A Complete Bibliography of Publications in *The International Journal of Supercomputer Applications*, *The International Journal of Supercomputer Applications and High-Performance Computing*, and *The International Journal of High Performance Computing Applications*

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References

Agullo:2022:RNA

[AAA+22] Emmanuel Agullo, Mirco Altenbernd, Hartwig Anzt, Leonardo Bautista-Gomez, Tommaso Benacchio, Luca Bonaventura, Hans-Joachim Bungartz, Sanjay Chatterjee, Florina M. Ciorba, Nathan Debardeleben, Daniel Drzisga, Sebastian Eibl, Christian Engelmann, Wilfried N. Gansterer, Luc Giraud, Dominik Göddeke, Marco Heisig, Fabienne Jézéquel, Nils Kohl, Xiaoye Sherry Li, Romain Lion, Miriam Mehl, Paul Mycek, Michael Obersteiner, Enrique S. Quintana-Ortí, Francesco Rizzi, Ulrich Rüde, Martin Schulz, Fred Fung, Robert Speck, Linda Stals, Keita Teranishi, Samuel Thibault, Dominik Thönnes, Andreas Wagner, and Barbara Wohlmuth. Resiliency in numerical algorithm design for extreme scale simulations. *The International Journal of High Performance Computing Applications*, 36 (2):251–285, March 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211055188`.

Abdelfattah:2021:SNL

[AAB+21a] Ahmad Abdelfattah, Hartwig Anzt, Erik G. Boman, Erin Carson, Terry Cojean, Jack Dongarra, Alyson Fox, Mark Gates, Nicholas J. Higham, Xiaoye S. Li, Jennifer Loe, Piotr Luszczek, Srikara Pranesh, Siva Rajamanickam, Tobias Ribizel, Barry F. Smith, Kasia Świrydowicz, Stephen Thomas, Stanimire Tomov, Yaohung M. Tsai, and Ulrike Meier Yang. A survey of numerical linear algebra methods utilizing mixed-precision arithmetic. *The Interna-*

tional Journal of High Performance Computing Applications, 35(4):344–369, July 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211003313`.

Acer:2021:EGC

[AAB+21b] Seher Acer, Ariful Azad, Erik G. Boman, Aydin Buluç, Karen D. Devine, Sm Ferdous, Nitin Gawande, Sayan Ghosh, Mahantesh Halappanavar, Ananth Kalyanaraman, Arif Khan, Marco Minutoli, Alex Pothen, Sivasankaran Rajamanickam, Oguz Selvitopi, Nathan R. Tallent, and Antonino Tumeo. EXA-GRAPH: Graph and combinatorial methods for enabling exascale applications. *The International Journal of High Performance Computing Applications*, 35(6):553–571, November 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211029299`.

Alexander:2021:CDC

[AAB+21c] Francis J. Alexander, James Ang, Jenna A. Bilbrey, Jan Balewski, Tiernan Casey, Ryan Chard, Jong Choi, Sutanay Choudhury, Bert Debusschere, Anthony M. Degennaro, Nikoli Dryden, J. Austin Ellis, Ian Foster, Cristina Garcia Cardona, Sayan Ghosh, Peter Harrington, Yunzhi Huang, Shantenu Jha, Travis Johnston, Ai Kagawa, Ramakrishnan Kannan, Neeraj Kumar, Zhengchun Liu, Naoya Maruyama, Satoshi Matsuoka, Erin Mccarthy, Jamaludin Mohd-Yusof, Peter Nugent, Yosuke Oyama, Thomas Proffen, David Pugmire, Sivasankaran Rajamanickam, Vinay Ramakrishniah, Malachi Schram, Sudip K. Seal, Ganesh Sivaraman, Christine Sweeney, Li Tan, Rajeev Thakur, Brian Van Essen, Logan Ward, Paul Welch, Michael Wolf, Sotiris S. Xantheas, Kevin G. Yager, Shinjae Yoo, and Byung-Jun Yoon. Co-design Center for Exascale Machine Learning Technologies (ExaLearn). *The International Journal of High Performance Computing Applications*, 35(6):598–616, November 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211029302`.

Addison:1997:PSI

[AAC+97] C. Addison, E. Appiani, R. Cook, M. Corvi, P. G. N. Howard, and B. Stephens. Parallel SAR image enhancement. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):314–327, Winter 1997. CODEN IJSCFG. ISSN 1078-3482. URL `http://`

journals.sagepub.com/doi/pdf/10.1177/109434209701100405.

Allen:2001:CWE

[AAF+01] Gabrielle Allen, David Angulo, Ian Foster, Gerd Lanfermann, Chuang Liu, Thomas Radke, Ed Seidel, and John Shalf. The Cactus Worm: Experiments with dynamic resource discovery and allocation in a Grid environment. *The International Journal of High Performance Computing Applications*, 15(4):345–358, Winter 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500402.

Farhan:2020:MTS

[AAT+20] Mohammed Al Farhan, Ahmad Abdelfattah, Stanimire Tomov, Mark Gates, Dalal Sukkari, Azzam Haidar, Robert Rosenberg, and Jack Dongarra. MAGMA templates for scalable linear algebra on emerging architectures. *The International Journal of High Performance Computing Applications*, 34(6):645–658, November 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020938421.

Apon:2001:NT

[AB01] Amy Apon and Mark Baker. Network technologies. *The International Journal of High Performance Computing Applications*, 15(2):102–114, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500203.

Ando:1987:ECS

[ABAS87] Albert Ando, Paul Beaumont, Matthew Ando, and Christopher A. Sims. Efficiency of the CYBER 205 for stochastic simulations of a simultaneous, nonlinear, dynamic econometric model. *The International Journal of Supercomputer Applications*, 1(4):54–81, December 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100405.

Averick:1994:NOC

[ABB+94] B. Averick, C. Bischof, B. Bixby, A. Carle, J. Dennis, M. El-Alem, A. El-Bakry, A. Griewank, G. Johnson, R. Lewis, J. Moré, R. Tapia, V. Torczon, and K. Williamson. Numerical optimization at the Center for Research on Parallel Computation. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(2):143–153, Summer 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800206.

Aupy:2018:CSA

[ABD+18] Guillaume Aupy, Anne Benoit, Sicheng Dai, Loïc Pottier, Padma Raghavan, Yves Robert, and Manu Shantharam. Co-scheduling Amdahl applications on cache-partitioned systems. *The International Journal of High Performance Computing Applications*, 32 (1):123–138, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017710806.

Ashby:1999:NSG

[ABF+99] S. F. Ashby, W. J. Bosl, R. D. Falgout, S. G. Smith, A. F. B. Tompson, and T. J. Williams. A numerical simulation of groundwater flow and contaminant transport on the Cray T3D and C90 supercomputers. *The International Journal of High Performance Computing Applications*, 13(1):80–93, Spring 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300105.

Alam:2008:EOR

[ABF+08] Sadaf R. Alam, Richard F. Barrett, Mark R. Fahey, Jeffery A. Kuehn, O. E. Bronson Messer, Richard T. Mills, Philip C. Roth, Jeffrey S. Vetter, and Patrick H. Worley. An evaluation of the Oak Ridge National Laboratory Cray XT3. *The International Journal of High Performance Computing Applications*, 22(1):52–80, Spring 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/1/52.full.pdf+html.

Aupy:2019:CSH

[ABG+19] Guillaume Aupy, Anne Benoit, Brice Goglin, Loïc Pottier, and Yves Robert. Co-scheduling HPC workloads on cache-partitioned CMP platforms. *The International Journal of High Performance Computing Applications*, 33(6):1221–1239, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019846956.

Acedo:2018:CLN

[ABH+18] Luis Acedo, Clara Burgos, José-Ignacio Hidalgo, Victor Sánchez-Alonso, Rafael-Jacinto Villanueva, and Javier Villanueva-Oller. Calibrating a large network model describing the transmission dynamics of the human papillomavirus using a particle swarm optimization algorithm in a distributed computing environment. *The International Journal of High Performance Computing Applications*, 32(5):721–728, 2018.

CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017697862.

Alakent:2007:MPD

[ACD07] Burak Alakent, Mehmet C. Camurdan, and Pemra Doruker. Mimicking protein dynamics by the integration of elastic network model with time series analysis. *The International Journal of High Performance Computing Applications*, 21 (1):59–65, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/1/59.full.pdf+html.

Agarwal:2011:DIS

[ACF+11] Deb Agarwal, You-Wei Cheah, Dan Fay, Jonathan Fay, Dean Guo, Tony Hey, Marty Humphrey, Keith Jackson, Jie Li, Christophe Poulain, Youngryel Ryu, and Catharine van Ingen. Data-intensive science: the Terapixel and Modisazure projects. *The International Journal of High Performance Computing Applications*, 25(3):304–316, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/3/304.full.pdf+html.

Anderson:1990:MEC

[ACG+90] D. V. Anderson, W. A. Cooper, R. Gruber, S. Merazzi, and U. Schwenn. Methods for the efficient calculation of the magnetohydrodynamic (MHD) stability properties of magnetically confined fusion plasmas. *The International Journal of Supercomputer Applications*, 4(3):34–47, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400305.

Arvind:1988:ABF

[ACM88] Arvind, David E. Culler, and Gino K. Maa. Assessing the benefits of fine-grain parallelism in dataflow programs. *The International Journal of Supercomputer Applications*, 2(3):10–36, September 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200303.

Amestoy:1989:VMM

[AD89] Patrick R. Amestoy and Iain S. Duff. Vectorization of a multiprocessor multifrontal code. *The International Journal of Supercomputer Applications*, 3(3):41–59, September 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300303.

Amestoy:1993:MMI

[AD93] Patrick R. Amestoy and Iain S. Duff. Memory management issues in sparse multifrontal methods on multiprocessors. *The International Journal of Supercomputer Applications*, 7(1):64–82, March 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700105.

Adelman:2021:HPB

[Ade21] Ross Adelman. Highly parallel boundary element method for solving extremely large, wide-area power-line models. *The International Journal of High Performance Computing Applications*, 35(2):136–153, March 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020976783.

AbdelBaky:2018:SDE

[ADMP18] Moustafa AbdelBaky, Javier Diaz-Montes, and Manish Parashar. Software-defined environments for science and engineering. *The International Journal of High Performance Computing Applications*, 32(1):104–122, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017710706.

AlSairafi:2003:DDN

[AEG+03] Salman AlSairafi, Filippia-Sofia Emmanouil, Moustafa Ghanem, Nikolaos Giannadakis, Yike Guo, Dimitrios Kalaitzopoulos, Michelle Osmond, Anthony Rowe, Jameel Syed, and Patrick Wendel. The design of Discovery Net: Towards Open Grid services for knowledge discovery. *The International Journal of High Performance Computing Applications*, 17(3):297–315, Fall 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003173003.

Ansaloni:1992:EPI

[AEPR92] Roberto Ansaloni, Stefano Evangelisti, Giuseppe Paruolo, and Elda Rossi. Efficient parallel implementation of a full configuration interaction algorithm for circular polyenes on a CRAY Y-MP. *The International Journal of Supercomputer Applications*, 6(4):351–360, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600404.

Aloisio:2009:TED

[AF09] Giovanni Aloisio and Sandro Fiore. Towards exascale distributed data management. *The International Journal of High Performance Computing Applications*, 23(4):398–400, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.

sagepub.com/content/23/4/398.full.pdf+html.

Anzt:2019:TMP

[AFGQO19] Hartwig Anzt, Goran Flegar, Thomas Grützmacher, and Enrique S. Quintana-Ortí. Toward a modular precision ecosystem for high-performance computing. *The International Journal of High Performance Computing Applications*, 33(6):1069–1078, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019846547.

Auricchio:2018:PFE

[AFL+18] F. Auricchio, M. Ferretti, A. Lefieux, M. Musci, A. Reali, S. Trimarchi, and A. Veneziani. Parallelizing a finite element solver in computational hemodynamics. *The International Journal of High Performance Computing Applications*, 32(3):351–362, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016649245.

Altenbernd:2018:SFD

[AG18] Mirco Altenbernd and Dominik Göddeke. Soft fault detection and correction for multigrid. *The International Journal of High Performance Computing Applications*, 32(6):897–912, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342016684006.

Abdi:2019:AIE

[AGC+19] Daniel S. Abdi, Francis X. Giraldo, Emil M. Constantinescu, Lester E. Carr, Lucas C. Wilcox, and Timothy C. Warburton. Acceleration of the IMplicit–EXplicit nonhydrostatic unified model of the atmosphere on many-core processors. *The International Journal of High Performance Computing Applications*, 33(2):242–267, March 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017732395.

Aupy:2019:MHT

[AGHR19] Guillaume Aupy, Brice Goglin, Valentin Honoré, and Bruno Raffin. Modeling high-throughput applications for in situ analytics. *The International Journal of High Performance Computing Applications*, 33(6):1185–1200, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019847263.

Ashcraft:1987:PSM

[AGL+87] C. Cleveland Ashcraft, Roger G.

Grimes, John G. Lewis, Barry W. Peyton, Horst D. Simon, and Petter E. Bjørstad. Progress in sparse matrix methods for large linear systems on vector supercomputers. *The International Journal of Supercomputer Applications*, 1(4):10–30, December 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100403.

Allen:2003:EAG

[AGR+03] Gabrielle Allen, Tom Goodale, Thomas Radke, Michael Russell, Ed Seidel, Kelly Davis, Konstantinos N. Dolkas, Nikolaos D. Doulamis, Thilo Kielmann, André Merzky, Jarek Nabrzyski, Juliusz Pukacki, John Shalf, and Ian Taylor. Enabling applications on the Grid: a GridLab overview. *The International Journal of High Performance Computing Applications*, 17(4):449–466, Winter 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420030174008.

Adeli:1993:CAC

[AH93] H. Adeli and S. L. Hung. A concurrent adaptive conjugate gradient learning algorithm on MIMD shared-memory machines. *The International Journal of Supercomputer Applications*, 7(2):155–166, June 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700206.

Ando:2016:PAE

[AHB+16] Kazuto Ando, Mamoru Hyodo, Toshitaka Baba, Takane Hori, Toshihiro Kato, Masaru Watanabe, Shin ichi Ichikawa, Hisakuni Kitahara, Hitoshi Uehara, and Hikaru Inoue. Parallel-algorithm extension for tsunami and earthquake-cycle simulators for massively parallel execution on the K computer. *The International Journal of High Performance Computing Applications*, 30(4):454–468, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016636670.

Ast:1997:RPF

[AJL+97] Markus Ast, T. Jerez, Jesus Labarta, Hartmut Manz, Andres Pérez, Uwe Schulz, and Jaume Solé. Runtime parallelization of the finite element code PERMAS. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):328–335, Winter 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100406.

Amman:1991:PPL

[AK91] Hans M. Amman and David A. Kendrick. Parallel processing for large-scale nonlinear control experiments in economics. *The International Journal of Supercomputer Applications*, 5(1):90–95, March 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500106.

Amman:1993:FLB

[AK93] Hans M. Amman and David A. Kendrick. Forward looking behavior and learning in stochastic control. *The International Journal of Supercomputer Applications*, 7(3):201–211, September 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700303.

Aktulga:2019:OPR

[AKC+19] Hasan Metin Aktulga, Chris Knight, Paul Coffman, Kurt A. O'Hearn, Tzu-Ray Shan, and Wei Jiang. Optimizing the performance of reactive molecular dynamics simulations for many-core architectures. *The International Journal of High Performance Computing Applications*, 33(2):304–321, March 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017746221.

Allegretti:2008:CAD

[AKP08] Dylan G. Allegretti, Garrett T. Kenyon, and William C. Priedhorsky. Cellular automata for distributed sensor networks. *The International Journal of High Performance Computing Applications*, 22(2):167–176, Summer 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/2/167.full.pdf+html.

Anzt:2018:OPE

[AKP+18] Hartwig Anzt, Moritz Kreutzer, Eduardo Ponce, Gregory D. Peterson, Gerhard Wellein, and Jack Dongarra. Optimization and performance evaluation of the IDR iterative Krylov solver on GPUs. *The International Journal of High Performance Computing Applications*, 32(2):220–230, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016646844.

Al-Kharusi:2019:LPD

[AKW19] Ibrahim Al-Kharusi and David W. Walker. Locality properties of 3D data orderings with application to parallel molecular dynamics simulations. *The International Journal of High Performance Computing Applications*, 33(5):998–1018, September 1, 2019. CODEN IHPCFL. ISSN

1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019846282.

Aldag:1989:ISG

[Ald89] John E. Aldag. The impact of supercomputers: Global, pervasive, positive. *The International Journal of Supercomputer Applications*, 3(2):3–5, June 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300201.

Akbudak:2020:ACS

[ALE+20] Kadir Akbudak, Hatem Ltaief, Vincent Etienne, Rached Abdelkhalak, Thierry Tonellot, and David Keyes. Asynchronous computations for solving the acoustic wave propagation equation. *The International Journal of High Performance Computing Applications*, 34(4):377–393, July 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020923027.

Allen:1988:CSS

[All88] William H. Allen. Centers of supercomputing — science at the National Center for Supercomputing. *The International Journal of Supercomputer Applications*, 2(3):6–9, September 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200302.

Akkan:2013:UIN

[ALL13] Hakan Akkan, Michael Lang, and Lorie Liebrock. Understanding and isolating the noise in the Linux kernel. *The International Journal of High Performance Computing Applications*, 27(2):136–146, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/2/136.full.pdf+html.

Ammar:2000:PAT

[AM00] Hany H. Ammar and Zhouhui Miao. Parallel algorithms for the training process of a neural network-based system. *The International Journal of High Performance Computing Applications*, 14(1):3–25, Spring 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400101.

Asch:2018:BDE

[AMB+18] M. Asch, T. Moore, R. Badia, M. Beck, P. Beckman, T. Bidot, F. Bodin, F. Cappello, A. Choudhary, B. de Supinski, E. Deelman, J. Dongarra, A. Dubey, G. Fox, H. Fu, S. Girona, W. Gropp, M. Heroux, Y. Ishikawa, K. Keahey, D. Keyes, W. Kramer, J-F Lavignon, Y. Lu, S. Matsuoka, B. Mohr, D. Reed, S. Requena, J. Saltz, T. Schulthess, R. Stevens, M. Swany, A. Szalay, W. Tang, G. Varoquaux, J.-P. Vilotte, R. Wisniewski, Z. Xu, and I. Zacharov. Big data and extreme-scale computing. *The International Journal of High Performance Computing Applications*, 32(4):435–479, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342018778123.

Asnicar:2018:NNE

[AMC+18] Francesco Asnicar, Luca Masera, Emanuela Coller, Caterina Gallo, Nadir Sella, Thomas Tolio, Paolo Morettin, Luca Erculiani, Francesca Galante, Stanislau Semeniuta, Giulia Malacarne, Kristof Engelen, Andrea Argentini, Valter Cavecchia, Claudio Moser, and Enrico Blanzieri. NES^{2}RA: Network expansion by stratified variable subsetting and ranking aggregation. *The International Journal of High Performance Computing Applications*, 32(3):380–392, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016662508.

Amdahl:1988:LE

[Amd88] Gene M. Amdahl. Limits of expectation. *The International Journal of Supercomputer Applications*, 2(1):88–94, March 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200107.

Anonymous:1987:ACR

[Ano87a] Anonymous. Advanced computing research facility offers opportunities for experimentation in multiprocessing. *The International Journal of Supercomputer Applications*, 1(1):115–116, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100113.

Anonymous:1987:AIE

[Ano87b] Anonymous. An agenda for improved evaluation of supercomputer performance. *The International Journal of Supercomputer Applications*, 1(1):110–111, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100109.

Anonymous:1987:DNS

[Ano87c] Anonymous. Dispelling the “no software myth. *The International Journal of Supercomputer Applications*, 1(1):116, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100114.

Anonymous:1987:HSC

[Ano87d] Anonymous. High-speed computing and artificial intelligence connection. *The International Journal of Supercomputer Applications, 1 (1):106–110, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100108.

Anonymous:1987:NNT

[Ano87e] Anonymous. Networking needs and trends in data communications. *The International Journal of Supercomputer Applications*, 1(3):97–100, September 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100308.

Anonymous:1987:SHP

[Ano87f] Anonymous. Software for high performance computers. *The International Journal of Supercomputer Applications*, 1(1):114–115, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100112.

Anonymous:1991:IJSb

[Ano91a] Anonymous. The *International Journal of Supercomputer Applications* — information for contributors. *The International Journal of Supercomputer Applications*, 5 (3):115–116, September 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500310.

Anonymous:1991:IJSa

[Ano91b] Anonymous. The international journal of supercomputer applications- information for contributors. *The International Journal of Supercomputer Applications*, 5(2):104–105, June 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500210.

Anonymous:1991:Ma

[Ano91c] Anonymous. Meetings. *The International Journal of Supercomputer Applications*, 5 (2):102–103, June 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500209.

Anonymous:1991:Mb

[Ano91d] Anonymous. Meetings. *The International Journal of Supercomputer Applications*, 5 (3):113–114, September 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500309.

Anonymous:1991:Mc

[Ano91e] Anonymous. Meetings. *The International Journal of Supercomputer Applications*, 5 (4):113–114, December 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500410.

Anonymous:1992:Aa

[Ano92a] Anonymous. Announcements. *The International Journal of Supercomputer Applications*, 6(1):118–119, April 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600108.

Anonymous:1992:Ab

[Ano92b] Anonymous. Announcements. *The International Journal of Supercomputer Applications*, 6(2):207, June 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600207.

Anonymous:1992:Ac

[Ano92c] Anonymous. Announcements. *The International Journal of Supercomputer Applications*, 6(4):389, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600408.

Anonymous:1992:Ad

[Ano92d] Anonymous. Announcements. *The International Journal of Supercomputer Applications*, 6(4):427–428, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600413.

Anonymous:1992:IJSb

[Ano92e] Anonymous. The international journal of supercomputer applications-. *The International Journal of Supercomputer Applications*, 6(4):392–406, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600410.

Anonymous:1992:IJSc

[Ano92f] Anonymous. The international journal of supercomputer applications-. *The International Journal of Supercomputer Applications*, 6(4):431–432, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600415.

Anonymous:1992:IJSa

[Ano92g] Anonymous. The international journal of supercomputer applications-information for contributors. *The International Journal of Supercomputer Applications*, 6(1):122–123, April 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600110.

Anonymous:1992:LKP

[Ano92h] Anonymous. Largest-known prime number uncovered. *The International Journal of Supercomputer Applications*, 6(3):304, Fall 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600307.

Anonymous:1992:Ma

[Ano92i] Anonymous. Meetings. *The International Journal of Supercomputer Applications*, 6 (1):120–121, April 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600109.

Anonymous:1992:Mb

[Ano92j] Anonymous. Meetings. *The International Journal of Supercomputer Applications*, 6 (2):208–209, June 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600208.

Anonymous:1992:Mc

[Ano92k] Anonymous. Meetings. *The International Journal of Supercomputer Applications*, 6 (3):305–307, Fall 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600308.

Anonymous:1992:Md

[Ano92l] Anonymous. Meetings. *The International Journal of Supercomputer Applications*, 6 (4):390–391, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600409.

Anonymous:1992:Me

[Ano92m] Anonymous. Meetings. *The International Journal of Supercomputer Applications*, 6 (4):429–430, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600414.

Anonymous:1992:P

[Ano92n] Anonymous. Perspectives. *The International Journal of Supercomputer Applications*, 6 (4):421–426, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600412.

Anonymous:1993:IJS

[Ano93a] Anonymous. The international journal of supercomputer applications-. *The International Journal of Supercomputer Applications*, 7(2): 182–183, June 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700210.

Anonymous:1993:Ma

[Ano93b] Anonymous. Meetings. *The International Journal of Supercomputer Applications*, 7 (2):180–181, June 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700209.

Anonymous:1993:Mb

[Ano93c] Anonymous. Meetings. *The International Journal of Supercomputer Applications*, 7 (4):365–366, December 1993.

CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700406.

Anonymous:1993:MPI

[Ano93d] Anonymous. Message-passing interface. *The International Journal of Supercomputer Applications*, 7(2):179, June 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700208.

Anonymous:1994:IJS

[Ano94a] Anonymous. *The International Journal of Supercomputer Applications and High Performance Computing*. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(1):68–69, Spring 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800109.

Anonymous:1994:MMP

[Ano94b] Anonymous. MPI: a message-passing interface standard. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(3–4):159–416, Fall/Winter 1994. CODEN IJSAE9. ISSN 0890-2720.

Anonymous:1994:SAH

[Ano94c] Anonymous. Supercomputer applications and high performance computing-. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(2):154–155, Summer 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800207.

Anonymous:1995:IJSb

[Ano95a] Anonymous. *The International Journal of Supercomputer Applications and High Performance Computing*. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(3):232–233, Fall 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900305.

Anonymous:1995:IJSa

[Ano95b] Anonymous. The international journal of supercomputer applications and high performance computing-. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(1):72–73, Spring 1995. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900106.

Anonymous:1996:IJS

[Ano96a] Anonymous. *The International Journal of Supercomputer Applications and High Performance Computing*: Information for contributors. *The*

International Journal of Supercomputer Applications and High Performance Computing, 10(4):341–342, Winter 1996. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000405.

Anonymous:1996:IV

[Ano96b] Anonymous. Index: Volume 10. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(4):343–345, Winter 1996. CODEN IJSCFG. ISSN 1078-3482.

Anonymous:1996:ICa

[Ano96c] Anonymous. Information for contributors. *The International Journal of Supercomputer Applications and High Performance Computing*, 10 (2–3):246–247, Summer/Fall 1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic).

Anonymous:1997:IJSc

[Ano97a] Anonymous. *The International Journal of Supercomputer Applications and High Performance Computing*. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):362–363, Winter 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100409.

Anonymous:1997:IJSa

[Ano97b] Anonymous. *The International Journal of Supercomputer Applications and High Performance Computing*: Information for contributors. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(2):175–176, Summer 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100209.

Anonymous:1997:IJSb

[Ano97c] Anonymous. *The International Journal of Supercomputer Applications and High Performance Computing*: Information for contributors. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(3):264–265, Fall 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100308.

Anonymous:1997:IV

[Ano97d] Anonymous. Index to volume 11. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):359–361, Winter 1997. CODEN IJSCFG. ISSN 1078-3482.

Anonymous:1998:IJH

[Ano98a] Anonymous. *The International Journal of High Performance Computing Applica-*

tions: Information for contributors. *The International Journal of High Performance Computing Applications*, 12(3):381–382, Fall 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209801200306`.

Anonymous:1998:IIJ

[Ano98b] Anonymous. Index to International Journal of High Performance Computing Applications. *The International Journal of High Performance Computing Applications*, 12 (4):446–447, Winter 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic).

Anonymous:1998:M

[Ano98c] Anonymous. Meetings. *The International Journal of High Performance Computing Applications*, 12(4):440–445, Winter 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic).

Anonymous:1999:IIJ

[Ano99] Anonymous. Index to International Journal of High Performance Computing Applications, volume 13. *The International Journal of High Performance Computing Applications*, 13(4):366–368, Winter 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic).

Anonymous:2000:IIJ

[Ano00] Anonymous. Index to *International Journal of High Performance Computing Applications*, volume 14. *The International Journal of High Performance Computing Applications*, 14(4):373–375, Winter 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200001400409`.

Anonymous:2001:AAL

[Ano01a] Anonymous. Appendixes: Appendix A: Linux, Windows NT, AIX, Solaris; appendix B: Compilers and preprocessors, MPI implementations, development environments, debuggers, performance analyzers. *The International Journal of High Performance Computing Applications*, 15(2):191–194, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200101500213`.

Anonymous:2001:IIJ

[Ano01b] Anonymous. Index to *International Journal of High Performance Computing Applications*, volume 15. *The International Journal of High Performance Computing Applications*, 15(4):394–396, Winter 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846

(electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500406.

Anonymous:2002:SB

[Ano02a] Anonymous. 3 sparse blas. *The International Journal of High Performance Computing Applications*, 16(2):119–141, Summer 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160020401.

Anonymous:2002:EMP

[Ano02b] Anonymous. 4 extended and mixed precision blas. *The International Journal of High Performance Computing Applications*, 16(2):142–174, Summer 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160020501.

Anonymous:2002:Ab

[Ano02c] Anonymous. Acknowledgments. *The International Journal of High Performance Computing Applications*, 16(1):2–3, Spring 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160010601.

Anonymous:2002:Ad

[Ano02d] Anonymous. Acknowledgments. *The International Journal of High Performance Computing Applications*, 16(2):116–117, Summer 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160020201.

Anonymous:2002:Ae

[Ano02e] Anonymous. Annex A. *The International Journal of High Performance Computing Applications*, 16(2):175–181, Summer 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160020601.

Anonymous:2002:AA

[Ano02f] Anonymous. Annex A Appendix. *The International Journal of High Performance Computing Applications*, 16(1):87–93, Spring 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160010901.

Anonymous:2002:ABa

[Ano02g] Anonymous. Annex B. *The International Journal of High Performance Computing Applications*, 16(2):182–195, Summer 2002. CO-

DEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160020701.

Anonymous:2002:ABL

[Ano02h] Anonymous. Annex B Legacy Blas. *The International Journal of High Performance Computing Applications*, 16(1):94–107, Spring 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160011001.

Anonymous:2002:ACa

[Ano02i] Anonymous. Annex C. *The International Journal of High Performance Computing Applications*, 16(1):108, Spring 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160010201.

Anonymous:2002:ACb

[Ano02j] Anonymous. Annex C. *The International Journal of High Performance Computing Applications*, 16(2):196, Summer 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160020801.

Anonymous:2002:DBB

[Ano02k] Anonymous. Dense and banded blas. *The International Journal of High Performance Computing Applications*, 16(1):19–86, Spring 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160010501.

Anonymous:2002:Ib

[Ano02l] Anonymous. Index. *The International Journal of High Performance Computing Applications*, 16(1):110–111, Spring 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160010401.

Anonymous:2002:Ic

[Ano02m] Anonymous. Index. *The International Journal of High Performance Computing Applications*, 16(2):198–199, Summer 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160021001.

Anonymous:2002:I

[Ano02n] Anonymous. Index. *The International Journal of High Performance Computing Applications*, 16(4):431–432, Winter 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic).

Anonymous:2002:Ia

[Ano02o] Anonymous. Introduction. *The International Journal* of High Performance Computing Applications, 16(1): 5–18, Spring 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200201600108 01.

Anonymous:2002:Ra

[Ano02p] Anonymous. References. *The International Journal of High Performance Computing Applications*, 16(1):109, Spring 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160010301.

Anonymous:2002:Rb

[Ano02q] Anonymous. References. *The International Journal of High Performance Computing Applications*, 16(2):197, Summer 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160020901.

Anonymous:2002:SRa

[Ano02r] Anonymous. Suggestions for reading. *The International Journal of High Performance Computing Applications*, 16(1):4, Spring 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160010701.

Anonymous:2002:SRb

[Ano02s] Anonymous. Suggestions for reading. *The International Journal of High Performance Computing Applications*, 16(2):118, Summer 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160020301.

Anonymous:2017:N

[Ano17a] Anonymous. Notice. *The International Journal of High Performance Computing Applications*, 31(3):181, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017711332.

Anonymous:2017:P

[Ano17b] Anonymous. Preface. *The International Journal of High Performance Computing Applications*, 31(3):179–180, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016680468.

Anonymous:2019:CFD

[Ano19] Anonymous. Corrigendum to A failure detector for HPC platforms. *The International Journal of High Performance Computing Applications*, 33 (6):NP1, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019876398. See [BBG+18].

Anonymous:2020:Ca

[Ano20a] Anonymous. Corrigendum. *The International Journal of High Performance Computing Applications*, 34(4): NP1, July 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342016687175.

Anonymous:2020:Cb

[Ano20b] Anonymous. Corrigendum. *The International Journal of High Performance Computing Applications*, 34(4): NP2, July 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017693151.

Anonymous:2020:TR

[Ano20c] Anonymous. Thanks to reviewers. *The International Journal of High Performance Computing Applications*, 34 (4):478, July 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020904197.

Aldinucci:2015:PVD

[APD+15] Marco Aldinucci, Guilherme Peretti Pezzi, Maurizio Drocco, Concetto Spampinato, and Massimo Torquati. Parallel visual data restoration on multi-GPGPUs using stencil-reduce pattern. *The International Journal of High Performance Computing Applications*, 29(4):461–472, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342014567907.

Arnavut:2007:LNL

[Arn07] Ziya Arnavut. Lossless and near-lossless compression of ECG signals with block-sorting techniques. *The International Journal of High Performance Computing Applications*, 21 (1):50–58, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/1/50.full.pdf+html.

Avila:2019:ISG

[ARPY19] Anderson Avila, Renata Hax Sander Reiser, Maurício Lima Pilla, and Adenauer Correa Yamin. Improving in situ GPU simulation of quantum computing in the D-GM environment. *The International Journal of High Performance Computing Applications*, 33 (3):462–472, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018823251.

Aro:1999:HPC

[ARR99] Colin J. Aro, Garry H. Rodrigue, and Douglas A. Rotman. A high performance chemical kinetics algorithm for 3-D atmospheric models. *The International Journal of High Performance Computing Applications*, 13(1):3–15, Spring 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic).

Adve:2000:ARM

[AS00] Vikram Adve and Rizos Sakellariou. Application representations for multiparadigm performance modeling of large-scale parallel scientific codes. *The International Journal of High Performance Computing Applications*, 14(4):304–316, Winter 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200001400403`.

Al-Shorman:2019:UPP

[ASAK19] Mohammad Y. Al-Shorman and Majd M. Al-Kofahi. Ultrasonic pulse propagation simulation using OpenCL for environment mapping and discovery. *The International Journal of High Performance Computing Applications*, 33 (5):1019–1029, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019846290`.

Ali:2016:CSA

[ASHH16] Md. Mohsin Ali, Peter E. Strazdins, Brendan Harding, and Markus Hegland. Complex scientific applications made fault-tolerant with the sparse grid combination technique. *The International Journal of High Performance Computing Applications*, 30(3):335–359, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015628056`.

Aoyagi:1991:ITS

[ASW91] Mutsumi Aoyagi, Ron Shepard, and Albert F. Wagner. An ab initio theoretical study of the $\mathrm{CH} + \mathrm{H}_2 \rightleftharpoons \mathrm{CH}_3^* \rightleftharpoons \mathrm{CH}_2 + \mathrm{H}$ reactions. *The International Journal of Supercomputer Applications*, 5(1):72–89, March 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500105`.

Almlof:1988:SCU

[ATD+88] Jan Almlöf, Donald G. Truhlar, H. T. Davis, Klavs F. Jensen, Matthew Tirrell, and Terry Lybrand. Supercomputer chemistry at the University of Minnesota. *The International Journal of Supercomputer Applications*, 2(2):5–15, June 1988. CODEN IJSAE9. ISSN 0890-2720. URL `http://`

journals.sagepub.com/doi/pdf/10.1177/109434208800200202.

Anzt:2017:PEE

[ATD17] Hartwig Anzt, Stanimire Tomov, and Jack Dongarra. On the performance and energy efficiency of sparse linear algebra on GPUs. *The International Journal of High Performance Computing Applications*, 31(5):375–390, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016672081.

Anzt:2015:AGB

[ATL+15] Hartwig Anzt, Stanimire Tomov, Piotr Luszczek, William Sawyer, and Jack Dongarra. Acceleration of GPU-based Krylov solvers via data transfer reduction. *The International Journal of High Performance Computing Applications*, 29(3):366–383, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015580139.

Aida:2000:PEM

[ATN+00] Kento Aida, Atsuko Takefusa, Hidemoto Nakada, Satoshi Matsuoka, Satoshi Sekiguchi, and Umpei Nagashima. Performance evaluation model for scheduling in global computing systems. *The International Journal of High Performance Computing Applications*, 14(3):268–279, Fall 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400308.

Austin:1992:CSU

[Aus92] Donald M. Austin. Centers of supercomputing — the University of Minnesota Army High Performance Computing Research Center. *The International Journal of Supercomputer Applications*, 6(3):215–223, September 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600301.

Abate:2001:PCR

[AWS01] Jason Abate, Peng Wang, and Kamy Sepehrnoori. Parallel compositional reservoir simulation on clusters of PCs. *The International Journal of High Performance Computing Applications*, 15(1):13–21, Spring 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500102.

Abdi:2019:GAC

[AWWG19] Daniel S. Abdi, Lucas C. Wilcox, Timothy C. Warburton, and Francis X. Giraldo. A GPU-accelerated continuous and discontinuous Galerkin non-hydrostatic atmospheric model. *The International Journal of High Performance Computing Applications*, 33(1):81–109, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017694427`.

Baker:2001:M

[BA01] Mark Baker and Amy Apon. Middleware. *The International Journal of High Performance Computing Applications*, 15(2):136–142, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200101500206`.

Bernholdt:2006:CAH

[BAA+06] David E. Bernholdt, Benjamin A. Allan, Robert Armstrong, Felipe Bertrand, Kenneth Chiu, Tamara L. Dahlgren, Kostadin Damevski, Wael R. Elwasif, Thomas G. W. Epperly, Madhusudhan Govindaraju, Daniel S. Katz, James A. Kohl, Manoj Krishnan, Gary Kumfert, J. Walter Larson, Sophia Lefantzi, Michael J. Lewis, Allen D. Malony, Lois C. Mclnnes, Jarek Nieplocha, Boyana Norris, Steven G. Parker, Jaideep Ray, Sameer Shende, Theresa L. Windus, and Shujia Zhou. A component architecture for high-performance scientific computing. *The International Journal of High Performance Computing Applications*, 20(2):163–202, Summer 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/2/163.full.pdf+html`.

Bailey:1988:HPF

[Bai88] David H. Bailey. A high-performance FFT algorithm for vector supercomputers. *The International Journal of Supercomputer Applications*, 2(1):82–87, March 1988. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208800200106`.

Bailey:2020:RVP

[Bai20] David H. Bailey. Reproducibility and variable precision computing. *The International Journal of High Performance Computing Applications*, 34(5):483–490, September 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342020938424`.

Baker:2001:P

[Bak01] Mark Baker. Preface. *The International Journal of High Performance Computing Applications*, 15(2):91, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://`

journals.sagepub.com/doi/pdf/10.1177/109434200101500201.

Bamzai:2012:P

[Bam12] Anjuli Bamzai. Preface. *The International Journal of High Performance Computing Applications*, 26(1):3–4, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/1/3.full.pdf+html.

Baba:2016:LSH

[BAM+16] Toshitaka Baba, Kazuto Ando, Daisuke Matsuoka, Mamoru Hyodo, Takane Hori, Narumi Takahashi, Ryoko Obayashi, Yoshiyuki Imato, Dai Kitamura, Hitoshi Uehara, Toshihiro Kato, and Ryotaro Saka. Large-scale, high-speed tsunami prediction for the Great Nankai Trough Earthquake on the K computer. *The International Journal of High Performance Computing Applications*, 30(1):71–84, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015584090.

Bridges:2012:VMB

[BAP+12] Patrick G. Bridges, Dorian Arnold, Kevin T. Pedretti, Madhav Suresh, Feng Lu, Peter Dinda, Russ Joseph, and Jack Lange. Virtual-machine-based emulation of future generation high-performance computing systems. *The International Journal of High Performance Computing Applications*, 26(2):125–135, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/2/125.full.pdf+html.

Barkai:2009:APS

[Bar09] David Barkai. The application perspective: Seeking productivity and performance. *The International Journal of High Performance Computing Applications*, 23(4):403–408, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/403.full.pdf+html.

Biagioni:2002:ARS

[BB02] Edoardo S. Biagioni and K. W. Bridges. The application of remote sensor technology to assist the recovery of rare and endangered species. *The International Journal of High Performance Computing Applications*, 16(3):315–324, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160031001.

Bjorstad:1987:IPL

[BBA87] Petter E. Bjørstad, Jon Braekhus, and John Aldag. Implementation and performance of the large-scale finite element code sesam on a wide range of scientific computers. *The International Journal of Supercomputer Applications*, 1(3):12–25, September 1987. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208700100303`.

Benacchio:2021:RFT

[BBA+21] Tommaso Benacchio, Luca Bonaventura, Mirco Altenbernd, Chris D. Cantwell, Peter D. Düben, Mike Gillard, Luc Giraud, Dominik Göddeke, Erwan Raffin, Keita Teranishi, and Nils Wedi. Resilience and fault tolerance in high-performance computing for numerical weather and climate prediction. *The International Journal of High Performance Computing Applications*, 35(4):285–311, July 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342021990433`.

Bailey:1991:NPB

[BBB+91a] D. H. Bailey, E. Barszcz, J. T. Barton, D. S. Browning, R. L. Carter, L. Dagum, R. A. Fatoohi, P. O. Frederickson, T. A. Lasinski, R. S. Schreiber, H. D. Simon, V. Venkatakrishnan, and S. K. Weeratunga. The NAS Parallel Benchmarks. *The International Journal of Supercomputer Applications*, 5(3):63–73, September 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500306`.

Barrett:1991:CSS

[BBB+91b] Chris Barrett, Frank Bobrowicz, Ralph G. Brickner, Bradley A. Clark, Rajan Gupta, Ann H. Hayes, Harold Trease, and Andrew B. White, Jr. Centers of supercomputing — supercomputing at Los Alamos National Laboratory. *The International Journal of Supercomputer Applications*, 5(2):3–9, June 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500201`.

Bova:2000:DLP

[BBC+00] Steve W. Bova, Clay P. Breshears, Christine E. Cuicchi, Zeki Demirbilek, and Henry A. Gabb. Dual-level parallel analysis of harbor wave response using MPI and OpenMP. *The International Journal of High Performance Computing Applications*, 14(1):49–64, Spring 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200001400104`.

Browne:2000:CDP

[BBD00] J. C. Browne, E. Berger, and A. Dube. Compositional development of performance models in POEMS. *The International Journal of High Performance Computing Applications*, 14(4):283–291, Winter 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400401.

Bell:2017:LBY

[BBD+17] Gordon Bell, David H. Bailey, Jack Dongarra, Alan H. Karp, and Kevin Walsh. A look back on 30 years of the Gordon Bell Prize. *The International Journal of High Performance Computing Applications*, 31(6):469–484, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017738610.

Bethune:2014:PAA

[BBDH14] Iain Bethune, J. Mark Bull, Nicholas J. Dingle, and Nicholas J. Higham. Performance analysis of asynchronous Jacobi's method implemented in MPI, SHMEM and OpenMP. *The International Journal of High Performance Computing Applications*, 28(1):97–111, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/1/97.full.pdf+html.

Bouchitte:1995:EAE

[BBDR95] Vincent Bouchitté, Pierre Boulet, Alain Darte, and Yves Robert. Evaluating array expressions on massively parallel machines with communication/computation overlap. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(3):205–219, Fall 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900303.

Balaji:2010:FGM

[BBG+10] Pavan Balaji, Darius Buntinas, David Goodell, William Gropp, and Rajeev Thakur. Fine-grained multithreading support for hybrid threaded MPI programming. *The International Journal of High Performance Computing Applications*, 24(1):49–57, Spring 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/1/49.full.pdf+html.

Barrett:2014:EMM

[BBG+14] Brian W. Barrett, Ron Brightwell, Ryan Grant, Simon D. Hammond, and K. Scott Hemmert. An evaluation of MPI message rate on hybrid-core processors. *The International Journal of High Performance Computing Applications*, 28(4):415–424, 2014. CODEN IHPCFL.

ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/4/415.

Bosilca:2018:FDH

[BBG+18] George Bosilca, Aurelien Bouteiller, Amina Guermouche, Thomas Herault, Yves Robert, Pierre Sens, and Jack Dongarra. A failure detector for HPC platforms. *The International Journal of High Performance Computing Applications*, 32(1):139–158, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017711505. See corrigendum [Ano19].

Bouteiller:2006:HPS

[BBH+06] Aurélien Bouteiller, Hinde-Lilia Bouziane, Thomas Herault, Pierre Lemarinier, and Franck Cappello. Hybrid preemptive scheduling of Message Passing Interface applications on Grids. *The International Journal of High Performance Computing Applications*, 20 (1):77–90, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/1/77.full.pdf+html.

Bland:2013:PFR

[BBH+13] Wesley Bland, Aurelien Bouteiller, Thomas Herault, George Bosilca, and Jack Dongarra. Post-failure recovery of MPI communication capability: Design and rationale. *The International Journal of High Performance Computing Applications*, 27(3):244–254, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/3/244.full.pdf+html.

Borghesi:2019:PSE

[BBMB19] Andrea Borghesi, Andrea Bartolini, Michela Milano, and Luca Benini. Pricing schemes for energy-efficient HPC systems: Design and exploration. *The International Journal of High Performance Computing Applications*, 33 (4):716–734, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018814593.

Belgin:2010:OSE

[BBR10] Mehmet Belgin, Godmar Back, and Calvin J. Ribbens. Operation stacking for ensemble computations with variable convergence. *The International Journal of High Performance Computing Applications*, 24(2):194–212, Summer 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/2/194.full.pdf+html.

Barnard:1999:MIS

[BBS99] Stephen T. Barnard, Luis M. Bernardo, and Horst D. Simon. An MPI implementation of the SPAI preconditioner on the T3E. *The International Journal of High Performance Computing Applications*, 13(2):107–123, Summer 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209901300202`.

Brown:1990:CSR

[BBW90] Alison Brown, Ashley Burns, and Kevin Wohlever. Centers of supercomputing — research at the Ohio Supercomputer Center. *The International Journal of Supercomputer Applications*, 4(1):6–9, March 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400102`.

Blas:2014:RAM

[BC14] Javier Garcia Blas and Jesus Carretero. Recent advances in the Message Passing Interface. *The International Journal of High Performance Computing Applications*, 28(4):387–389, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/28/4/387`.

Berman:2001:GPS

[BCC+01] Francine Berman, Andrew Chien, Keith Cooper, Jack Dongarra, Ian Foster, Dennis Gannon, Lennart Johnsson, Ken Kennedy, Carl Kesselman, John Mellor-Crummey, Dan Reed, Linda Torczon, and Rich Wolski. The GrADS Project: Software support for high-level Grid application development. *The International Journal of High Performance Computing Applications*, 15(4):327–344, Winter 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200101500401`.

Bolze:2006:GLS

[BCC+06] Raphaël Bolze, Franck Cappello, Eddy Caron, Michel Daydé, Frédéric Desprez, Emmanuel Jeannot, Yvon Jégou, Stephane Lanteri, Julien Leduc, Noredine Melab, Guillaume Mornet, Raymond Namyst, Pascale Primet, Benjamin Quetier, Olivier Richard, El-Ghazali Talbi, and Iréa Touche. Grid'5000: a large scale and highly reconfigurable experimental Grid testbed. *The International Journal of High Performance Computing Applications*, 20(4):481–494, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.`

sagepub.com/content/20/4/481.full.pdf+html.

Bahi:2009:PAS

[BCCL09] Jacques M. Bahi, Jean-Claude Charr, Raphaël Couturier, and David Laiymani. A parallel algorithm to solve large stiff ODE systems on Grid systems. *The International Journal of High Performance Computing Applications*, 23 (2):140–151, Summer 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/2/140.full.pdf+html.

Balaji:2010:IND

[BCG+10] Pavan Balaji, Anthony Chan, William Gropp, Rajeev Thakur, and Ewing Lusk. The importance of non-data-communication overheads in MPI. *The International Journal of High Performance Computing Applications*, 24(1):5–15, Spring 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/1/5.full.pdf+html.

Buyya:2001:SSI

[BCJ01] Rajkumar Buyya, Toni Cortes, and Hai Jin. Single system image. *The International Journal of High Performance Computing Applications*, 15(2):124–135, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500205.

Berry:1989:PCB

[BCK+89] M. Berry, D. Chen, P. Koss, D. Kuck, S. Lo, Y. Pang, L. Pointer, R. Roloff, A. Sameh, E. Clementi, S. Chin, D. Schneider, G. Fox, P. Messina, D. Walker, C. Hsiung, J. Schwarzmeier, K. Lue, S. Orszag, F. Seidl, O. Johnson, R. Goodrum, and J. Martin. The PERFECT club benchmarks: Effective performance evaluation of supercomputers. *The International Journal of Supercomputer Applications*, 3 (3):5–40, September 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300302.

Buffat:2017:SAV

[BCLP17] Marc Buffat, Anne Cadiou, Lionel Le Penven, and Christophe Pera. In situ analysis and visualization of massively parallel computations. *The International Journal of High Performance Computing Applications*, 31(1):83–90, January 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015597081.

Bell:2003:OGS

[BCM+03] William H. Bell, David G.

Cameron, A. Paul Millar, Luigi Capozza, Kurt Stockinger, and Floriano Zini. Optorsim: a Grid simulator for studying dynamic data replication strategies. *The International Journal of High Performance Computing Applications*, 17(4):403–416, Winter 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420030174005.

Bez:2020:PSD

[BCP+20] Jean Luca Bez, André Ramos Carneiro, Pablo José Pavan, Valéria Soldera Girelli, Francieli Zanon Boito, Bruno Alves Fagundes, Carla Osthoff, Pedro Leite da Silva Dias, Jean-François Méhaut, and Philippe Oa Navaux. I/O performance of the Santos Dumont supercomputer. *The International Journal of High Performance Computing Applications*, 34(2):227–245, March 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019868526.

Bougeret:2014:UGR

[BCR+14] Marin Bougeret, Henri Casanova, Yves Robert, Frédéric Vivien, and Dounia Zaidouni. Using group replication for resilience on exascale systems. *The International Journal of High Performance Computing Applications*, 28(2):210–224, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/2/210.

Bhushan:2011:SSL

[BCYS11] Shanti Bhushan, Pablo Carrica, Jianming Yang, and Frederick Stern. Scalability studies and large grid computations for surface combatant using CFDShip-Iowa. *The International Journal of High Performance Computing Applications*, 25(4):466–487, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/4/466.full.pdf+html.

BenYoussef:2007:PIC

[BCZM07] Belgacem Ben Youssef, Gang Cheng, Kyriacos Zygourakis, and Pauline Markenscoff. Parallel implementation of a cellular automaton modeling the growth of three-dimensional tissues. *The International Journal of High Performance Computing Applications*, 21(2):196–209, Summer 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/2/196.full.pdf+html.

Barreda:2021:CNN

[BDC21] Maria Barreda, Manuel F.

Dolz, and M. Asunción Castaño. Convolutional neural nets for estimating the run time and energy consumption of the sparse matrix–vector product. *The International Journal of High Performance Computing Applications*, 35(3):268–281, May 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020953196.

Besard:2015:CSM

[BDFVP15] Tim Besard, Bjorn De Sutter, Andrés Frías-Velázquez, and Wilfried Philips. Case study of multiple trace transform implementations. *The International Journal of High Performance Computing Applications*, 29(4):489–505, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015584091.

Beguelin:1995:REP

[BDG+95] Adam Beguelin, Jack Dongarra, Al Geist, Robert Manchek, and Vaidy Sunderam. Recent enhancements to PVM. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(2):108–127, Summer 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900204.

Browne:2000:PPI

[BDG+00] S. Browne, J. Dongarra, N. Garner, G. Ho, and P. Mucci. A portable programming interface for performance evaluation on modern processors. *The International Journal of High Performance Computing Applications*, 14(3):189–204, Fall 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400303.

Buttari:2007:MPI

[BDL+07] Alfredo Buttari, Jack Dongarra, Julie Langou, Julien Langou, Piotr Luszczek, and Jakub Kurzak. Mixed precision iterative refinement techniques for the solution of dense linear systems. *The International Journal of High Performance Computing Applications*, 21(4):457–466, Winter 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/4/457.full.pdf+html.

Bagrodia:2001:PSL

[BDP01] Rajive Bagrodia, Ewa Deelman, and Thomas Phan. Parallel simulation of large-scale parallel applications. *The International Journal of High Performance Computing Applications*, 15(1):3–12, Spring 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846

(electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500101.

Boduroglu:2007:PRM

[BE07] İ İlkay Boduroḡlu and Zeynep Erenay. A pattern recognition model for predicting a financial crisis in Turkey: Turkish Economic Stability Index. *The International Journal of High Performance Computing Applications*, 21(1):5–20, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/1/5.full.pdf+html.

Bakken:2017:RTT

[BE17] Rune Havnung Bakken and Lars Moland Eliassen. Real-time three-dimensional skeletonisation using general-purpose computing on graphics processing units applied to computer vision-based human pose estimation. *The International Journal of High Performance Computing Applications*, 31(4):259–273, July 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342014566289.

Bland:2018:SIF

[BE18] Wesley Bland and Mattan Erez. Special issue on FTS. *The International Journal of High Performance Computing Applications*, 32(5):597, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017705023.

Bristeau:1995:SHE

[BEF+95] Marie-Odile Bristeau, Jocelyne Erhel, Philippe Féat, Roland Glowinski, and Jacques Périaux. Solving the Helmholtz equation at high-wave numbers on a parallel computer with a shared virtual memory. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(1):18–28, Spring 1995. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900102.

Bitar:1990:HEM

[BEH+90] K. M. Bitar, R. Edwards, U. Heller, A. D. Kennedy, W. Liu, T. A. DeGrand, S. A. Gottlieb, A. Krasnitz, J. B. Kogut, R. L. Renken, M. C. Ogilvie, P. Rossi, D. K. Sinclair, K. C. Wang, R. L. Sugar, M. Teper, and D. Toussaint. The high energy Monte Carlo grand challenge: Simulating quarks and gluons. *The International Journal of Supercomputer Applications*, 4(3):48–60, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400306.

Bernholdt:2018:PGR

[BEK+18] David E. Bernholdt, Wael R. Elwasif, Christos Kartsaklis, Seyong Lee, and Tiffany M. Mintz. Programmer-guided reliability for extreme-scale applications. *The International Journal of High Performance Computing Applications*, 32(5):598–612, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016667625`.

Buttari:2007:POM

[BELF07] Alfredo Buttari, Victor Eijkhout, Julien Langou, and Salvatore Filippone. Performance optimization and modeling of blocked sparse kernels. *The International Journal of High Performance Computing Applications*, 21(4):467–484, Winter 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/4/467.full.pdf+html`.

Berry:1992:LSS

[Ber92] Michael W. Berry. Large-scale sparse singular value computations. *The International Journal of Supercomputer Applications*, 6(1):13–49, April 1992. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209200600103`.

Bauer:2016:FEB

[BEW16] Pavol Bauer, Stefan Engblom, and Stefan Widgren. Fast event-based epidemiological simulations on national scales. *The International Journal of High Performance Computing Applications*, 30(4):438–453, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016635723`.

Berthou:2001:COH

[BF01] Jean-Yves Berthou and Eric Fayolle. Comparing OpenMP, HPF, and MPI programming: a study case. *The International Journal of High Performance Computing Applications*, 15(3):297–309, Fall 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200101500307`.

Baraglia:1999:OPM

[BFLL99] Ranieri Baraglia, Renato Ferrini, Domenico Laforenza, and Antonio Laganà. On the optimization of a pipeline model to integrate a reduced-dimensionality Schrödinger equation for distributed memory architectures. *The International Journal of High Performance Computing Applications*, 13(1):49–62, Spring 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://`

journals.sagepub.com/doi/pdf/10.1177/109434209901300103.

Bounanos:2007:LBD

[BFNV07] Stylianos Bounanos, Martin Fleury, Sebastien Nicolas, and Anthony Vickers. Load-balanced drift-diffusion model simulation: Cluster software performance evaluation. *The International Journal of High Performance Computing Applications*, 21(2):222–245, Summer 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/2/222.full.pdf+html.

Breitenfeld:2000:PIS

[BG00] M. Scot Breitenfeld and Philippe H. Geubelle. Parallel implementation of a spectral scheme for simulations of 3-D dynamic fracture events. *The International Journal of High Performance Computing Applications*, 14(1):26–38, Spring 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400102.

Brooks:2002:TME

[BG02] R. R. Brooks and C. Griffin. Traffic model evaluation of *Ad Hoc* target tracking algorithms. *The International Journal of High Performance Computing Applications*, 16(3):221–234, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160030301.

Beltran:2009:HBL

[BG09] Marta Beltrán and Antonio Guzmán. How to balance the load on heterogeneous clusters. *The International Journal of High Performance Computing Applications*, 23(1):99–118, Spring 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/1/99.full.pdf+html.

Buluc:2011:CBD

[BG11] Aydin Buluç and John R. Gilbert. The Combinatorial BLAS: design, implementation, and applications. *The International Journal of High Performance Computing Applications*, 25(4):496–509, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/4/496.full.pdf+html.

Barzegari:2022:HSN

[BG22] Mojtaba Barzegari and Liesbet Geris. Highly scalable numerical simulation of coupled reaction–diffusion systems with moving interfaces. *The International Journal of High Performance Computing Applications*, 36(2):198–

213, March 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211045939`.

Burgee:1996:CGP

[BGB+96] Susan Burgee, Anthony A. Giunta, Vladimir Balabanov, Bernard Grossman, William H. Mason, Robert Narducci, Raphael T. Haftka, and Layne T. Watson. A coarse-grained parallel variable-complexity multidisciplinary optimization paradigm. *The International Journal of Supercomputer Applications and High Performance Computing*, 10 (4):269–299, Winter 1996. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209601000402`.

Bird:2018:POI

[BGB+18] Robert F. Bird, Patrick Gillies, Michael R. Bareford, Andy Herdman, and Stephen Jarvis. Performance optimisation of inertial confinement fusion codes using mini-applications. *The International Journal of High Performance Computing Applications*, 32(4):570–581, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016670225`.

Brooks:2002:SOD

[BGF02] R. R. Brooks, C. Griffin, and D. S. Friedlander. Self-organized distributed sensor network entity tracking. *The International Journal of High Performance Computing Applications*, 16(3):207–219, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/10943420020160030201`.

Baboulin:2005:PDS

[BGG05] Marc Baboulin, Luc Giraud, and Serge Gratton. A parallel distributed solver for large dense symmetric systems: Applications to geodesy and electromagnetism problems. *The International Journal of High Performance Computing Applications*, 19(4): 353–363, Winter 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/19/4/353.full.pdf+html`.

Baldini:1999:HPC

[BGI+99] Sandra Baldini, Luc Giraud, Javier G. Izaguirre, Jose M. Jimenez, and Luis M. Matey. High performance computing in multibody system design. *The International Journal of High Performance Computing Applications*, 13(2):99–106, Summer 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846

(electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300201.

Bernard:1990:LCE

[BGK+90] Claude Bernard, Rajan Gupta, Gregory Kilcup, Stephen R. Sharpe, and Amarjit Soni. Lattice calculation of electroweak amplitude. *The International Journal of Supercomputer Applications*, 4(3):61–71, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400307.

Bajpai:2015:FMP

[BGM15] Manish Bajpai, Phalguni Gupta, and Prabhat Munshi. Fast multi-processor multi-GPU based algorithm of tomographic inversion for 3D image reconstruction. *The International Journal of High Performance Computing Applications*, 29(1):64–72, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/29/1/64.

Bienz:2020:RCA

[BGO20] Amanda Bienz, William D. Gropp, and Luke N. Olson. Reducing communication in algebraic multigrid with multistep node aware communication. *The International Journal of High Performance Computing Applications*, 34(5):547–561, September 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020925535.

Byrne:1999:CPO

[BH99] George D. Byrne and Alan C. Hindmarsh. Correspondence: PVODE, an ODE solver for parallel computers. *The International Journal of High Performance Computing Applications*, 13(4):354–365, Winter 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300405.

Buck:2000:ARC

[BH00] Bryan Buck and Jeffrey K. Hollingsworth. An API for runtime code patching. *The International Journal of High Performance Computing Applications*, 14(4):317–329, Winter 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400404.

Buck:2006:NHM

[BH06] B. R. Buck and J. K. Hollingsworth. A new hardware monitor design to measure data structure-specific cache eviction information. *The International Journal of High Performance Computing Applications*, 20(3):353–363, Fall 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/3/353.full.pdf+html.

Bethel:2012:MCM

[BH12] E. Wes Bethel and Mark Howison. Multi-core and many-core shared-memory parallel raycasting volume rendering optimization and tuning. *The International Journal of High Performance Computing Applications*, 26(4):399–412, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/4/399.full.pdf+html.

Balaji:2017:SIP

[BH17] Pavan Balaji and Zhiyi Huang. Special issue on programming models and applications for multicores and manycores. *The International Journal of High Performance Computing Applications*, 31(5):359–360, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017717342.

Berthou:2009:XSX

[BHdR09] Jean-Yves Berthou, Jean-François Hamelin, and Etienne de Rocquigny. XXL simulation for XXIst Century power systems operation. *The International Journal of High Performance Computing Applications*, 23(4):361–365, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/361.full.pdf+html.

Bassolino:1988:DPS

[BHK+88] Donna A. Bassolino, Fumio Hirata, Douglas B. Kitchen, Dorothea Kominos, Arthur Pardi, and Ronald M. Levy. Determination of protein structures in solution using NMR data and IMPACT. *The International Journal of Supercomputer Applications*, 2(2):41–61, June 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200204.

Bouteiller:2006:MVP

[BHK+06] A. Bouteiller, T. Herault, G. Krawezik, P. Lemarinier, and F. Cappello. MPICH-V project: a multiprotocol automatic fault-tolerant MPI. *The International Journal of High Performance Computing Applications*, 20(3):319–333, Fall 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/3/319.full.pdf+html.

Basu:2013:TMA

[BHK+13] Protonu Basu, Mary Hall, Malik Khan, Suchit Maindola, Saurav Muralidharan, Shreyas Ramalingam, Axel Rivera, Manu Shantharam, and Anand Venkat. Towards making autotuning mainstream. *The International Journal of High Performance Computing Applications*, 27(4):379–393, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/4/379.full.pdf+html`.

Blas:2010:IEF

[BIC+10] Javier Garcia Blas, Florin Isaila, Jesus Carretero, David Singh, and Felix Garcia-Carballeira. Implementation and evaluation of file write-back and prefetching for MPI-IO over GPFS. *The International Journal of High Performance Computing Applications*, 24(1):78–92, Spring 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/1/78.full.pdf+html`.

Brunet:1992:AAB

[BJ92] Jean-Philippe Brunet and S. Lennart Johnsson. All-to-all broadcast and applications on the Connection Machine. *The International Journal of Supercomputer Applications*, 6(3):241–256, September 1992. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209200600303`.

Budimlic:2007:ICJ

[BJK07] Zoran Budimlić, Mackale Joyner, and Ken Kennedy. Improving compilation of Java scientific applications. *The International Journal of High Performance Computing Applications*, 21(3):251–265, Fall 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/3/251.full.pdf+html`.

Benatia:2020:SMP

[BJWS20] Akrem Benatia, Weixing Ji, Yizhuo Wang, and Feng Shi. Sparse matrix partitioning for optimizing SpMV on CPU–GPU heterogeneous platforms. *The International Journal of High Performance Computing Applications*, 34(1):66–80, January 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019886628`.

Bliss:2007:PPM

[BK07] N. Travinin Bliss and J. Kepner. pMATLAB parallel MATLAB library. *The International Journal of High Performance Computing Applications*, 21(3):336–359, Fall 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/3/336.full.pdf+html`.

Benoit:2009:MCS

[BKRSR09] Anne Benoit, Harald Kosch, Veronika Rehn-Sonigo, and Yves Robert. Multi-criteria scheduling of pipeline workflows (and application to the JPEG encoder). *The International Journal of High Performance Computing Applications*, 23(2):171–187, Summer 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/23/2/171.full.pdf+html`.

Bhatt:2007:CGU

[BKS+07] H. S. Bhatt, H. J. Kotecha, B. K. Singh, K. Bandyopadhyay, V. H. Patel, and A. Dasgupta. Connecting Grids using communication satellites. *The International Journal of High Performance Computing Applications*, 21(4):388–404, Winter 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/4/388.full.pdf+html`.

Basney:1999:IGC

[BL99] Jim Basney and Miron Livny. Improving goodput by coscheduling CPU and network capacity. *The International Journal of High Performance Computing Applications*, 13 (3):220–230, Fall 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209901300305`.

Balaji:2018:I

[BL18] Pavan Balaji and Kai-Cheung Leung. Introduction. *The International Journal of High Performance Computing Applications*, 32(6):777–778, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018807004`.

Beard:2017:RCT

[BLC17] Jonathan C. Beard, Peng Li, and Roger D. Chamberlain. RaftLib: a C++ template library for high performance stream parallel processing. *The International Journal of High Performance Computing Applications*, 31(5):391–404, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016672542`.

Bloch:1987:SGC

[Blo87] Erich Bloch. Supercomputing and the growth of computational science in the National Science Foundation. *The International Journal of Supercomputer Applications*, 1(1):5–8, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208700100102`.

Benoit:2018:REC

[BLOR18] Anne Benoit, Laurent Lefèvre, Anne-Cécile Orgerie, and Issam Raïs. Reducing the energy consumption of large-scale computing systems through combined shutdown policies with multiple constraints. *The International Journal of High Performance Computing Applications*, 32(1):176–188, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342017714530`.

Beaumont:2001:SDH

[BLRR01] Olivier Beaumont, Arnaud Legrand, Fabrice Rastello, and Yves Robert. Static *LU* decomposition on heterogeneous platforms. *The International Journal of High Performance Computing Applications*, 15(3):310–323, Fall 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200101500308`.

Bahr:2022:DHA

[BLU+22] Pascal R. Bähr, Bruno Lang, Peer Ueberholz, Marton Ady, and Roberto Kersevan. Development of a hardware-accelerated simulation kernel for ultra-high vacuum with Nvidia RTX GPUs. *The International Journal of High Performance Computing Applications*, 36(2):141–152, March 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211056654`.

Balaji:2012:AHC

[BM12] Pavan Balaji and Jiayuan Meng. Applications for the Heterogeneous Computing Era. *The International Journal of High Performance Computing Applications*, 26(2):146–147, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/2/146.full.pdf+html`.

Balaji:2013:GEI

[BM13] Pavan Balaji and Satoshi Matsuoka. Guest Editors' introduction: Special issue on applications for the heterogeneous computing era. *The International Journal of High Performance Computing Applications*, 27(2):87–88, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/2/87.full.pdf+html`.

Beaumont:2006:CRC

[BMR06] O. Beaumont, L. Marchal, and Y. Robert. Complexity results for collective communications on heterogeneous platforms. *The International Journal of High Performance Computing Applications*, 20

(1):5–17, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/1/5.full.pdf+html`.

Brower:1989:FAS

[BMT89] R. C. Brower, K. J. M. Moriarty, and P. Tamayo. A fast algorithm to simulate the microcanonical dynamics of the Ising model. *The International Journal of Supercomputer Applications*, 3(4):68–72, December 1989. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208900300407`.

Benner:1987:CMM

[BMWD87] R. E. Benner, G. R. Montry, G. G. Weigand, and Iain Duff. Concurrent multifrontal methods: Shared memory, cache, and frontwidth issues. *The International Journal of Supercomputer Applications*, 1(3):26–44, September 1987. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208700100304`.

Biswas:2008:P

[BO08] Rupak Biswas and Leonid Oliker. Preface. *The International Journal of High Performance Computing Applications*, 22(1):3–4, Spring 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/22/1/3.full.pdf+html`.

Bernard:1991:SQG

[BOD+91] Claude Bernard, Michael C. Ogilvie, Thomas A. DeGrand, Carleton E. DeTar, Steven A. Gottlieb, A. Krasnitz, R. L. Sugar, and D. Toussaint. Studying quarks and gluons on MIMD parallel computers. *The International Journal of Supercomputer Applications*, 5(4):61–70, December 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500406`.

Bader:2001:A

[BP01] David A. Bader and Robert Pennington. Applications. *The International Journal of High Performance Computing Applications*, 15(2):181–185, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200101500211`.

Bellens:2011:MBT

[BPBL11] Pieter Bellens, Josep M. Perez, Rosa M. Badia, and Jesus Labarta. Making the best of temporal locality: Just-in-time renaming and lazy write-back on the Cell/B.E. *The International Journal of High Performance Computing Applications*, 25(2):137–147, 2011. CODEN IHPCFL. ISSN 1094-

3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/2/137.full.pdf+html.

Bhatt:2007:GGA

[BPK+07] H. S. Bhatt, R. M. Patel, H. J. Kotecha, V. H. Patel, and A. Dasgupta. GANESH: Grid application management and enhanced scheduling. *The International Journal of High Performance Computing Applications*, 21(4): 419–428, Winter 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/4/419.full.pdf+html.

Benoit:2018:RCS

[BPR18] Anne Benoit, Loïc Pottier, and Yves Robert. Resilient co-scheduling of malleable applications. *The International Journal of High Performance Computing Applications*, 32(1):89–103, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017704979.

Benner:2021:ISI

[BQOS21] Peter Benner, Enrique Quintana-Ortí, and Jens Saak. Introduction to the special issue related to the Power-Aware Computing Workshop 2019-PACO 2019. *The International Journal of High Performance Computing Applications*, 35(3):209–210, May 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211008791.

Boeres:2003:TOS

[BR03] Cristina Boeres and Vinod E. F. Rebello. Towards optimal static task scheduling for realistic machine models: Theory and practice. *The International Journal of High Performance Computing Applications*, 17(2):173–189, Summer 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003017002007.

Brandt:1991:CSH

[Bra91] Lawrence E. Brandt. Centers of supercomputing — a history and prospectus for the NSF supercomputer centers. *The International Journal of Supercomputer Applications*, 5(4):4–9, December 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500402.

Benoit:2011:MCR

[BRGR11] Anne Benoit, Paul Renaud-Goud, and Yves Robert. Models and complexity results for performance and energy optimization of concurrent streaming applications. *The Inter-*

national Journal of High Performance Computing Applications, 25(3):261–273, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/3/261.full.pdf+html.

Brightwell:2010:EDA

[Bri10] Ron Brightwell. Exploiting direct access shared memory for MPI on multi-core processors. *The International Journal of High Performance Computing Applications*, 24(1):69–77, Spring 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/1/69.full.pdf+html.

Brightwell:2003:DIP

[BRM03] Ron Brightwell, Rolf Riesen, and Arthur B. Maccabe. Design, implementation, and performance of MPI on Portals 3.0. *The International Journal of High Performance Computing Applications*, 17(1):7–19, Spring 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003017001002.

Brown:1988:SCC

[Bro88] Robert A. Brown. Supercomputers in chemistry and chemical engineering. *The International Journal of Supercomputer Applications*, 2(2):3–4, June 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200201.

Benoit:2017:ECV

[BRR17] Anne Benoit, Saurabh K. Raina, and Yves Robert. Efficient checkpoint/verification patterns. *The International Journal of High Performance Computing Applications*, 31(1):52–65, January 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015594531.

Brower:1992:BHP

[BRT+92] R. C. Brower, C. Rebbi, P. Tamayo, K. J. M. Moriarty, and S. Sanielevici. Benchmarking high-performance computing systems by means of local-Creutz simulations of the $d = 2$ Ising model. *The International Journal of Supercomputer Applications*, 6(3):281–287, September 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600305.

Brightwell:2005:AIO

[BRU05] Ron Brightwell, Rolf Riesen, and Keith D. Underwood. Analyzing the impact of overlap, offload, and independent progress for Message Passing Interface applications.

The International Journal of High Performance Computing Applications, 19(2):103–117, Summer 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/2/103.full.pdf+html.

Berry:1988:MSS

[BS88] Michael W. Berry and Ahmed Sameh. Multiprocessor schemes for solving block tridiagonal linear systems. *The International Journal of Supercomputer Applications*, 2(3):37–57, September 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200304.

Bailey:1989:FPA

[BSBF89] David H. Bailey, Horst D. Simon, John T. Barton, and Martin J. Fouts. Floating point arithmetic in future supercomputers. *The International Journal of Supercomputer Applications*, 3(3):86–90, September 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300306.

Bhatti:2003:NQG

[BSCC03] Saleem N. Bhatti, Søren-Aksel Sørensen, Peter Clark, and Jon Crowcroft. Network QoS for Grid systems. *The International Journal of High Performance Computing Applications*, 17(3):219–236, Fall 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003173009.

Boyd:2016:PPR

[BSH+16] William Boyd, Andrew Siegel, Shuo He, Benoit Forget, and Kord Smith. Parallel performance results for the OpenMOC neutron transport code on multicore platforms. *The International Journal of High Performance Computing Applications*, 30(3):360–375, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016630388.

Banerjee:2014:CSH

[BSK14] Dip Sankar Banerjee, Parikshit Sakurikar, and Kishore Kothapalli. Comparison sorting on hybrid multicore architectures for fixed and variable length keys. *The International Journal of High Performance Computing Applications*, 28(3):267–284, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/3/267.

Benson:2015:SED

[BSS15] Austin R. Benson, Sven Schmit, and Robert Schreiber.

Silent error detection in numerical time-stepping schemes. *The International Journal of High Performance Computing Applications*, 29(4):403–421, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342014532297`.

Bernabeu:2014:CCS

[BSW+14] Miguel O. Bernabeu, James Southern, Nicholas Wilson, Peter Strazdins, Jonathan Cooper, and Joe Pitt-Francis. Chaste: a case study of parallelisation of an open source finite-element solver with applications to computational cardiac electrophysiology simulation. *The International Journal of High Performance Computing Applications*, 28 (1):13–32, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/28/1/13.full.pdf+html`.

Balouek-Thomert:2019:TCC

[BTRZ+19] Daniel Balouek-Thomert, Eduard Gibert Renart, Ali Reza Zamani, Anthony Simonet, and Manish Parashar. Towards a computing continuum: Enabling edge-to-cloud integration for data-driven workflows. *The International Journal of High Performance Computing Applications*, 33 (6):1159–1174, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019877383`.

Buslee:1987:BRS

[Bus87] B. Buslee. Book review: *Supercomputers: Value and Trends*, Bill Buzbee, Computer Research and Applications Group, Computing and Communications Division, Los Alamos National Laboratory, Los Alamos, New Mexico 87545. *The International Journal of Supercomputer Applications*, 1(2):100–103, June 1987. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208700100207`.

Buzbee:1989:RT

[Buz89] Bill Buzbee. Report from Trondheim. *The International Journal of Supercomputer Applications*, 3(4):3–5, December 1989. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208900300401`.

Balaji:2011:SIP

[BV11] Pavan Balaji and Abhinav Vishnu. Special issue on programming models and systems software support for high-end computing applications. *The International Journal of High Performance Computing Applications*, 25(2):135–136, 2011. CODEN IHPCFL.

ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/25/2/135.full.pdf+html`.

Bhatele:2010:UAP

[BWB+10] Abhinav Bhatelé, Lukasz Wesolowski, Eric Bohm, Edgar Solomonik, and Laxmikant V. Kalé. Understanding application performance via micro-benchmarks on three large supercomputers: Intrepid, Ranger and Jaguar. *The International Journal of High Performance Computing Applications*, 24(4):411–427, Winter 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/4/411.full.pdf+html`.

Bertrand:2005:APC

[BYCB05] Felipe Bertrand, Yongquan Yuan, Kenneth Chiu, and Randall Bramley. An approach to parallel $M \times N$ communication. *The International Journal of High Performance Computing Applications*, 19(4):399–407, Winter 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/19/4/399.full.pdf+html`.

Brooks:1991:MSS

[BYT91] Charles L. Brooks III, William S. Young, and Douglas J. Tobias. Molecular simulations on supercomputers. *The International Journal of Supercomputer Applications*, 5(4):98–112, December 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500409`.

Childs:2020:TSV

[CAA+20] Hank Childs, Sean D. Ahern, James Ahrens, Andrew C. Bauer, Janine Bennett, E. Wes Bethel, Peer-Timo Bremer, Eric Brugger, Joseph Cottam, Matthieu Dorier, Soumya Dutta, Jean M. Favre, Thomas Fogal, Steffen Frey, Christoph Garth, Berk Geveci, William F. Godoy, Charles D. Hansen, Cyrus Harrison, Bernd Hentschel, Joseph Insley, Chris R. Johnson, Scott Klasky, Aaron Knoll, James Kress, Matthew Larsen, Jay Lofstead, Kwan-Liu Ma, Preeti Malakar, Jeremy Meredith, Kenneth Moreland, Paul Navrátil, Patrick O'Leary, Manish Parashar, Valerio Pascucci, John Patchett, Tom Peterka, Steve Petruzza, Norbert Podhorszki, David Pugmire, Michel Rasquin, Silvio Rizzi, David H. Rogers, Sudhanshu Sane, Franz Sauer, Robert Sisneros, Han-Wei Shen, Will Usher, Rhonda Vickery, Venkatram Vishwanath, Ingo Wald, Ruonan Wang, Gunther H. Weber, Brad Whitlock, Matthew Wolf, Hongfeng Yu, and Sean B. Ziegeler. A terminology for in situ visualization and analysis systems. *The International Journal of High Performance Computing Applications*, 34 (6):676–691, November 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342020935991`.

Carpenter:2013:PTA

[CAE+13] I. Carpenter, R. K. Archibald, K. J. Evans, J. Larkin, P. Micikevicius, M. Norman, J. Rosinski, J. Schwarzmeier, and M. A. Taylor. Progress towards accelerating HOMME on hybrid multi-core systems. *The International Journal of High Performance Computing Applications*, 27(3):335–347, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/3/335.full.pdf+html`.

Choi:2007:PCC

[CAK+07] Gyu Sang Choi, Saurabh Agarwal, Jin-Ha Kim, Chita R. Das, and Andy B. Yoo. Performance comparison of coscheduling algorithms for non-dedicated clusters through a generic framework. *The International Journal of High Performance Computing Applications*, 21(1):91–105, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/1/91.full.pdf+html`.

Cappello:2009:FTP

[Cap09] Franck Cappello. Fault tolerance in petascale/exascale systems: Current knowledge, challenges and research opportunities. *The International Journal of High Performance Computing Applications*, 23 (3):212–226, Fall 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/23/3/212.full.pdf+html`.

Cortese:1995:HPS

[CB95] Thomas A. Cortese and S. Balachandar. High performance spectral simulation of turbulent flows in massively parallel machines with distributed memory. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(3):187–204, Fall 1995. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209500900302`.

Cotelo:2018:SCO

[CBA+18] Carmen Cotelo, María Aránzazu Amo Baladrón, Roland Aznar, Pablo Lorente, Pablo Rey, and Aurelio Rodríguez. On the successful coexistence of oceanographic operational services with other computational workloads. *The Inter-*

national Journal of High Performance Computing Applications, 32(2):302–313, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017692045.

Crutcher:1996:RSI

[CBB+96] Richard M. Crutcher, M. Pauline Baker, George Baxter, John Pixton, Raymond Plante, Harold Ravlin, Douglas Roberts, and Randall Sharpe. Radio synthesis imaging: a grand challenge HPCC project. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(2–3):236–245, Summer/Fall 1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000210.

Casanova:2004:VIS

[CBB+04] Henri Casanova, Francine Berman, Thomas Bartol, Erhan Gokcay, Terry Sejnowski, Adam Birnbaum, Jack Dongarra, Michelle Miller, Mark Ellisman, Marcio Faerman, Graziano Obertelli, Rich Wolski, Stuart Pomerantz, and Joel Stiles. The Virtual Instrument: Support for Grid-enabled Mcell simulations. *The International Journal of High Performance Computing Applications*, 18(1):3–17, Spring 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/1/3.full.pdf+html.

Chien:2017:EVD

[CBD+17] A. Chien, P. Balaji, N. Dun, A. Fang, H. Fujita, K. Iskra, Z. Rubenstein, Z. Zheng, J. Hammond, I. Laguna, D. Richards, A. Dubey, B. van Straalen, M. Hoemmen, M. Heroux, K. Teranishi, and A. Siegel. Exploring versioned distributed arrays for resilience in scientific applications. *The International Journal of High Performance Computing Applications*, 31(6):564–590, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016664796.

Chakravarti:2006:SOS

[CBL06] Arjav J. Chakravarti, Gerald Baumgartner, and Mario Lauria. Self-organizing scheduling on the organic Grid. *The International Journal of High Performance Computing Applications*, 20(1):115–130, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/1/115.full.pdf+html.

Casas:2010:APD

[CBL10] Marc Casas, Rosa M. Badia, and Jesús Labarta. Automatic phase detection and structure extraction of MPI applications. *The International Journal of High Performance Computing Applications*, 24(3):335–360, Fall 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/3/335.full.pdf+html.

Chaimov:2013:TML

[CBM13] Nicholas Chaimov, Scott Biersdorff, and Allen D. Malony. Tools for machine-learning-based empirical autotuning and specialization. *The International Journal of High Performance Computing Applications*, 27(4):403–411, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/4/403.full.pdf+html.

Casanova:2001:DMS

[CBSB01] Henri Casanova, Thomas M. Bartol, Jr., Joel Stiles, and Francine Berman. Distributing MCell simulations on the Grid. *The International Journal of High Performance Computing Applications*, 15(3):243–257, Fall 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500304.

Constantin:1997:PHK

[CBV97] Jeffrey M. Constantin, Michael W. Berry, and Bradley T. Vander Zanden. Parallelization of the Hoshen–Kopelman algorithm using a finite state machine. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(1):34–48, Spring 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100103.

Chirravuri:1995:MPA

[CBW95] Sridhar Chirravuri, Suchendra M. Bhandarkar, and David Whitmire. A massively parallel algorithm for K_2 entropy computation: Case studies of model systems and *In Vivo* data. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(4):296–311, Winter 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900404.

Chang:1995:PMH

[CC95] Yu-Chung Chang and Tony F. Chan. Performance modeling for high-order finite difference methods on the Connection Machine CM-2. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(1):40–57, Spring 1995. CODEN IJSAE9. ISSN 0890-2720. URL http://

journals.sagepub.com/doi/pdf/10.1177/109434209500900104.

Conejero:2018:TBP

[CCBL18] Javier Conejero, Sandra Corella, Rosa M. Badia, and Jesus Labarta. Task-based programming in COMPSs to converge from HPC to big data. *The International Journal of High Performance Computing Applications*, 32(1):45–60, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017701278.

Chau:2011:PSO

[CCBS11] M. Chau, R. Couturier, J. Bahi, and P. Spiteri. Parallel solution of the obstacle problem in Grid environments. *The International Journal of High Performance Computing Applications*, 25(4):488–495, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/4/488.full.pdf+html.

Carter:2006:Pb

[CCD+06] Larry Carter, Henri Casanova, Frédéric Desprez, Jeanne Ferrante, and Yves Robert. Preface. *The International Journal of High Performance Computing Applications*, 20(4): 441–442, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/4/441.full.pdf+html.

Carter:2006:Pa

[CCF+06] Larry Carter, Henri Casanova, Jeanne Ferrante, Frédéric Desprez, and Yves Robert. Preface. *The International Journal of High Performance Computing Applications*, 20(1):3–4, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/1/3.full.pdf+html.

Callahan:1988:PPP

[CCH+88] C. David Callahan, Keith D. Cooper, Robert T. Hood, Ken Kennedy, and Linda Torczon. ParaScope: a parallel programming environment. *The International Journal of Supercomputer Applications*, 2(4):84–99, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200409.

Calhoun:2019:EFL

[CCO+19] Jon Calhoun, Franck Cappello, Luke N. Olson, Marc Snir, and William D. Gropp. Exploring the feasibility of lossy compression for PDE simulations. *The International Journal of High Performance Computing Applications*, 33(2):397–410, March 1, 2019. CODEN IHPCFL. ISSN

1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018762036.

Canon:2020:SIS

[CCRV20] Louis-Claude Canon, Aurélie Kong Win Chang, Yves Robert, and Frédéric Vivien. Scheduling independent stochastic tasks under deadline and budget constraints. *The International Journal of High Performance Computing Applications*, 34(2):246–264, March 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019852135.

Chamberlain:2007:PPC

[CCZ07] B. L. Chamberlain, D. Callahan, and H. P. Zima. Parallel programmability and the Chapel language. *The International Journal of High Performance Computing Applications*, 21(3):291–312, Fall 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/3/291.full.pdf+html.

Casanova:1997:NNE

[CD97] Henri Casanova and Jack Dongarra. NetSolve: a network-enabled server for solving computational science problems. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(3):212–223, Fall 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100304.

Caron:2006:DST

[CD06] E. Caron and F. Desprez. Diet: a scalable toolbox to build network enabled servers on the Grid. *The International Journal of High Performance Computing Applications*, 20(3):335–352, Fall 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/3/335.full.pdf+html.

Chouhan:2006:AMD

[CDCV06] Pushpinder Kaur Chouhan, Holly Dail, Eddy Caron, and Frédéric Vivien. Automatic middleware deployment planning on clusters. *The International Journal of High Performance Computing Applications*, 20(4):517–530, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/4/517.full.pdf+html.

Carreras:1990:PTC

[CDD+90] B. A. Carreras, N. Dominguez, J. B. Drake, J.-N. Leboeuf, L. A. Charlton, J. A. Holmes, D. K. Lee, V. E. Lynch, and L. Garcia. Plasma turbulence calculations on supercomputers. *The International Journal of Supercomputer Appli-*

cations, 4(3):97–110, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400310.

Cordoba:2014:EPR

[CDG+14] M. Luisa Córdoba, Antonio García Dopico, M. Isabel García, Francisco Rosales, Jesús Arnaiz, Rodolfo Bermejo, and Pedro Galán del Sastre. Efficient parallelization of a regional ocean model for the western Mediterranean Sea. *The International Journal of High Performance Computing Applications*, 28(3):368–383, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/3/368.

Casalino:2021:ADM

[CDG+21] Lorenzo Casalino, Abigail C. Dommer, Zied Gaieb, Emilia P. Barros, Terra Sztain, Surl-Hee Ahn, Anda Trifan, Alexander Brace, Anthony T. Bogetti, Austin Clyde, Heng Ma, Hyungro Lee, Matteo Turilli, Syma Khalid, Lillian T. Chong, Carlos Simmerling, David J. Hardy, Julio Dc Maia, James C. Phillips, Thorsten Kurth, Abraham C. Stern, Lei Huang, John D. Mccalpin, Mahidhar Tatineni, Tom Gibbs, John E. Stone, Shantenu Jha, Arvind Ramanathan, and Rommie E. Amaro. AI-driven multiscale simulations illuminate mechanisms of SARS-CoV-2 spike dynamics. *The International Journal of High Performance Computing Applications*, 35 (5):432–451, September 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211006452.

Chang:1993:UPC

[CDH+93] C.-S. Chang, G. De Titta, H. Hauptman, R. Miller, P. Thuman, and C. Weeks. Using parallel computers to solve the phase problem of X-Ray crystallography. *The International Journal of Supercomputer Applications*, 7(1):25–49, March 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700103.

Colbrook:1997:E

[CDH+97a] Adrian Colbrook, Iain Duff, Tony Hey, Klaus Stüben, and Clemens-August Thole. Editorial. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):275–276, Winter 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100401. Reports on the EUROPORT Project to port 38 industrially relevant codes to parallel computers.

Cuny:1997:BDS

[CDH+97b] Janice E. Cuny, Robert A. Dunn, Steven T. Hackstadt, Christopher W. Harrop, Harold H. Hersey, Allen D. Malony, and Douglas R. Toomey. Building domain-specific environments for computational science: a case study in seismic tomography. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(3):179–196, Fall 1997. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209701100301`.

Cappello:2019:UCL

[CDL+19] Franck Cappello, Sheng Di, Sihuan Li, Xin Liang, Ali Murat Gok, Dingwen Tao, Chun Hong Yoon, Xin-Chuan Wu, Yuri Alexeev, and Frederic T. Chong. Use cases of lossy compression for floating-point data in scientific data sets. *The International Journal of High Performance Computing Applications*, 33(6):1201–1220, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019853336`.

Cayrols:2020:PSP

[CDL20] Sébastien Cayrols, Iain S. Duff, and Florent Lopez. Parallelization of the solve phase in a task-based Cholesky solver using a sequential task flow model. *The International Journal of High Performance Computing Applications*, 34 (3):340–356, May 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019888567`.

Choi:1994:CRL

[CDP+94] Jaeyoung Choi, Jack J. Dongarra, Roldan Pozo, Danny C. Sorensen, and David W. Walker. CRPC research into linear algebra software for high performance computers. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(2):99–118, Summer 1994. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209400800203`.

Caron:2004:PEL

[CDQS04] E. Caron, F. Desprez, M. Quinson, and F. Suter. Performance evaluation of linear algebra routines. *The International Journal of High Performance Computing Applications*, 18(3):373–390, Fall 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/18/3/373.full.pdf+html`.

Casanova:2015:MAV

[CDRV15] Henri Casanova, Fanny Dufossé, Yves Robert, and Frédéric Vivien. Mapping applications on volatile resource. *The International Journal of High Performance Computing Applications*, 29(1):73–91, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/29/1/73`.

Chan:2005:CCI

[CDT05] Albert Chan, Frank Dehne, and Ryan Taylor. CGMGRAPH/CGMLIB: Implementing and testing CGM graph algorithms on PC clusters and shared memory machines. *The International Journal of High Performance Computing Applications*, 19 (1):81–97, Spring 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/19/1/81.full.pdf+html`.

Chavez:2018:DMR

[CdVL+18] Francisco Chávez, Francisco Fernández de Vega, Daniel Lanza, César Benavides, Juan Villegas, Leonardo Trujillo, Gustavo Olague, and Graciela Román. Deploying massive runs of evolutionary algorithms with ECJ and Hadoop: Reducing interest points required for face recognition. *The International Journal of High Performance Computing Applications*, 32(5):706–720, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016678302`.

Chan:2000:DLP

[CE00] Tony Chan and Victor Eijkhout. Design of a library of parallel preconditioners. *The International Journal of High Performance Computing Applications*, 14 (2):91–101, Summer 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200001400201`.

Cecilia:2020:GEN

[Cec20] José M. Cecilia. Guest Editors' note: Special issue on novel high-performance computing algorithms and platforms in bioinformatics. *The International Journal of High Performance Computing Applications*, 34(1):3–4, January 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019889705`.

Clinckemaillie:1997:PIP

[CEL+97] Jan Clinckemaillie, Birgit Elsner, Guy Lonsdale, Serge Meliciani, Stefanos Vlachoutsis, Frank de Bruyne, and Michael Holzner. Performance issues of the parallel PAM-CRASH code. *The*

International Journal of Supercomputer Applications and High Performance Computing, 11(1):3–11, Spring 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100101.

Chandy:1994:IST

[CFK+94] Mani Chandy, Ian Foster, Ken Kennedy, Charles Koelbel, and Chau-Wen Tseng. Integrated support for task and data parallelism. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(2):80–98, Summer 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800202.

Cachau:1994:SST

[CGB+94] Raul E. Cachau, Rick Gussio, John A. Beutler, Gwendolyn N. Chmurny, Bruce D. Hilton, Gary M. Muschik, and John W. Erickson. Solution structure of taxol determined using a novel feedback-scaling procedure for NOE-Restrained molecular dynamics. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(1):24–34, Spring 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800104.

Cappello:2009:TER

[CGG+09] Franck Cappello, Al Geist, Bill Gropp, Laxmikant Kale, Bill Kramer, and Marc Snir. Toward exascale resilience. *The International Journal of High Performance Computing Applications*, 23(4):374–388, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/374.full.pdf+html.

Calderon:2016:IPU

[CGGC+16] Alejandro Calderón, Alberto García, Félix García-Carballeira, Jesús Carretero, and Javier Fernández. Improving performance using computational compression through memoization: a case study using a railway power consumption simulator. *The International Journal of High Performance Computing Applications*, 30(4):469–485, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016637813.

Calore:2019:OLB

[CGST19] E. Calore, A. Gabbana, Sf Schifano, and R. Tripiccione. Optimization of lattice Boltzmann simulations on heterogeneous computers. *The International Journal of High Performance Computing Applications*, 33(1):124–

139, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017703771`.

Chalios:2018:D

[CGT+18] Charalampos Chalios, Giorgis Georgakoudis, Konstantinos Tovletoglou, George Karakonstantis, Hans Vandierendonck, and Dimitrios S. Nikolopoulos. DARE. *The International Journal of High Performance Computing Applications*, 32(1):74–88, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342017718612`.

Casas:2019:RGI

[CGW19] Marc Casas, Wilfried N. Gansterer, and Elias Wimmer. Resilient gossip-inspired all-reduce algorithms for high-performance computing: Potential, limitations, and open questions. *The International Journal of High Performance Computing Applications*, 33(2):366–383, March 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018762531`.

Chen:1994:MPM

[CH94] Ai Chen and Cynthia S. Hirtzel. Massively parallel Monte Carlo simulations on CM2 for gas adsorption in zeolite molecular sieves. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(1):54–63, Spring 1994. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209400800107`.

Chen:2013:TFA

[CH13] Ray S. Chen and Jeffrey K. Hollingsworth. Towards fully automatic auto-tuning: Leveraging language features of Chapel. *The International Journal of High Performance Computing Applications*, 27(4):394–402, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/4/394.full.pdf+html`.

Chan:1988:DDA

[Cha88] Tony F. Chan. Domain decomposition algorithms and computational fluid dynamics. *The International Journal of Supercomputer Applications*, 2(4):72–83, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208800200408`.

Chow:2001:PIP

[Cho01] Edmond Chow. Parallel implementation and practical use of sparse approximate inverse preconditioners with a priori sparsity patterns. *The International Journal of High Performance Computing Applications*, 15(1):56–74, Spring 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500106.

Charrier:2019:SED

[CHT+19] Dominic E. Charrier, Benjamin Hazelwood, Ekaterina Tutlyaeva, Michael Bader, Michael Dumbser, Andrey Kudryavtsev, Alexander Moskovsky, and Tobias Weinzierl. Studies on the energy and deep memory behaviour of a cache-oblivious, task-based hyperbolic PDE solver. *The International Journal of High Performance Computing Applications*, 33(5):973–986, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019842645.

Chu:1999:IPL

[Chu99] Eleanor Chu. Impact of physical/logical network topology on parallel matrix computation. *The International Journal of High Performance Computing Applications*, 13(2):124–145, Summer 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300203.

Chai:2015:TSS

[CHW+15] Jun Chai, Johan Hake, Nan Wu, Mei Wen, Xing Cai, Glenn T. Lines, Jing Yang, Huayou Su, Chunyuan Zhang, and Xiangke Liao. Towards simulation of subcellular calcium dynamics at nanometre resolution. *The International Journal of High Performance Computing Applications*, 29(1):51–63, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/29/1/51.

Cremonesi:2020:APM

[CHWS20] Francesco Cremonesi, Georg Hager, Gerhard Wellein, and Felix Schürmann. Analytic performance modeling and analysis of detailed neuron simulations. *The International Journal of High Performance Computing Applications*, 34(4):428–449, July 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020912528.

Chu:2002:SID

[CHZ02] Maurice Chu, Horst Haussecker, and Feng Zhao. Scalable information-driven sensor querying and routing for *Ad Hoc* heterogeneous sensor networks. *The International Journal of High Performance Computing Appli-*

cations, 16(3):293–313, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160030901.

Chaimov:2017:RBS

[CIWI17] Nicholas Chaimov, Khaled Z. Ibrahim, Samuel Williams, and Costin Iancu. Reaching bandwidth saturation using transparent injection parallelization. *The International Journal of High Performance Computing Applications*, 31(5):405–421, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016672720.

Caniou:2006:MSH

[CJ06] Yves Caniou and Emmanuel Jeannot. Multicriteria scheduling heuristics for GridRPC systems. *The International Journal of High Performance Computing Applications*, 20 (1):61–76, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/1/61.full.pdf+html.

Craig:2005:CNE

[CJK+05] Anthony P. Craig, Robert Jacob, Brian Kauffman, Tom Bettge, Jay Larson, Everest Ong, Chris Ding, and Yun He. CPL6: The new extensible, high performance parallel coupler for the Community Climate System Model. *The International Journal of High Performance Computing Applications*, 19(3):309–327, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/309.full.pdf+html.

Chen:2008:P

[CJZ08] Jinjun Chen, Hai Jin, and Mengchu Zhou. Preface. *The International Journal of High Performance Computing Applications*, 22(3):235–237, Fall 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/3/235.full.pdf+html.

Chernyavsky:2001:ILE

[CK01] Boris Chernyavsky and Doyle Knight. Investigation of large eddy simulation code scaling performance and network type influence on a Linux PC cluster. *The International Journal of High Performance Computing Applications*, 15(4):388–393, Winter 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500405.

Chau:2008:AFM

[CKE08] Nguyen Hai Chau, Atsushi Kawai, and Toshikazu Ebisuzaki.

Acceleration of Fast Multipole Method using special-purpose computer GRAPE. *The International Journal of High Performance Computing Applications*, 22(2):194–205, Summer 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/2/194.full.pdf+html.

Casanova:1999:AST

[CKPD99] Henri Casanova, MyungHo Kim, James S. Plank, and Jack J. Dongarra. Adaptive scheduling for task farming with grid middleware. *The International Journal of High Performance Computing Applications*, 13(3):231–240, Fall 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300306.

Chang:1995:PIL

[CL95] Henry Ker-Chang Chang and Chung-Yu Liou. Parallel implementation of linear quadtree codes using the nCube 2 supercomputer system. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(3):220–231, Fall 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900304.

Clancy:1991:CSC

[Cla91] Paulette Clancy. Computer simulation of crystal growth and dissolution in metals and semiconductors. *The International Journal of Supercomputer Applications*, 5(4):10–33, December 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500403.

Cornelis:2017:HAV

[CLBS17] Jan G. Cornelis, Jan Lemeire, Tim Bruylants, and Peter Schelkens. Heterogeneous acceleration of volumetric JPEG 2000 using OpenCL. *The International Journal of High Performance Computing Applications*, 31(3):229–245, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016646438.

Choi:1987:IDI

[CLF87] Diana Choi, Creon Levit, and Steven E. Follin. Implementation of a distributed interactive graphics system. *The International Journal of Supercomputer Applications*, 1(4):82–95, December 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100406.

Clark:2013:ARA

[CLLG13] M. A. Clark, P. C. La Plante,

and L. J. Greenhill. Accelerating radio astronomy cross-correlation with graphics processing units. *The International Journal of High Performance Computing Applications*, 27(2):178–192, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/2/178.full.pdf+html`.

Chow:2016:SHF

[CLM+16] Edmond Chow, Xing Liu, Sanchit Misra, Marat Dukhan, Mikhail Smelyanskiy, Jeff R. Hammond, Yunfei Du, Xiang-Ke Liao, and Pradeep Dubey. Scaling up Hartree–Fock calculations on Tianhe-2. *The International Journal of High Performance Computing Applications*, 30(1):85–102, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015592960`.

Chien:1999:DEH

[CLP+99] A. Chien, M. Lauria, R. Pennington, M. Showerman, G. Iannello, M. Buchanan, K. Connelly, L. Giannini, G. Koenig, S. Krishnamurthy, Q. Liu, S. Pakin, and G. Sampemane. Design and evaluation of an HPVM-based Windows NT supercomputer. *The International Journal of High Performance Computing Applications*, 13(3):201–219, Fall 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209901300304`.

Chapman:2009:PI

[CLSS09] Barbara Chapman, Jesús Labarta, Vivek Sarkar, and Mitsuhisa Sato. Programmability issues. *The International Journal of High Performance Computing Applications*, 23(4):328–331, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/23/4/328.full.pdf+html`.

Coupez:1997:DSP

[CM97] Thierry Coupez and Stéphane Marie. From a direct solver to a parallel iterative solver in 3-D forming simulation. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):277–285, Winter 1997. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209701100402`.

Craig:2015:IPP

[CMHB15] Anthony P. Craig, Sheri A. Mickelson, Elizabeth C. Hunke, and David A. Bailey. Improved parallel performance of the CICE model in CESM1. *The International Journal of High Performance Computing Applications*, 29(2):154–165,

2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342014548771.

Commer:2012:IKS

[CMN12] Michael Commer, Filipe Rnc Maia, and Gregory A. Newman. Iterative Krylov solution methods for geophysical electromagnetic simulations on throughput-oriented processing units. *The International Journal of High Performance Computing Applications*, 26(4):378–385, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/4/378.full.pdf+html.

Callaghan:2011:MHS

[CMS+11] Scott Callaghan, Philip Maechling, Patrick Small, Kevin Milner, Gideon Juve, Thomas H. Jordan, Ewa Deelman, Gaurang Mehta, Karan Vahi, Dan Gunter, Keith Beattie, and Christopher Brooks. Metrics for heterogeneous scientific workflows: a case study of an earthquake science application. *The International Journal of High Performance Computing Applications*, 25(3):274–285, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/3/274.full.pdf+html.

Connolly:1988:BRS

[Con88] John W. D. Connolly. Book review: *The Supercomputer Era*. *The International Journal of Supercomputer Applications*, 2(1):95–96, March 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200108.

Cotronis:2004:CMP

[Cot04] Yiannis Cotronis. Composition of Message Passing Interface applications over MPICH-G2. *The International Journal of High Performance Computing Applications*, 18(3):327–339, Fall 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/3/327.full.pdf+html.

Cowles:2008:PFC

[Cow08] Geoffrey W. Cowles. Parallelization of the FVCOM Coastal Ocean Model. *The International Journal of High Performance Computing Applications*, 22(2):177–193, Summer 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/2/177.full.pdf+html.

Chapp:2019:TPW

[CRS+19] Dylan Chapp, Danny Rorabaugh, Kento Sato, Dong H. Ahn, and Michela Taufer. A three-phase workflow for general and expressive representations of nondeterminism in HPC applications. *The International Journal of High Performance Computing Applications*, 33 (6):1175–1184, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019868826`.

Che:2014:BCP

[CS14] Shuai Che and Kevin Skadron. BenchFriend: Correlating the performance of GPU benchmarks. *The International Journal of High Performance Computing Applications*, 28 (2):238–250, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/28/2/238`.

Cicotti:2019:RCP

[CSC19] Pietro Cicotti, Manu Shantharam, and Laura Carrington. Reducing communication in parallel graph search algorithms with software caches. *The International Journal of High Performance Computing Applications*, 33(2):384–396, March 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018762510`.

Camargos:2017:GAI

[CSGM17] Ana Flávia P. Camargos, Viviane C. Silva, Jean-M. Guichon, and Gérard Meunier. GPU-accelerated iterative solution of complex-entry systems issued from 3D edge-FEA of electromagnetics in the frequency domain. *The International Journal of High Performance Computing Applications*, 31(2):119–133, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015584476`.

Chronopoulos:1991:SPS

[CSV91] Anthony T. Chronopoulos, C. R. Swaminathan, and V. R. Voller. The Stefan problem solved via conjugate gradient-like iterative methods on a parallel vector machine. *The International Journal of Supercomputer Applications*, 5(3):74–91, September 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500307`.

Chung:2010:HPT

[CSY10] Julianne Chung, Philip Sternberg, and Chao Yang. High-performance three-dimensional image reconstruction for molecular structure determination. *The International Journal of High Performance Computing Applications*, 24(2):117–135, Summer 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.`

sagepub.com/content/24/2/117.full.pdf+html.

Collins:2005:DIC

[CTD+05] Nancy Collins, Gerhard Theurich, Cecelia DeLuca, Max Suarez, Atanas Trayanov, V. Balaji, Peggy Li, Weiyu Yang, Chris Hill, and Arlindo da Silva. Design and implementation of components in the Earth System Modeling Framework. *The International Journal of High Performance Computing Applications*, 19(3):341–350, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/341.full.pdf+html.

Collignon:2011:FIS

[CvG11] Tp Collignon and Mb van Gijzen. Fast iterative solution of large sparse linear systems on geographically separated clusters. *The International Journal of High Performance Computing Applications*, 25(4):440–450, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/4/440.full.pdf+html.

Craig:2012:NFC

[CVJ12] Anthony P. Craig, Mariana Vertenstein, and Robert Jacob. A new flexible coupler for Earth system modeling developed for CCSM4 and CESM1. *The International Journal of High Performance Computing Applications*, 26(1):31–42, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/1/31.full.pdf+html.

Chapin:2001:OS

[CW01] Steve Chapin and Joachim Worringen. Operating systems. *The International Journal of High Performance Computing Applications*, 15(2):115–123, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500204.

Cooper:2005:IAC

[CW05] Keith D. Cooper and Todd Waterman. Investigating adaptive compilation using the MIPSPro compiler. *The International Journal of High Performance Computing Applications*, 19(4):423–431, Winter 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/4/423.full.pdf+html.

Chorley:2009:HMP

[CWG09] Martin J. Chorley, David W. Walker, and Martyn F. Guest. Hybrid message-passing and shared-memory programming in a molecular dynamics application on multicore clusters.

The International Journal of High Performance Computing Applications, 23(3):196–211, Fall 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/3/196.full.pdf+html.

Carrillo:1999:ILS

[CWHP99] Alex R. Carrillo, John E. West, David A. Horner, and John F. Peters. Interactive large-scale soil modeling using distributed high performance computing environments. *The International Journal of High Performance Computing Applications*, 13(1):33–48, Spring 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300101.

Chen:2008:ACD

[CY08] Jinjun Chen and Yun Yang. Activity completion duration based checkpoint selection for dynamic verification of temporal constraints in Grid workflow systems. *The International Journal of High Performance Computing Applications*, 22(3):319–329, Fall 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/3/319.full.pdf+html.

Chen:2002:SLT

[CYT+02] J. C. Chen, K. Yao, T. L. Tung, C. W. Reed, and D. Chen. Source localization and tracking of a wideband source using a randomly distributed beamforming sensor array. *The International Journal of High Performance Computing Applications*, 16(3):259–272, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160030601.

Chen:2020:HSC

[CYZ+20] Daobi Chen, Liang Yuan, Yunquan Zhang, Jingfu Yan, and David Kahaner. HPC software capability landscape in China. *The International Journal of High Performance Computing Applications*, 34(1):115–153, January 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018760614.

Czarnul:2003:PTA

[Cza03] Paweł Czarnul. Programming, tuning and automatic parallelization of irregular divide-and-conquer applications in DAMPVM/DAC. *The International Journal of High Performance Computing Applications*, 17(1):77–93, Spring 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://

journals.sagepub.com/doi/pdf/10.1177/1094342003017001007.

Chen:2011:GAM

[CZR+11] Yong Chen, Huaiyu Zhu, Philip C. Roth, Hui Jin, and Xian-He Sun. Global-aware and multi-order context-based prefetching for high-performance processors. *The International Journal of High Performance Computing Applications*, 25(4):355–370, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/4/355.full.pdf+html.

deAmorim:2003:GEP

[dA03] Claudio Luis de Amorim. Guest Editor's preface. *The International Journal of High Performance Computing Applications*, 17(2):133–134, Summer 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003017002003.

Dekate:2012:ISP

[DAB+12] Chirag Dekate, Matthew Anderson, Maciej Brodowicz, Hartmut Kaiser, Bryce Adelstein-Lelbach, and Thomas Sterling. Improving the scalability of parallel N-body applications with an event-driven constraint-based execution model. *The International Journal of High Performance Computing Applications*, 26(3):319–332, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/3/319.full.pdf+html.

Dubey:2014:EFM

[DAC+14] Anshu Dubey, Katie Antypas, Alan C. Calder, Chris Daley, Bruce Fryxell, J. Brad Gallagher, Donald Q. Lamb, Dongwook Lee, Kevin Olson, Lynn B. Reid, Paul Rich, Paul M. Ricker, Katherine M. Riley, Robert Rosner, Andrew Siegel, Noel T. Taylor, Klaus Weide, Francis X. Timmes, Natasha Vladimirova, and John ZuHone. Evolution of FLASH, a multi-physics scientific simulation code for high-performance computing. *The International Journal of High Performance Computing Applications*, 28(2):225–237, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/2/225.

Darema:1999:NST

[Dar99] Frederica Darema. New software technologies for the development and runtime support of complex applications. *The International Journal of High Performance Computing Applications*, 13(3):180–190, Fall 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://

journals.sagepub.com/doi/pdf/10.1177/109434209901300302.

Darema:2000:PET

[Dar00] Frederica Darema. Performance engineering technology for the design, management, and control of computing systems. *The International Journal of High Performance Computing Applications*, 14(3):180–188, Fall 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400302.

Vasconcellos:2019:NBC

[dAVCM+19] Jucele França de Alencar Vasconcellos, Edson Norberto Cáceres, Henrique Mongelli, Siang Wun Song, Frank Dehne, and Jayme Luiz Szwarcfiter. New BSP/CGM algorithms for spanning trees. *The International Journal of High Performance Computing Applications*, 33(3):444–461, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018803672.

Dongarra:2009:IES

[DBA+09] Jack Dongarra, Pete Beckman, Patrick Aerts, Frank Cappello, Thomas Lippert, Satoshi Matsuoka, Paul Messina, Terry Moore, Rick Stevens, Anne Trefethen, and Mateo Valero. The International Exascale Software Project: a call to cooperative action by the global high-performance community. *The International Journal of High Performance Computing Applications*, 23(4):309–322, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/309.full.pdf+html.

Dongarra:2011:IES

[DBM+11] Jack Dongarra, Pete Beckman, Terry Moore, Patrick Aerts, Giovanni Aloisio, Jean-Claude Andre, David Barkai, Jean-Yves Berthou, Taisuke Boku, Bertrand Braunschweig, Franck Cappello, Barbara Chapman, Xuebin Chi, Alok Choudhary, Sudip Dosanjh, Thom Dunning, Sandro Fiore, Al Geist, Bill Gropp, Robert Harrison, Mark Hereld, Michael Heroux, Adolfy Hoisie, Koh Hotta, Zhong Jin, Yutaka Ishikawa, Fred Johnson, Sanjay Kale, Richard Kenway, David Keyes, Bill Kramer, Jesus Labarta, Alain Lichnewsky, Thomas Lippert, Bob Lucas, Barney Maccabe, Satoshi Matsuoka, Paul Messina, Peter Michielse, Bernd Mohr, Matthias S. Mueller, Wolfgang E. Nagel, Hiroshi Nakashima, Michael E. Papka, Dan Reed, Mitsuhisa Sato, Ed Seidel, John Shalf, David Skinner, Marc Snir, Thomas Sterling, Rick

Stevens, Fred Streitz, Bob Sugar, Shinji Sumimoto, William Tang, John Taylor, Rajeev Thakur, Anne Trefethen, Mateo Valero, Aad van der Steen, Jeffrey Vetter, Peg Williams, Robert Wisniewski, and Kathy Yelick. The International Exascale Software Project roadmap. *The International Journal of High Performance Computing Applications*, 25(1):3–60, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/25/1/3.full.pdf+html`.

Downes:2010:DRS

[DCCS10] Patrick Downes, Oisín Curran, John Cunniffe, and Andy Shearer. Distributed radiotherapy simulation with the Webcom Workflow System. *The International Journal of High Performance Computing Applications*, 24(2):213–227, Summer 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/2/213.full.pdf+html`.

Dubey:2013:POB

[DCD+13] Anshu Dubey, Alan C. Calder, Christopher Daley, Robert T. Fisher, C. Graziani, George C. Jordan, Donald Q. Lamb, Lynn B. Reid, Dean M. Townsley, and Klaus Weide. Pragmatic optimizations for better scientific utilization of large supercomputers. *The International Journal of High Performance Computing Applications*, 27(3):360–373, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/3/360.full.pdf+html`.

Dou:2008:WED

[DCL+08] Wanchun Dou, Jinjun Chen, Jianxun Liu, S. C. Cheung, Guihai Chen, and Shaokun Fan. A workflow engine-driven SOA-based cooperative computing paradigm in Grid environments. *The International Journal of High Performance Computing Applications*, 22(3):284–300, Fall 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/22/3/284.full.pdf+html`.

Digonnet:2019:MPA

[DCLS19] Hugues Digonnet, Thierry Coupez, Patrice Laure, and Luisa Silva. Massively parallel anisotropic mesh adaptation. *The International Journal of High Performance Computing Applications*, 33(1):3–24, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017693906`.

Deelman:2017:PAP

[DCM+17] Ewa Deelman, Christopher Carothers, Anirban Mandal, Brian Tierney, Jeffrey S. Vetter, Ilya Baldin, Claris Castillo, Gideon Juve, Dariusz Król, Vickie Lynch, Ben Mayer, Jeremy Meredith, Thomas Proffen, Paul Ruth, and Rafael Ferreira da Silva. PANORAMA: an approach to performance modeling and diagnosis of extreme-scale workflows. *The International Journal of High Performance Computing Applications*, 31(1):4–18, January 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015594515`.

Diener:2017:MMA

[DCN17] Matthias Diener, Eduardo Hm Cruz, and Philippe Oa Navaux. Modeling memory access behavior for data mapping. *The International Journal of High Performance Computing Applications*, 31(3):212–228, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016640056`.

Dayde:1989:LBF

[DD89] Michel J. Daydé and Iain S. Duff. Level 3 BLAS in *LU* factorization on the CRAY-2, ETA-10P, and IBM 3090-200/VF. *The International Journal of Supercomputer Applications*, 3(2):40–70, June 1989. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208900300204`.

Dayde:1991:ULB

[DD91] M. J. Daydé and I. S. Duff. Use of Level 3 BLAS in *LU* factorization in a multiprocessing environment on three vector multiprocessors: The Alliant FX/80, the CRAY-2, and the IBM 3090 VF. *The International Journal of Supercomputer Applications*, 5(3):92–110, September 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500308`.

Dail:2006:EHR

[DD06] Holly Dail and Frédéric Desprez. Experiences with hierarchical request flow management for network-enabled server environments. *The International Journal of High Performance Computing Applications*, 20(1):143–157, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/1/143.full.pdf+html`.

Dennis:2019:OHD

[DDKK19] John M. Dennis, Brian Dobbins, Christopher Kerr, and Youngsung Kim. Optimizing the HOMME dynamical core for multicore platforms. *The International Journal of High Performance Computing Applications*, 33 (5):1030–1045, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019849618.

Dawson:1987:PMP

[DDM87] John M. Dawson, Viktor K. Decyk, and Brendan McNamara. Particle modeling of plasmas on supercomputers. *The International Journal of Supercomputer Applications*, 1(1):24–43, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100104.

Darema:2000:P

[DDS00] Frederica Darema, Jack Dongarra, and Subhash Saini. Preface. *The International Journal of High Performance Computing Applications*, 14 (3):179, Fall 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400301.

deLaBourdonnaye:1989:EEM

[de 89] Armel de La Bourdonnaye. The element by element method as a preconditioner for linear systems coming from finite element models. *The International Journal of Supercomputer Applications*, 3 (3):60–68, September 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300304.

Dongarra:2003:SAN

[DE03] Jack Dongarra and Victor Eijkhout. Self-adapting numerical software for next generation applications. *The International Journal of High Performance Computing Applications*, 17(2):125–131, Summer 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003017002002.

Deelman:2010:GCM

[Dee10] Ewa Deelman. Grids and clouds: Making workflow applications work in heterogeneous distributed environments. *The International Journal of High Performance Computing Applications*, 24 (3):284–298, Fall 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/3/284.full.pdf+html.

Dennis:2012:CSS

[DEE+12] John M. Dennis, Jim Edwards, Katherine J. Evans, Oksana Guba, Peter H. Lauritzen, Arthur A. Mirin, Amik St-Cyr, Mark A. Taylor, and

Patrick H. Worley. CAM–SE: a scalable spectral element dynamical core for the Community Atmosphere Model. *The International Journal of High Performance Computing Applications*, 26(1):74–89, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/1/74.full.pdf+html.

Dackland:1992:PBM

[DEKV92] Krister Dackland, Erik Elmroth, Bo Kågström, and Charles Van Loan. Parallel block matrix factorizations on the shared-memory multiprocessor IBM 3090 VF/600J. *The International Journal of Supercomputer Applications*, 6(1):69–97, April 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600105.

Delic:1993:PAC

[Del93] George Delic. Performance attributes for code and workload analysis on CRAY X-MP and Y-MP systems. *The International Journal of Supercomputer Applications*, 7(4):304–336, December 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700403.

Dennis:2012:ALP

[DEL+12] John M. Dennis, Jim Edwards, Ray Loy, Robert Jacob, Arthur A. Mirin, Anthony P. Craig, and Mariana Vertenstein. An application-level parallel I/O library for Earth system models. *The International Journal of High Performance Computing Applications*, 26(1):43–53, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/1/43.full.pdf+html.

Demos:1990:IAM

[Dem90] Gary Demos. Issues in applying massively parallel computing power. *The International Journal of Supercomputer Applications*, 4(4):90–105, December 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400407.

Dufrechou:2021:SOS

[DEQO21] Ernesto Dufrechou, Pablo Ezzatti, and Enrique S. Quintana-Ortí. Selecting optimal SpMV realizations for GPUs via machine learning. *The International Journal of High Performance Computing Applications*, 35(3):254–267, May 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342021990738.

Du:2008:LCP

[DF08] Qian Du and James E. Fowler. Low-complexity principal component analysis for hyperspectral image compression. *The International Journal of High Performance Computing Applications*, 22(4):438–448, Winter 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/22/4/438.full.pdf+html`.

Daberdaku:2018:CVR

[DF18] Sebastian Daberdaku and Carlo Ferrari. Computing voxelised representations of macromolecular surfaces. *The International Journal of High Performance Computing Applications*, 32(3):407–432, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016647114`.

Dixon:1990:QCM

[DFC90] David A. Dixon, William B. Farnham, and Patrick J. Capobianco. Quantum chemical molecular models for fluorinated polymers: Visualization of structures and vibrational motions. *The International Journal of Supercomputer Applications*, 4(2):134–149, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400212`.

Diachin:1996:CVE

[DFH+96] Darin Diachin, Lori Freitag, Daniel Heath, Jim Herzog, William Michels, and Paul Plassmann. Collaborative virtual environments used in the design of pollution control systems. *The International Journal of Supercomputer Applications and High Performance Computing*, 10 (2–3):223–235, Summer/Fall 1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209601000209`.

Deshpande:1994:ADN

[DFMD94] Manish Deshpande, Jinzhang Feng, Charles L. Merkle, and Ashish Deshpande. Application of a distributed network in computational fluid dynamic simulations. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(1):64–67, Spring 1994. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209400800108`.

DeFanti:1996:OWW

[DFP+96] Thomas A. DeFanti, Ian Foster, Michael E. Papka, Rick Stevens, and Tim Kuhfuss. Overview of the I-WAY: Wide-area visual supercomputing. *The International Journal of Supercomputer Applications and High Performance Computing*, 10

(2–3):123–131, Summer/Fall 1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000201.

Dennis:2005:HRM

[DFS+05] John Dennis, Aimé Fournier, William F. Spotz, Amik St-Cyr, Mark A. Taylor, Stephen J. Thomas, and Henry Tufo. High-resolution mesh convergence properties and parallel efficiency of a spectral element atmospheric dynamical core. *The International Journal of High Performance Computing Applications*, 19(3):225–235, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/225.full.pdf+html.

Dun:2015:DDM

[DFT+15] Nan Dun, Hajime Fujita, John R. Tramm, Andrew A. Chien, and Andrew R. Siegel. Data decomposition in Monte Carlo neutron transport simulations using global view arrays. *The International Journal of High Performance Computing Applications*, 29 (3):348–365, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015577681.

Dinan:2014:ECC

[DGB+14] James Dinan, Ryan E. Grant, Pavan Balaji, David Goodell, Douglas Miller, Marc Snir, and Rajeev Thakur. Enabling communication concurrency through flexible MPI endpoints. *The International Journal of High Performance Computing Applications*, 28 (4):390–405, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/4/390.

Deng:2004:PMQ

[DGD+04] Y. Deng, J. Glimm, J. W. Davenport, X. Cai, and E. Santos. Performance models on QCDOC for molecular dynamics with Coulomb potentials. *The International Journal of High Performance Computing Applications*, 18(2):183–195, Summer 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/2/183.full.pdf+html.

Drake:1993:CCS

[DGH+93] J. B. Drake, G. A. Geist, H. R. Hicks, K. L. Kliewer, G. M. Stocks, L. E. Toran, and P. H. Worley. The Center for Computational Sciences at Oak Ridge National Laboratory. *The International Journal of Supercomputer Applications*, 7(1):3–14, March 1993. CODEN IJSAE9. ISSN

0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700101.

Donald:2009:ONH

[DGJ09] James Mc Donald, Aaron Golden, and S. Gerard Jennings. OpenDDA: a novel high-performance computational framework for the discrete dipole approximation. *The International Journal of High Performance Computing Applications*, 23(1):42–61, Spring 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/1/42.full.pdf+html.

Dracopoulos:1997:BSP

[DGP+97] Mike C. Dracopoulos, Craig Glasgow, A. Kevin Parrott, Rick Janssen, Pergiorgio Alotto, and John Simkin. Bulk synchronous parallelization of industrial electromagnetic software. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):344–358, Winter 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100408.

Dykes:2017:S

[DGRK17] Timothy Dykes, Claudio Gheller, Marzia Rivi, and Mel Krokos. Splotch. *The International Journal of High Performance Computing Applications*, 31(6):550–563, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016652713.

Delic:1996:FAA

[DH96] George Delic and Richard I. Haller. Factor analysis of applications performance data for the Cray Y-MP. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(1):91–113, Spring 1996. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000104.

Dongarra:2016:HPC

[DHL16] Jack Dongarra, Michael A. Heroux, and Piotr Luszczek. High-performance conjugate-gradient benchmark: a new metric for ranking high-performance computing systems. *The International Journal of High Performance Computing Applications*, 30(1):3–10, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015593158.

Deng:2000:FPT

[DIB00] Weian Deng, S. Sitharama Iyengar, and Nathan E. Brener. A fast parallel thinning algorithm for the binary image skeletonization. *The International Journal of High Performance Computing Applications*, 14(1):65–81, Spring 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400105.

Ding:1991:SLQ

[Din91] Hong-Qiang Ding. Simulating lattice QCD on a Caltech/JPL hypercube. *The International Journal of Supercomputer Applications*, 5(2):74–81, June 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500205.

Drake:2005:OSD

[DJC05] John B. Drake, Philip W. Jones, and George R. Carr, Jr. Overview of the software design of the Community Climate System Model. *The International Journal of High Performance Computing Applications*, 19(3):177–186, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/177.full.pdf+html.

Denis:2019:SPT

[DJJ+19] Alexandre Denis, Julien Jaeger, Emmanuel Jeannot, Marc Pérache, and Hugo Taboada. Study on progress threads placement and dedicated cores for overlapping MPI nonblocking collectives on manycore processor. *The International Journal of High Performance Computing Applications*, 33(6):1240–1254, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019860184.

DiMartino:2007:P

[DKD07] Beniamino Di Martino, Dieter Kranzlmüller, and Jack Dongarra. Preface. *The International Journal of High Performance Computing Applications*, 21(2):129–131, Summer 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/2/129.full.pdf+html.

Danelutto:2018:SAP

[DKMT18] Marco Danelutto, Peter Kilpatrick, Gabriele Mencagli, and Massimo Torquati. State access patterns in stream parallel computations. *The International Journal of High Performance Computing Applications*, 32(6):807–818, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017694134.

Dekeyser:1997:HBV

[DL97] Jean-Luc Dekeyser and Christian Lefebvre. HPF-Builder: a visual environment to transform Fortran 90 codes to HPF.

The International Journal of Supercomputer Applications and High Performance Computing, 11(2):95–102, Summer 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100203.

Dongarra:2009:PLB

[DL09] Jack J. Dongarra and Julien Langou. The problem with the LINPACK Benchmark 1.0 Matrix Generator. *The International Journal of High Performance Computing Applications*, 23(1):5–13, Spring 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/1/5.full.pdf+html.

Desai:2007:CEM

[DLB07] Narayan Desai, Ewing Lusk, and Rick Bradshaw. A composition environment for MPI programs. *The International Journal of High Performance Computing Applications*, 21 (2):166–173, Summer 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/2/166.full.pdf+html.

Drozdowski:2006:SMD

[DLG06] M. Drozdowski, M. Lawenda, and F. Guinand. Scheduling multiple divisible loads. *The International Journal of High Performance Computing Applications*, 20(1):19–30, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/1/19.full.pdf+html.

Davis:1998:PRL

[DLY+98] G. Davis, L. Lau, R. Young, F. Duncalfe, and L. Brebber. Parallel run length encoding compression: Reducing I/O in dynamic environmental simulations. *The International Journal of High Performance Computing Applications*, 12(4):396–410, Winter 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209801200402.

Deelman:2019:RML

[DMJS19] Ewa Deelman, Anirban Mandal, Ming Jiang, and Rizos Sakellariou. The role of machine learning in scientific workflows. *The International Journal of High Performance Computing Applications*, 33 (6):1128–1139, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019852127.

DiMartino:2012:GPU

[DMQS12] Beniamino Di Martino, Eduard Mehofer, Dan Quinlan, and Markus Schordan. Graphical processing units and scientific applications. *The International Journal of High Performance Computing Applications*, 26(3):189–191, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/3/189.full.pdf+html.

Deakin:2018:IPS

[DMSMG18] Tom Deakin, Simon McIntosh-Smith, Matt Martineau, and Wayne Gaudin. An improved parallelism scheme for deterministic discrete ordinates transport. *The International Journal of High Performance Computing Applications*, 32(4):555–569, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016668978.

Dorward:1997:TEU

[DMT97] Susan E. Dorward, Lesley R. Matheson, and Robert E. Tarjan. Toward efficient unstructured multigrid preprocessing. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(1):12–33, Spring 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100102.

Dongarra:2001:NLT

[DMT01] Jack Dongarra, Shirley Moore, and Anne Trefethen. Numerical libraries and tools for scalable parallel cluster computing. *The International Journal of High Performance Computing Applications*, 15(2):175–180, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500210.

Dongarra:1987:BRC

[Don87] Jack Dongarra. Book reviews: *The Connection Machine*. *The International Journal of Supercomputer Applications*, 1(1):112, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100110.

Dongarra:1989:ACR

[Don89] Jack Dongarra. Advanced Computing Research Facility, Mathematics and Computer Science Division, Argonne National Laboratory. *The International Journal of Supercomputer Applications*, 3(4):6–8, December 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300402.

Dongarra:1992:E

[Don92] Jack Dongarra. Editorial. *The International Journal of Supercomputer Applications*, 6(4):313, December 1992. CODEN IJSAE9. ISSN

0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600401.

Dongarra:2002:PBLa

[Don02a] Jack Dongarra. Preface: Basic Linear Algebra Subprograms Technical (Blast) Forum Standard I. *The International Journal of High Performance Computing Applications*, 16(1):1–111, Spring 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160010101.

Dongarra:2002:PBLb

[Don02b] Jack Dongarra. Preface: Basic Linear Algebra Subprograms Technical (Blast) Forum Standard II. *The International Journal of High Performance Computing Applications*, 16(2):115, Summer 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160020101.

Damevski:2005:DRT

[DP05] Kostadin Damevski and Steven G. Parker. $M \times N$ data redistribution through Parallel Remote Method Invocation. *The International Journal of High Performance Computing Applications*, 19(4):389–398, Winter 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/4/389.full.pdf+html.

Deelman:2018:FSW

[DPA+18] Ewa Deelman, Tom Peterka, Ilkay Altintas, Christopher D. Carothers, Kerstin Kleese van Dam, Kenneth Moreland, Manish Parashar, Lavanya Ramakrishnan, Michela Taufer, and Jeffrey Vetter. The future of scientific workflows. *The International Journal of High Performance Computing Applications*, 32(1):159–175, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017704893.

dePinho:2003:GDE

[dPIdA03] Leonardo Bidese de Pinho, Edison Ishikawa, and Claudio Luis de Amorim. GloVE: a distributed environment for scalable video-on-demand systems. *The International Journal of High Performance Computing Applications*, 17(2):147–161, Summer 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003017002005.

Davenport:1990:FPM

[DQFW90] James W. Davenport, Guo-Xin Qian, Gayanath W. Fernando, and Michael Weinert. First principles molecular dynamics studies of liquid and solid sodium. *The International Journal of Supercomputer Applications*, 4 (3):122–130, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400312`.

Dahmani:2006:SMD

[DR06] Mohamed Dahmani and Robert Roy. Scalability modeling for deterministic particle transport solvers. *The International Journal of High Performance Computing Applications*, 20 (4):541–556, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/4/541.full.pdf+html`.

Astorga:2018:AOI

[dRADS+18a] David del Rio Astorga, Manuel F. Dolz, Luis Miguel Sánchez, Javier Fernández, and J. Daniel García. An adaptive offline implementation selector for heterogeneous parallel platforms. *The International Journal of High Performance Computing Applications*, 32(6): 854–863, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017698746`.

Astorga:2018:FPP

[dRADS+18b] David del Rio Astorga, Manuel F. Dolz, Luis Miguel Sánchez, J. Daniel García, Marco Danelutto, and Massimo Torquati. Finding parallel patterns through static analysis in C++ applications. *The International Journal of High Performance Computing Applications*, 32(6):779–788, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017695639`.

deSupinski:2021:SII

[dS21] Bronis R. de Supinski. Special issue introduction: The Gordon Bell Special Prize for HPC-Based COVID-19 Research finalists. *The International Journal of High Performance Computing Applications*, 35(5):431, September 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211044760`.

Dawson:1991:PMT

[DSD+91] John M. Dawson, Richard D. Sydora, Viktor K. Decyk, Paulette C. Liewer, and Robert D. Ferraro. Physics modeling of Tokamak transport, a grand challenge for controlled fusion. *The International Journal of Supercomputer Applications*, 5 (3):13–35, September 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://`

journals.sagepub.com/doi/pdf/10.1177/109434209100500303.

Dang:2016:CEH

[DSH+16] Hoang-Vu Dang, Bertil Schmidt, Andreas Hildebrandt, Tuan Tu Tran, and Anna Katharina Hildebrandt. Cuda-enabled hierarchical ward clustering of protein structures based on the nearest neighbour chain algorithm. *The International Journal of High Performance Computing Applications*, 30(2):200–211, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015597988.

deSupinski:2008:BAP

[dSSB+08] Bronis R. de Supinski, Martin Schulz, Vasily V. Bulatov, William Cabot, Bor Chan, Andrew W. Cook, Erik W. Draeger, James N. Glosli, Jeffrey A. Greenough, Keith Henderson, Alison Kubota, Steve Louis, Brian J. Miller, Mehul V. Patel, Thomas E. Spelce, Frederick H. Streitz, Peter L. Williams, Robert K. Yates, Andy Yoo, George Almasi, Gyan Bhanot, Alan Gara, John A. Gunnels, Manish Gupta, Jose Moreira, James Sexton, Bob Walkup, Charles Archer, Francois Gygi, Timothy C. Germann, Kai Kadau, Peter S. Lomdahl, Charles Rendleman, Michael L. Welcome, William McLendon, Bruce Hendrickson, Franz Franchetti, Stefan Kral, Jürgen Lorenz, Christoph W. Überhuber, Edmond Chow, and Ümit Çatalyürek. BlueGene/L applications: Parallelism on a massive scale. *The International Journal of High Performance Computing Applications*, 22(1):33–51, Spring 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/1/33.full.pdf+html.

Dongarra:1997:PSI

[DT97] Jack Dongarra and Bernard Tourancheau. Preface to the special issue. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(2):83, Summer 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100201.

Dongarra:1999:SII

[DT99] Jack J. Dongarra and Bernard Tourancheau. Special issue introduction: Clusters and computational grids for scientific computing. *The International Journal of High Performance Computing Applications*, 13(3):179, Fall 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://

journals.sagepub.com/doi/pdf/10.1177/109434209901300301.

Dongarra:2001:P

[DT01] Jack Dongarra and Bernard Tourancheau. Preface. *The International Journal of High Performance Computing Applications*, 15(3):199, Fall 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500301.

Dongarra:2006:SIT

[DT06] Jack Dongarra and Bernard Tourancheau. Special issue on tools in the ACTS Collection 2004. *The International Journal of High Performance Computing Applications*, 20(3):317, Fall 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/3/317.full.pdf+html.

Dongarra:2009:E

[DT09] Jack Dongarra and Bernard Tourancheau. Editorial. *The International Journal of High Performance Computing Applications*, 23(3):195, Fall 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/3/195.full.pdf+html.

Dongarra:2011:SPW

[DT11] Jack Dongarra and Bernard Tourancheau. Selected papers of the Workshop on Clusters, Clouds and Grids for Scientific Computing (CCGSC). *The International Journal of High Performance Computing Applications*, 25(3):259–260, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/3/259.full.pdf+html.

Dongarra:2013:IAS

[DT13] Jack Dongarra and Bernard Tourancheau. Introduction for August special issue CCDSC. *The International Journal of High Performance Computing Applications*, 27(3):231, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/3/231.full.pdf+html.

Dongarra:2017:GEN

[DT17] Jack Dongarra and Bernard Tourancheau. Guest Editor's note: Special issue on clusters, clouds and data for scientific computing. *The International Journal of High Performance Computing Applications*, 31(1):3, January 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015594514.

Dongarra:2018:GEN

[DT18] Jack Dongarra and Bernard Tourancheau. Guest editors' note. *The International Journal of High Performance Computing Applications*, 32(1):3, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017745244.

Dongarra:2019:GEN

[DT19] Jack Dongarra and Bernard Tourancheau. Guest editors' note: Special issue on clusters, clouds, and data for scientific computing. *The International Journal of High Performance Computing Applications*, 33 (6):1067–1068, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019876834.

Darriba:2014:HPC

[DTDP14] Diego Darriba, Guillermo L. Taboada, Ramón Doallo, and David Posada. High-performance computing selection of models of DNA substitution for multicore clusters. *The International Journal of High Performance Computing Applications*, 28(1):112–125, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/1/112.full.pdf+html.

Dubey:2019:DIC

[DTL19] Anshu Dubey, Petros Tzeferacos, and Don Q. Lamb. The dividends of investing in computational software design: a case study. *The International Journal of High Performance Computing Applications*, 33(2):322–331, March 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017747692.

Dunnebacke:2021:ISP

[DTL+21] Jonas Dünnebacke, Stefan Turek, Christoph Lohmann, Andriy Sokolov, and Peter Zajac. Increased space-parallelism via time-simultaneous Newton-multigrid methods for nonstationary nonlinear PDE problems. *The International Journal of High Performance Computing Applications*, 35 (3):211–225, May 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211001940.

Duke:1991:CSS

[Duk91] Dennis W. Duke. Computational science at the Supercomputer Computations Research Institute. *The International Journal of Supercomputer Applications*, 5(3):4–12, September 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500302.

Dixon:1988:MMH

[DVC88] David A. Dixon and Frederic A. Van-Cadedge. A molecular model for the helicity of polytetrafluoro ethylene (Tefloin(R)). *The International Journal of Supercomputer Applications*, 2(2):62–81, June 1988. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208800200205`.

Dennis:2012:CPU

[DVW+12] John M. Dennis, Mariana Vertenstein, Patrick H. Worley, Arthur A. Mirin, Anthony P. Craig, Robert Jacob, and Sheri Mickelson. Computational performance of ultra-high-resolution capability in the Community Earth System Model. *The International Journal of High Performance Computing Applications*, 26(1):5–16, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/1/5.full.pdf+html`.

Decker:1997:STS

[DW97] Karsten M. Decker and Brian J. N. Wylie. Software tools for scalable multilevel application engineering. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(3):236–250, Fall 1997. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209701100306`.

Demeshko:2019:TPP

[DWT+19] Irina Demeshko, Jerry Watkins, Irina K. Tezaur, Oksana Guba, William F. Spotz, Andrew G. Salinger, Roger P. Pawlowski, and Michael A. Heroux. Toward performance portability of the Albany finite element analysis code using the Kokkos library. *The International Journal of High Performance Computing Applications*, 33(2):332–352, March 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017749957`.

Diaconescu:2007:ADD

[DZ07] R. E. Diaconescu and H. P. Zima. An approach to data distributions in Chapel. *The International Journal of High Performance Computing Applications*, 21(3):313–335, Fall 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/3/313.full.pdf+html`.

Dragovitsch:1995:PPS

[DZDR95] P. Dragovitsch, X. Zhao, L. C. Dennis, and G. A. Riccardi. PVMGeant — a parallel simulation code for the CLAS detector at CEBAF. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(2):128–137, Summer 1995. CODEN IJSCFG. ISSN

1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900205.

Dhingra:1999:CGP

[DZRS99] A. K. Dhingra, M. Zhang, R. Ratnam, and D. Suri. A coarse-grained parallel homotopy for mechanism design. *The International Journal of High Performance Computing Applications*, 13(4):303–319, Winter 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300402.

Evans:2019:PAF

[EAG+19] Katherine J. Evans, Richard K. Archibald, David J. Gardner, Matthew R. Norman, Mark A. Taylor, Carol S. Woodward, and Patrick H. Worley. Performance analysis of fully explicit and fully implicit solvers within a spectral element shallow-water atmosphere model. *The International Journal of High Performance Computing Applications*, 33(2):268–284, March 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017736373.

EMDiouri:2013:EEH

[ECG+13] Mohammed EM Diouri, Ghislain L. Tsafack Chetsa, Olivier Glück, Laurent Lefèvre, Jean-Marc Pierson, Patricia Stolf, and Georges Da Costa. Energy efficiency in high-performance computing with and without knowledge of applications and services. *The International Journal of High Performance Computing Applications*, 27(3):232–243, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/3/232.full.pdf+html.

Ejarque:2019:HTB

[EDB19] Jorge Ejarque, Marc Domínguez, and Rosa M. Badia. A hierarchic task-based programming model for distributed heterogeneous computing. *The International Journal of High Performance Computing Applications*, 33(5):987–997, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019845438.

Edelman:1993:LDN

[Ede93] Alan Edelman. Large dense numerical linear algebra in 1993: The parallel computing influence. *The International Journal of Supercomputer Applications*, 7(2):113–128, June 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700203.

Ern:1995:DCM

[EDS95] Alexandre Ern, Craig C. Douglas, and Mitchell D. Smooke. Detailed chemistry modeling of laminar diffusion flames on parallel computers. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(3):167–186, Fall 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900301.

ElMaghraoui:2006:IOS

[EDSV06] Kaoutar El Maghraoui, Travis J. Desell, Boleslaw K. Szymanski, and Carlos A. Varela. The Internet Operating System: Middleware for adaptive distributed computing. *The International Journal of High Performance Computing Applications*, 20(4):467–480, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/4/467.full.pdf+html.

Ekeberg:2015:MLU

[EEL15] Tomas Ekeberg, Stefan Engblom, and Jing Liu. Machine learning for ultrafast X-ray diffraction patterns on large-scale GPU clusters. *The International Journal of High Performance Computing Applications*, 29(2):233–243, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015572030.

Eder:2005:MPP

[EGG05] Paul M. Eder, James E. Giuliani, and Somnath Ghosh. Multilevel parallel programming for three-dimensional Voronoi cell finite element modeling of heterogeneous materials. *The International Journal of High Performance Computing Applications*, 19(1):29–45, Spring 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/1/29.full.pdf+html.

El-Gamal:1993:CIS

[EGMP93] Mahmoud A. El-Gamal, Richard D. McKelvey, and Thomas R. Palfrey. Computational issues in the statistical design and analysis of experimental games. *The International Journal of Supercomputer Applications*, 7(3):189–200, September 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700302.

Ernst:2021:PER

[EHTW21] Dominik Ernst, Georg Hager, Jonas Thies, and Gerhard Wellein. Performance engineering for real and complex tall & skinny matrix multiplication kernels on GPUs. *The International Journal* of *High Performance Computing Applications*, 35(1):5–19, January 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020965661.

Endrei:2019:SML

[EJD+19] Mark Endrei, Chao Jin, Minh Ngoc Dinh, David Abramson, Heidi Poxon, Luiz Derose, and Bronis R. de Supinski. Statistical and machine learning models for optimizing energy in parallel applications. *The International Journal of High Performance Computing Applications*, 33 (6):1079–1097, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019842915.

Epperly:2012:HPL

[EKD+12] Thomas Gw Epperly, Gary Kumfert, Tamara Dahlgren, Dietmar Ebner, Jim Leek, Adrian Prantl, and Scott Kohn. High-performance language interoperability for scientific computing through Babel. *The International Journal of High Performance Computing Applications*, 26(3):260–274, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/3/260.full.pdf+html.

Elliott:2019:ISP

[EKF+19] Samuel Elliott, Raghu Raj Prasanna Kumar, Natasha Flyer, Tuan Ta, and Richard Loft. Implementation of a scalable, performance portable shallow water equation solver using radial basis function-generated finite difference methods. *The International Journal of High Performance Computing Applications*, 33(4):619–631, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018797170.

Elshazly:2021:AEE

[ELEB21] Hatem Elshazly, Francesc Lordan, Jorge Ejarque, and Rosa M. Badia. Accelerated execution via eager-release of dependencies in task-based workflows. *The International Journal of High Performance Computing Applications*, 35(4):325–343, July 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342021997558.

Eoyang:1989:SJI

[EM89] Christopher Eoyang and Raul H. Mendez. Supercomputing in Japan: Institute for Supercomputing Research. *The International Journal of Supercomputer Applications*, 3(1):5–9, March 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://

journals.sagepub.com/doi/pdf/10.1177/109434208900300102.

Epicoco:2018:HSD

[EMP+18] Italo Epicoco, Silvia Mocavero, Andrew R. Porter, Stephen M. Pickles, Mike Ashworth, and Giovanni Aloisio. Hybridisation strategies and data structures for the NEMO ocean model. *The International Journal of High Performance Computing Applications*, 32 (6):864–881, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342016684930.

Erisman:1988:STP

[Eri88] Albert M. Erisman. Supercomputing as a tool for product development. *The International Journal of Supercomputer Applications*, 2 (4):118–121, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200412.

Evans:2022:SSI

[ESD+22] Thomas M. Evans, Andrew Siegel, Erik W. Draeger, Jack Deslippe, Marianne M. Francois, Timothy C. Germann, William E. Hart, and Daniel F. Martin. A survey of software implementations used by application codes in the exascale computing project. *The International Journal of High Performance Computing Applications*, 36(1):5–12, January 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211028940.

Evans:2012:MSI

[ESW+12] Katherine J. Evans, Andrew G. Salinger, Patrick H. Worley, Stephen F. Price, William H. Lipscomb, Jeffrey A. Nichols, James B. White III, Mauro Perego, Mariana Vertenstein, James Edwards, and Jean-François Lemieux. A modern solver interface to manage solution algorithms in the Community Earth System Model. *The International Journal of High Performance Computing Applications*, 26(1):54–62, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/1/54.full.pdf+html.

England:2006:RLP

[EW06] Darin England and Jon Weissman. A resource leasing policy for on-demand computing. *The International Journal of High Performance Computing Applications*, 20(1):91–101, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/1/91.full.pdf+html.

Evans:2022:MCE

[EW22] Thomas M. Evans and Julia C. White. Multiphysics coupling in the Exascale Computing Project. *The International Journal of High Performance Computing Applications*, 36(1):3–4, January 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211028943`.

Ewing:1988:LSC

[Ewi88] Richard E. Ewing. Large-scale computing in reservoir simulation. *The International Journal of Supercomputer Applications*, 2(4):45–53, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208800200405`.

Eyraud:2006:PAS

[Eyr06] Lionel Eyraud. A pragmatic analysis of scheduling environments on new computing platforms. *The International Journal of High Performance Computing Applications*, 20 (4):507–516, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/4/507.full.pdf+html`.

Foster:2021:ODA

[FAB+21] Ian Foster, Mark Ainsworth, Julie Bessac, Franck Cappello, Jong Choi, Sheng Di, Zichao Di, Ali M. Gok, Hanqi Guo, Kevin A. Huck, Christopher Kelly, Scott Klasky, Kerstin Kleese van Dam, Xin Liang, Kshitij Mehta, Manish Parashar, Tom Peterka, Line Pouchard, Tong Shu, Ozan Tugluk, Hubertus van Dam, Lipeng Wan, Matthew Wolf, Justin M. Wozniak, Wei Xu, Igor Yakushin, Shinjae Yoo, and Todd Munson. Online data analysis and reduction: an important co-design motif for extreme-scale computers. *The International Journal of High Performance Computing Applications*, 35(6): 617–635, November 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211023549`.

Faerman:2003:RAS

[FBBC03] Marcio Faerman, Adam Birnbaum, Francine Berman, and Henri Casanova. Resource allocation strategies for guided parameter space searches. *The International Journal of High Performance Computing Applications*, 17 (4):383–402, Winter 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/10943420030174004`.

Friesner:1987:CAL

[FBW+87] Richard A. Friesner, Jean-

Philippe Brunet, Robert E. Wyatt, Claude Leforestier, and Steven Binkley. Computational approach to large quantum dynamical problems. *The International Journal of Supercomputer Applications*, 1(1):9–23, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100103.

Falzone:2007:PMF

[FCLG07] Christopher Falzone, Anthony Chan, Ewing Lusk, and William Gropp. A portable method for finding user errors in the usage of MPI collective operations. *The International Journal of High Performance Computing Applications*, 21(2):155–165, Summer 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/2/155.full.pdf+html.

Fagg:2004:BUF

[FD04] Graham E. Fagg and Jack J. Dongarra. Building and using a fault-tolerant MPI implementation. *The International Journal of High Performance Computing Applications*, 18(3):353–361, Fall 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/3/353.full.pdf+html.

Feitelson:1999:ITD

[Fei99] Dror G. Feitelson. On the interpretation of Top500 data. *The International Journal of High Performance Computing Applications*, 13(2):146–153, Summer 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300204.

Fembach:1990:UHP

[Fem90] Sidney Fembach. A U.S. high-performance computing program. *The International Journal of Supercomputer Applications*, 4(1):3–5, March 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400101.

Fritzson:1997:RBS

[FFNP97] Dag Fritzson, Peter Fritzson, Patrik Nordling, and Tommy Persson. Rolling bearing simulation on MIMD computers. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):299–313, Winter 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100404.

Fritzsche:2010:APP

[FFR+10] Paula Cecilia Fritzsche, Jose-Jesus Fernandez, Dolores Rexachs, Inmaculada Garcia, and

Emilio Luque. Analytical performance prediction for iterative reconstruction techniques in electron tomography of biological structures. *The International Journal of High Performance Computing Applications*, 24(4):457–468, Winter 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/4/457.full.pdf+html.

Fischer:1997:ONS

[FG97] Paul Fischer and David Gottlieb. On the optimal number of subdomains for hyperbolic problems on parallel computers. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(1):65–76, Spring 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100105.

Fagg:2005:PFT

[FGC+05] Graham E. Fagg, Edgar Gabriel, Zizhong Chen, Thara Angskun, George Bosilca, Jelena Pjesivac-Grbovic, and Jack J. Dongarra. Process fault tolerance: Semantics, design and applications for high performance computing. *The International Journal of High Performance Computing Applications*, 19(4):465–477, Winter 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/4/465.full.pdf+html.

Faulk:2004:MHP

[FGJ+04] Stuart Faulk, John Gustafson, Philip Johnson, Adam Porter, Walter Tichy, and Lawrence Votta. Measuring high performance computing productivity. *The International Journal of High Performance Computing Applications*, 18(4):459–473, Winter 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/4/459.full.pdf+html.

Farooqi:2019:CAO

[FIMU19] Muhammad Nufail Farooqi, Daulet Izbassarov, Metin Muradoglu, and Didem Unat. Communication analysis and optimization of 3D front tracking method for multiphase flow simulations. *The International Journal of High Performance Computing Applications*, 33(1):67–80, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017694426.

Foster:1997:GMI

[FK97] Ian Foster and Carl Kesselman. Globus: a metacomputing infrastructure toolkit. *The International Journal of Supercomputer Applications and*

High Performance Computing, 11(2):115–128, Summer 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100205.

Filguiera:2017:DPF

[FKA+17] Rosa Filguiera, Amrey Krause, Malcolm Atkinson, Iraklis Klampanos, and Alexander Moreno. `dispel4py`: a Python framework for data-intensive scientific computing. *The International Journal of High Performance Computing Applications*, 31(4):316–334, July 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016649766.

Foster:2001:AGE

[FKT01] Ian Foster, Carl Kesselman, and Steven Tuecke. The anatomy of the Grid: Enabling scalable virtual organization. *The International Journal of High Performance Computing Applications*, 15(3):200–222, Fall 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500302.

Fischer:2020:SHP

[FMR+20] Paul Fischer, Misun Min, Thilina Rathnayake, Som Dutta, Tzanio Kolev, Veselin Dobrev, Jean-Sylvain Camier, Martin Kronbichler, Tim Warburton, Kasia Świrydowicz, and Jed Brown. Scalability of high-performance PDE solvers. *The International Journal of High Performance Computing Applications*, 34(5):562–586, September 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020915762.

Foley:1990:SDV

[Fol90a] James D. Foley. Scientific data visualization software: Trends and directions. *The International Journal of Supercomputer Applications*, 4(2):154–157, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400214.

Follin:1990:AI

[Fol90b] Steve Follin. About this issue. *The International Journal of Supercomputer Applications*, 4(2):3–4, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400201.

Fowler:2005:P

[Fow05] Robert Fowler. Preface. *The International Journal of High Performance Computing Applications*, 19(4):387–388, Winter 2005. CODEN IHPCFL. ISSN 1094-

3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/4/387.full.pdf+html.

Friedlander:2002:SIF

[FP02] D. S. Friedlander and S. Phoha. Semantic information fusion for coordinated signal processing in mobile sensor networks. *The International Journal of High Performance Computing Applications*, 16 (3):235–241, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160030401.

Frattolillo:2005:RLS

[Fra05] Franco Frattolillo. Running large-scale applications on cluster Grids. *The International Journal of High Performance Computing Applications*, 19(2):157–172, Summer 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/2/157.full.pdf+html.

FroeseFischer:1991:CVA

[Fro91] Charlotte Froese Fischer. Concurrent vector algorithms for spline solutions of the helium pair equation. *The International Journal of Supercomputer Applications*, 5(1):5–20, March 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500101.

Filgueira:2011:ACE

[FSC+11] Rosa Filgueira, David E. Singh, Jesús Carretero, Alejandro Calderón, and Félix García. Adaptive-CoMPI: Enhancing MPI-based applications' performance and scalability by using adaptive compression. *The International Journal of High Performance Computing Applications*, 25 (1):93–114, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/1/93.full.pdf+html.

Fladrich:2008:IPN

[FSN08] Uwe Fladrich, Jörg Stiller, and Wolfgang E. Nagel. Improved performance for nodal spectral element operators. *The International Journal of High Performance Computing Applications*, 22(4):450–459, Winter 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/4/450.full.pdf+html.

Felker:2013:OMC

[FSS13] K. G. Felker, A. R. Siegel, and S. F. Siegel. Optimizing memory constrained environments in Monte Carlo nuclear reactor simulations. *The International Journal of High Performance Computing Appli-*

cations, 27(2):210–216, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/2/210.full.pdf+html`.

Fortin:2019:DTT

[FT19] Pierre Fortin and Maxime Touche. Dual tree traversal on integrated GPUs for astrophysical N-body simulations. *The International Journal of High Performance Computing Applications*, 33(5): 960–972, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019840806`.

Fabregat-Traver:2013:ATL

[FTB13] Diego Fabregat-Traver and Paolo Bientinesi. Application-tailored linear algebra algorithms: a search-based approach. *The International Journal of High Performance Computing Applications*, 27 (4):426–439, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/4/426.full.pdf+html`.

Fukazawa:2012:PMM

[FU12] Keiichiro Fukazawa and Takayuki Umeda. Performance measurement of magnetohydrodynamic code for space plasma on typical scalar-type supercomputer systems with a large number of cores. *The International Journal of High Performance Computing Applications*, 26(3):310–318, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/3/310.full.pdf+html`.

Fisher:2002:SIT

[FWSW02] John W. Fisher III, Martin J. Wainwright, Erik B. Sudderth, and Alan S. Willsky. Statistical and information-theoretic methods for self-organization and fusion of multimodal, networked sensors. *The International Journal of High Performance Computing Applications*, 16(3):337–353, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/10943420020160031201`.

Ferreira:1991:SES

[FWZ91] L. G. Ferreira, S.-H. Wei, and Alex Zunger. Stability, electronic structure, and phase diagrams of novel inter-semiconductor compounds. *The International Journal of Supercomputer Applications*, 5(1):34–56, March 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500103`.

Gaffney:1988:IBS

[Gaf88] Patrick Gaffney. IBM Bergen scientific centre and the international conference on vector and parallel computing. *The International Journal of Supercomputer Applications*, 2(4):3–4, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200401.

Gannon:1988:PES

[Gan88] Dennis Gannon. Programming environments for supercomputing. *The International Journal of Supercomputer Applications*, 2(1):3–4, March 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200101.

Garcia-Blas:2018:HLP

[GBB18] Javier García-Blas and Christopher Brown. High-level programming for heterogeneous and hierarchical parallel systems. *The International Journal of High Performance Computing Applications*, 32(6):804–806, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018807840.

Garcia-Carballeira:2003:DEP

[GCCC+03] Félix Garcia-Carballeira, Alejandro Calderon, Jesus Carretero, Javier Fernandez, and Jose M. Perez. The design of the Expand Parallel File System. *The International Journal of High Performance Computing Applications*, 17(1):21–37, Spring 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003017001003.

Geradin:1997:PSF

[GCD97] Michel Géradin, Danielle Coulon, and Jean-Pierre Delsemme. Parallelization of the SAMCEF finite element software through domain decomposition and FETI algorithm. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):286–298, Winter 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100403.

Gantes:1993:SDP

[GCL93] Charis Gantes, Jerome J. Connor, and Robert D. Logcher. Simulation of the deployment process of multiunit deployable structures on a CRAY-2. *The International Journal of Supercomputer Applications*, 7(2):144–154, June 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700205.

Gainaru:2013:FPH

[GCSK13] Ana Gainaru, Franck Cappello, Marc Snir, and William Kramer. Failure prediction for HPC systems and applications: Current situation and open issues. *The International Journal of High Performance Computing Applications*, 27(3):273–282, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/3/273.full.pdf+html`.

Geist:2009:IEC

[GD09] Al Geist and Sudip Dosanjh. IESP exascale challenge: Co-design of architectures and algorithms. *The International Journal of High Performance Computing Applications*, 23 (4):401–402, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/23/4/401.full.pdf+html`.

Gonzalez-Dominguez:2015:LSG

[GDKWS15] Jorge González-Domínguez, Jan Christian Kässens, Lars Wienbrandt, and Bertil Schmidt. Large-scale genome-wide association studies on a GPU cluster using a CUDA-accelerated PGAS programming model. *The International Journal of High Performance Computing Applications*, 29(4):506–510, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015585846`.

Giitsidis:2017:PIA

[GDS17] Themistoklis Giitsidis, Nikolaos I. Dourvas, and Georgios Ch Sirakoulis. Parallel implementation of aircraft disembarking and emergency evacuation based on cellular automata. *The International Journal of High Performance Computing Applications*, 31(2):134–151, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015584533`.

Glimberg:2019:MSD

[GEKO19] Stefan Lemvig Glimberg, Allan Peter Engsig-Karup, and Luke N. Olson. A massively scalable distributed multigrid framework for nonlinear marine hydrodynamics. *The International Journal of High Performance Computing Applications*, 33(5):855–868, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019826662`.

Gentzsch:1988:CSM

[Gen88] Wolfgang Gentzsch. Comparison of supercomputers and Mini-Supercomputers for computational fluid dynamics calculations. *The International*

Journal of Supercomputer Applications, 2(4):63–71, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200407.

Germann:2021:CDE

[Ger21] Timothy C. Germann. Co-design in the Exascale Computing Project. *The International Journal of High Performance Computing Applications*, 35(6):503–507, November 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211059380.

Gabriel:2005:EDC

[GFD05] Edgar Gabriel, Graham E. Fagg, and Jack J. Dongarra. Evaluating dynamic communicators and one-sided operations for current MPI libraries. *The International Journal of High Performance Computing Applications*, 19 (1):67–79, Spring 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/1/67.full.pdf+html.

Guo:2011:OSD

[GG11] D. Guo and W. Gropp. Optimizing sparse data structures for matrix-vector multiply. *The International Journal of High Performance Computing Applications*, 25(1):115–131, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/1/115.full.pdf+html.

Guo:2014:ASS

[GG14] Dahai Guo and William Gropp. Applications of the streamed storage format for sparse matrix operations. *The International Journal of High Performance Computing Applications*, 28(1):3–12, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/1/3.full.pdf+html.

Garcia-Gasulla:2020:RMS

[GGMJF$^+$20] Marta Garcia-Gasulla, Filippo Mantovani, Marc Josep-Fabrego, Beatriz Eguzkitza, and Guillaume Houzeaux. Runtime mechanisms to survive new HPC architectures: a use case in human respiratory simulations. *The International Journal of High Performance Computing Applications*, 34(1):42–56, January 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019842919.

Guo:2016:HFB

[GGO16] Dahai Guo, William Gropp, and Luke N. Olson. A hybrid format for better performance of sparse matrix-vector multiplication on a GPU. *The International Journal of High Performance Computing Applications*, 30(1):103–120, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015593156.

Giraud:2001:PDF

[GGS01] Luc Giraud, Ronan Guivarch, and Joël Stein. Parallel distributed FFT-based solvers for 3-D Poisson problems in meso-scale atmospheric simulations. *The International Journal of High Performance Computing Applications*, 15(1):36–46, Spring 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500104.

Gray:2015:SSM

[GHHS15] Alan Gray, Alistair Hart, Oliver Henrich, and Kevin Stratford. Scaling soft matter physics to thousands of graphics processing units in parallel. *The International Journal of High Performance Computing Applications*, 29(3):274–283, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015576848.

Gates:2015:HPH

[GHL15] Mark Gates, Michael T. Heath, and John Lambros. High-performance hybrid CPU and GPU parallel algorithm for digital volume correlation. *The International Journal of High Performance Computing Applications*, 29(1):92–106, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/29/1/92.

Garzon:2010:EEC

[GHM+10] Jose Ignacio Garzon, Eduardo Huedo, Ruben Santiago Montero, Ignacio Martin Llorente, and Pablo Chacon. End-to-end cache system for Grid computing: Design and efficiency analysis of a high-throughput bioinformatic docking application. *The International Journal of High Performance Computing Applications*, 24(3):243–264, Fall 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/3/243.full.pdf+html.

Groen:2010:LAS

[GHZ10] Derek Groen, Stefan Harfst, and Simon Portegies Zwart. The living application: a self-organizing system for complex Grid tasks. *The International Journal of High Performance Computing Applications*, 24(2):185–193, Summer 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http:/

/hpc.sagepub.com/content/24/2/185.full.pdf+html.

Giraud:2002:CSD

[Gir02] L. Giraud. Combining shared and distributed memory programming models on clusters of symmetric multiprocessors: Some basic promising experiments. *The International Journal of High Performance Computing Applications*, 16(4):425–430, Winter 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200201600405.

Gallivan:1988:IHM

[GJMS88] Kyle Gallivan, William Jalby, Ulrike Meier, and Ahmed H. Sameh. Impact of hierarchical memory systems on linear algebra algorithm design. *The International Journal of Supercomputer Applications*, 2(1):12–48, March 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200103.

Georgiou:2018:TAJ

[GJMV18] Yiannis Georgiou, Emmanuel Jeannot, Guillaume Mercier, and Adèle Villiermet. Topology-aware job mapping. *The International Journal of High Performance Computing Applications*, 32(1):14–27, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017727061.

Gray:1993:VCP

[GKB93] Lincoln Gray, Scott Klasky, and Robert Byers. Visualizing complex patterns in the spread of head and neck cancers. *The International Journal of Supercomputer Applications*, 7(2):167–178, June 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700207.

Gottlieb:1991:HTC

[GKH+91] Steven A. Gottlieb, A. Krasnitz, U. M. Heller, A. D. Kennedy, W. Liu, J. B. Kogut, R. L. Renken, D. K. Sinclair, K. C. Wang, R. L. Sugar, and D. Toussaint. Hadron thermodynamics on the Connection Machine. *The International Journal of Supercomputer Applications*, 5(4):50–60, December 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500405.

Gropp:2000:GNK

[GKMT00] William Gropp, David Keyes, Lois Curfman McInness, and M. D. Tidriri. Globalized Newton–Krylov–Schwarz algorithms and software for parallel implicit CFD. *The International Journal of High Performance Computing Applications*, 14(2):102–136, Summer

2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400202.

Geist:1996:EED

[GKN+96] George A. Geist II, James A. Kohl, Donald M. C. Nicholson, Philip M. Papadopoulos, Bart D. Semeraro, William A. Shelton, G. Malcolm Stocks, and Yang Wang. Early experiences with distributed supercomputing on I-WAY: First principles materials science and parallel acoustic wave propagation. *The International Journal of Supercomputer Applications and High Performance Computing*, 10 (2–3):157–169, Summer/Fall 1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000204.

Geist:1997:CPF

[GKP97] G. A. Geist II, James Arthur Kohl, and Philip M. Papadopoulos. CUMULVS: Providing fault tolerance, visualization, and steering of parallel applications. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(3):224–235, Fall 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100305.

Gropp:1997:SMC

[GL97] William Gropp and Ewing Lusk. Sowing MPICH: a case study in the dissemination of a portable environment for parallel scientific computing. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(2):103–114, Summer 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100204.

Gropp:2004:FTM

[GL04] William Gropp and Ewing Lusk. Fault tolerance in Message Passing Interface programs. *The International Journal of High Performance Computing Applications*, 18 (3):363–372, Fall 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/3/363.full.pdf+html.

Geist:2009:MCS

[GL09] Al Geist and Robert Lucas. Major computer science challenges at exascale. *The International Journal of High Performance Computing Applications*, 23(4):427–436, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/427.full.pdf+html.

Gomez-Luna:2011:LBV

[GLGLB+11] Juan Gómez-Luna, José María González-Linares, José Ignacio Benavides, Emilio L. Zapata, and Nicolás Guil. Load balancing versus occupancy maximization on graphics processing units: the Generalized Hough Transform as a case study. *The International Journal of High Performance Computing Applications*, 25(2):205–222, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/25/2/205.full.pdf+html`.

Gao:2014:UIM

[GLZS14] Tao Gao, Yutong Lu, Baida Zhang, and Guang Suo. Using the Intel Many Integrated Core to accelerate graph traversal. *The International Journal of High Performance Computing Applications*, 28(3):255–266, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/28/3/255`.

Glatard:2008:FEW

[GMLP08] Tristan Glatard, Johan Montagnat, Diane Lingrand, and Xavier Pennec. Flexible and efficient workflow deployment of data-intensive applications on Grids with MOTEUR. *The International Journal of High Performance Computing Applications*, 22(3):347–360, Fall 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/22/3/347.full.pdf+html`.

Gourdain:2010:HPC

[GMWG10] Nicolas Gourdain, Marc Montagnac, Fabien Wlassow, and Michel Gazaix. High-performance computing to simulate large-scale industrial flows in multistage compressors. *The International Journal of High Performance Computing Applications*, 24(4):429–443, Winter 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/4/429.full.pdf+html`.

Gupta:2011:UCO

[GNB11] Rinku Gupta, Harish Naik, and Pete Beckman. Understanding checkpointing overheads on massive-scale systems: Analysis of the IBM Blue Gene/P system. *The International Journal of High Performance Computing Applications*, 25(2):180–192, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/25/2/180.full.pdf+html`.

Grimshaw:1997:CWC

[GNTLH97] Andrew S. Grimshaw, Anh Nguyen-Tuong, Mark J. Lewis, and M. Hyett. Campus-wide computing: Early results using Legion at the University of Virginia. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(2):129–143, Summer 1997. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209701100206`.

Gilli:1993:EMS

[GP93] Manfred Gilli and Giorgio Pauletto. Econometric model simulation on parallel computers. *The International Journal of Supercomputer Applications*, 7(3):254–264, September 1993. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209300700306`.

Gonzalez:2020:HHD

[GPO+20] César González, Mariano Pérez, Juan M. Orduña, Javier Chaves, and Ana-Bárbara García. HPG-HMapper: a DNA hydroxymethylation analysis tool. *The International Journal of High Performance Computing Applications*, 34(1):57–65, January 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019840792`.

Geist:2017:SHP

[GR17] Al Geist and Daniel A. Reed. A survey of high-performance computing scaling challenges. *The International Journal of High Performance Computing Applications*, 31(1):104–113, January 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015597083`.

Gomes:2008:EGB

[GRC08] Cecilia Gomes, Omer F. Rana, and Jose Cunha. Extending Grid-based workflow tools with patterns/operators. *The International Journal of High Performance Computing Applications*, 22(3):301–318, Fall 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/22/3/301.full.pdf+html`.

Grossschadl:2003:ASL

[Gro03] Johann Großschädl. Architectural support for long integer modulo arithmetic on RISC-based Smart Cards. *The International Journal of High Performance Computing Applications*, 17(2):135–146, Summer 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/10943420030170020004`.

Gray:1999:MIS

[GS99] Paul A. Gray and Vaidy S. Sunderam. Metacomputing with the IceT system. *The*

International Journal of High Performance Computing Applications, 13(3):241–252, Fall 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300307.

Ghan:2005:LBS

[GS05] Steven Ghan and Timothy Shippert. Load balancing and scalability of a subgrid orography scheme in a global climate model. *The International Journal of High Performance Computing Applications*, 19(3):237–245, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/237.full.pdf+html.

Gropp:2009:NCC

[GS09] William Gropp and Marc Snir. On the need for a consortium of capability centers. *The International Journal of High Performance Computing Applications*, 23(4):413–420, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/413.full.pdf+html.

Gray:2018:LAP

[GS18] Alan Gray and Kevin Stratford. A lightweight approach to performance portability with targetDP. *The International Journal of High Performance Computing Applications*, 32(2):288–301, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016682071.

Gainaru:2019:FSV

[GSA+19] Ana Gainaru, Hongyang Sun, Guillaume Aupy, Yuankai Huo, Bennett A. Landman, and Padma Raghavan. On-the-fly scheduling versus reservation-based scheduling for unpredictable workflows. *The International Journal of High Performance Computing Applications*, 33(6):1140–1158, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019841681.

Gine:2003:DMC

[GSHL03] Francesc Giné, Francesc Solsona, Porfidio Hernández, and Emilio Luque. Dealing with memory constraints in a non-dedicated Linux cluster. *The International Journal of High Performance Computing Applications*, 17(1):39–48, Spring 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003017001004.

Grigoriev:2015:HPA

[GSK+15] Fv Grigoriev, Av Sulimov,

Igor Kochikov, Oa Kondakova, Vb Sulimov, and Av Tikhonravov. High-performance atomistic modeling of optical thin films deposited by energetic processes. *The International Journal of High Performance Computing Applications*, 29(2):184–192, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342014560591`.

Grannan:2020:ULS

[GSND20] A. Grannan, K. Sood, B. Norris, and A. Dubey. Understanding the landscape of scientific software used on high-performance computing platforms. *The International Journal of High Performance Computing Applications*, 34 (4):465–477, July 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019899451`.

Gunther:2000:DPC

[Gun00] Neil J. Gunther. The dynamics of performance collapse in large-scale networks and computers. *The International Journal of High Performance Computing Applications*, 14(4):367–372, Winter 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200001400408`.

Gustafson:2004:PBB

[Gus04] J. Gustafson. Purpose-based benchmarks. *The International Journal of High Performance Computing Applications*, 18(4):475–487, Winter 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/18/4/475.full.pdf+html`.

Gallardo:2018:EMM

[GVF+18] Esthela Gallardo, Jérôme Vienne, Leonardo Fialho, Patricia Teller, and James Browne. Employing MPI_T in MPI advisor to optimize application performance. *The International Journal of High Performance Computing Applications*, 32(6):882–896, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342016684005`.

Glaser:2021:HTV

[GVR+21] Jens Glaser, Josh V. Vermaas, David M. Rogers, Jeff Larkin, Scott Legrand, Swen Boehm, Matthew B. Baker, Aaron Scheinberg, Andreas F. Tillack, Mathialakan Thavappiragasam, Ada Sedova, and Oscar Hernandez. High-throughput virtual laboratory for drug discovery using massive datasets. *The International Journal of*

High Performance Computing Applications, 35(5):452–468, September 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211001565.

Gurun:2008:ECO

[GWKN08] Selim Gurun, Rich Wolski, Chandra Krintz, and Dan Nurmi. On the efficacy of computation offloading decision-making strategies. *The International Journal of High Performance Computing Applications*, 22(4):460–479, Winter 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/4/460.full.pdf+html.

Hsu:1991:MAO

[HA91] Hsieh-Lung Hsu and Hojjat Adeli. A microtasking algorithm for optimization of structures. *The International Journal of Supercomputer Applications*, 5(2):82–91, June 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500206.

Haber:1990:SVW

[Hab90] Robert B. Haber. Scientific visualization: What's beyond the vision? *The International Journal of Supercomputer Applications*, 4(2):150–153, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400213.

Hibbard:1996:ECA

[HAF+96] William L. Hibbard, John Anderson, Ian Foster, Brian E. Paul, Robert Jacob, Chad Schafer, and Mary K. Tyree. Exploring coupled atmosphere-ocean models using Vis5D. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(2–3):211–222, Summer/Fall 1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000208.

Hajivassiliou:1993:SNR

[Haj93] Vassilis Argyrou Hajivassiliou. Simulating normal rectangle probabilities and their derivatives: Effects of vectorization. *The International Journal of Supercomputer Applications*, 7(3):231–253, September 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700305.

Hamber:1991:SDQ

[Ham91] Herbert W. Hamber. Simulations of discrete quantized gravity. *The International Journal of Supercomputer Applications*, 5(4):84–97, December 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://

journals.sagepub.com/doi/pdf/10.1177/109434209100500408.

Hart:2011:MTW

[Har11] David L. Hart. Measuring TeraGrid: workload characterization for a high-performance computing federation. *The International Journal of High Performance Computing Applications*, 25 (4):451–465, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/4/451.full.pdf+html.

Hausheer:1994:ITI

[Hau94] Frederick H. Hausheer. Introduction to the theme issue. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(1):5, Spring 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800102.

Hingerty:1990:ARS

[HB90] Brian E. Hingerty and Suse Broyde. Atomic resolution structures of DNA and DNA modified by carcinogens. *The International Journal of Supercomputer Applications*, 4 (3):11–21, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400303.

Hood:2008:BCS

[HBC+08] Robert Hood, Rupak Biswas, Johnny Chang, M. Jahed Djomehri, and Haoqiang Jin. Benchmarking the Columbia supercluster. *The International Journal of High Performance Computing Applications*, 22(1):97–112, Spring 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/1/97.full.pdf+html.

Holzer:2021:HEL

[HBKR21] Markus Holzer, Martin Bauer, Harald Köstler, and Ulrich Rüde. Highly efficient lattice Boltzmann multiphase simulations of immiscible fluids at high-density ratios on CPUs and GPUs through code generation. *The International Journal of High Performance Computing Applications*, 35(4):413–427, July 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211016525.

Hamann:2003:NVG

[HBSM03] Bernd Hamann, E. Wes Bethel, Horst Simon, and Juan Meza. NERSC 'Visualization Greenbook': Future visualization needs of the DOE computational science community hosted at NERSC. *The International Journal of High Performance Computing Applica-*

tions, 17(2):97–123, Summer 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003017002001.

Herrero:2008:WAW

[HBSP08] Pilar Herrero, José Luis Bosque, Manuel Salvadores, and María S. Pérez. WE-AMBLE: a workflow engine to manage awareness in collaborative Grid environments. *The International Journal of High Performance Computing Applications*, 22(3):250–267, Fall 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/3/250.full.pdf+html.

Hsueh:2008:FPG

[HC08] Mingkai Hsueh and Chein-I Chang. Field programmable gate arrays (FPGA) for pixel purity index using blocks of skewers for endmember extraction in hyperspectral imagery. *The International Journal of High Performance Computing Applications*, 22(4):408–423, Winter 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/4/408.full.pdf+html.

Hamid:2010:CMB

[HC10] Nor Asilah Wati Abdul Hamid and Paul Coddington. Comparison of MPI benchmark programs on shared memory and distributed memory machines (point-to-point communication). *The International Journal of High Performance Computing Applications*, 24(4):469–483, Winter 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/4/469.full.pdf+html.

Harris:2022:EMS

[HCC+22] J. Austin Harris, Ran Chu, Sean M. Couch, Anshu Dubey, Eirik Endeve, Antigoni Georgiadou, Rajeev Jain, Daniel Kasen, M. P. Laiu, Oe B. Messer, Jared O'Neal, Michael A. Sandoval, and Klaus Weide. Exascale models of stellar explosions: Quintessential multiphysics simulation. *The International Journal of High Performance Computing Applications*, 36(1):59–77, January 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211027937.

Hernandez:2020:OSS

[HCCG20] Mario Hernández, Juan M. Cebrián, José M. Cecilia, and José M. García. Offloading strategies for stencil kernels on the KNC Xeon Phi architecture: Accuracy versus performance. *The International Journal of High Per-*

formance Computing Applications, 34(2):199–207, March 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017738352.

He:2005:CMM

[HD05] Yun He and Chris H. Q. Ding. Coupling multicomponent models with MPH on distributed memory computer architectures. *The International Journal of High Performance Computing Applications*, 19 (3):329–340, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/329.full.pdf+html.

Haidar:2015:BMC

[HDL+15] Azzam Haidar, Tingxing Dong, Piotr Luszczek, Stanimire Tomov, and Jack Dongarra. Batched matrix computations on hardware accelerators based on GPUs. *The International Journal of High Performance Computing Applications*, 29(2):193–208, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342014567546.

Hidalgo:2018:SIE

[HdV18] J. Ignacio Hidalgo and Francisco Fernández de Vega. Special issue on "Evolutionary algorithms on parallel architectures and distributed infrastructures". *The International Journal of High Performance Computing Applications*, 32(5):674–675, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342018797756.

Horoi:2001:UAL

[HE01] Mihai Horoi and Richard J. Enbody. Using Amdahl's Law as a metric to drive code parallelization: Two case studies. *The International Journal of High Performance Computing Applications*, 15(1):75–80, Spring 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500107.

Heath:2015:TTL

[Hea15] Michael T. Heath. A tale of two laws. *The International Journal of High Performance Computing Applications*, 29(3):320–330, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015572031.

Hertz:1988:SMN

[Her88] J. A. Hertz. Statistical mechanics of neural computation. *The International Jour-*

nal of Supercomputer Applications, 2(4):54–62, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200406.

Hernquist:1991:FAG

[Her91] Lars Hernquist. The fueling of active galaxies. *The International Journal of Supercomputer Applications*, 5(4):71–83, December 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500407.

Heroux:2009:SCE

[Her09] Michael A. Heroux. Software challenges for extreme scale computing: Going from petascale to exascale systems. *The International Journal of High Performance Computing Applications*, 23(4):437–439, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/437.full.pdf+html.

Halappanavar:2012:AWM

[HFV+12] Mahantesh Halappanavar, John Feo, Oreste Villa, Antonino Tumeo, and Alex Pothen. Approximate weighted matching on emerging manycore and multithreaded architectures. *The International Journal of High Performance Computing Applications*, 26(4):413–430, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/4/413.full.pdf+html.

Heath:1991:EEI

[HGD91] Michael T. Heath, George A. Geist, and John B. Drake. Early experience with the Intel iPSC/860 at Oak Ridge National Laboratory. *The International Journal of Supercomputer Applications*, 5(2):10–26, June 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500202.

Hermanns:2012:SDM

[HGMW12] Marc-André Hermanns, Markus Geimer, Bernd Mohr, and Felix Wolf. Scalable detection of MPI-2 remote memory access inefficiency patterns. *The International Journal of High Performance Computing Applications*, 26(3):227–236, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/3/227.full.pdf+html.

Hugo:2014:CMS

[HGWN14] Andra Hugo, Abdou Guermouche, Pierre-André Wacrenier, and Raymond Namyst. Composing multiple StarPU applications over heterogeneous machines: a supervised approach. *The International Journal of High Performance*

Computing Applications, 28 (3):285–300, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/28/3/285`.

Huckelheim:2019:RMA

[HHSM19] Jan Hückelheim, Paul Hovland, Michelle Mills Strout, and Jens-Dominik Müller. Reverse-mode algorithmic differentiation of an OpenMP-parallel compressible flow solver. *The International Journal of High Performance Computing Applications*, 33 (1):140–154, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017712060`.

Hoefler:2012:OSR

[HI12] Torsten Hoefler and Kamil Iskra. Operating systems and runtime environments on supercomputers. *The International Journal of High Performance Computing Applications*, 26(2):93–94, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/2/93.full.pdf+html`.

Hoefler:2013:OSR

[HI13] Torsten Hoefler and Kamil Iskra. Operating systems and runtime environments on supercomputers. *The International Journal of High Performance Computing Applications*, 27(2):123, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/2/123.full.pdf+html`.

Hasegawa:2014:PEU

[HIT+14] Yukihiro Hasegawa, Jun-Ichi Iwata, Miwako Tsuji, Daisuke Takahashi, Atsushi Oshiyama, Kazuo Minami, Taisuke Boku, Hikaru Inoue, Yoshito Kitazawa, Ikuo Miyoshi, and Mitsuo Yokokawa. Performance evaluation of ultra-large-scale first-principles electronic structure calculation code on the K computer. *The International Journal of High Performance Computing Applications*, 28(3):335–355, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/28/3/335`.

Hu:1996:DPI

[HJ96] Yu Hu and S. Lennart Johnsson. A data-parallel implementation of hierarchical N-body methods. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(1):3–40, Spring 1996. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209601000101`.

Hara:1988:FSP

[HKK88] Heihachiro Hara, Yoichi Kodera, and Kazuhiko Kanehiro. Flow simulations by parallel computer MiPax. *The International Journal of Supercomputer Applications*, 2 (3):73–80, September 1988. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208800200306`.

Hey:2000:DPP

[HL00] Tony Hey and David Lancaster. The development of Parkbench and performance prediction. *The International Journal of High Performance Computing Applications*, 14(3):205–215, Fall 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200001400304`.

Hauser:2010:OCF

[HL10] Thomas Hauser and Raymond LeBeau. Optimization of a computational fluid dynamics code for the memory hierarchy: a case study. *The International Journal of High Performance Computing Applications*, 24(3):299–318, Fall 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/3/299.full.pdf+html`.

Han:2019:GAS

[HLC+19] Li Han, Valentin Le Fèvre, Louis-Claude Canon, Yves Robert, and Frédéric Vivien. A generic approach to scheduling and checkpointing workflows. *The International Journal of High Performance Computing Applications*, 33 (6):1255–1274, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019866891`.

Heller:2019:HBT

[HLH+19] Thomas Heller, Bryce Adelstein Lelbach, Kevin A. Huck, John Biddiscombe, Patricia Grubel, Alice E. Koniges, Matthias Kretz, Dominic Marcello, David Pfander, Adrian Serio, Juhan Frank, Geoffrey C. Clayton, Dirk Pflüger, David Eder, and Hartmut Kaiser. Harnessing billions of tasks for a scalable portable hydrodynamic simulation of the merger of two stars. *The International Journal of High Performance Computing Applications*, 33(4):699–715, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018819744`.

Houstis:2003:GSB

[HLP+03] Catherine Houstis, Spyros Lalis, Marios Pitikakis, George V.

Vasilakis, Kyriakos Kritikos, and Antonis Smardas. A Grid service-based infrastructure for accessing scientific collections: The case of the ARION system. *The International Journal of High Performance Computing Applications*, 17(3):269–280, Fall 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/1094342003173008`.

Huang:2017:SPP

[HLS+17] Miaoqing Huang, Chenggang Lai, Xuan Shi, Zhijun Hao, and Haihang You. Study of parallel programming models on computer clusters with Intel MIC coprocessors. *The International Journal of High Performance Computing Applications*, 31(4):303–315, July 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015580864`.

Hoisie:2000:PSA

[HLW00] Adolfy Hoisie, Olaf Lubeck, and Harvey Wasserman. Performance and scalability analysis of teraflop-scale parallel architectures using multidimensional wavefront applications. *The International Journal of High Performance Computing Applications*, 14(4):330–346, Winter 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200001400405`.

He:2016:EHP

[HLW+16] Shuibing He, Yan Liu, Yang Wang, Xian-He Sun, and Chuanhe Huang. Enhancing hybrid parallel file system through performance and space-aware data layout. *The International Journal of High Performance Computing Applications*, 30(4):396–410, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016631610`.

Hu:2020:PAC

[HLZ+20] Xiaodong Hu, Zhonghua Lu, Jian Zhang, Xiazhen Liu, Wu Yuan, Shan Liang, and Haikuo Zhang. A parallel algorithm for chimera grid with implicit hole cutting method. *The International Journal of High Performance Computing Applications*, 34 (2):169–177, March 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019845042`.

Haber:1990:EDS

[HME90] Robert B. Haber, David A. McNabb, and Robert A. Ellis. Eliminating distance in scientific computing: An experiment in televisualization. *The International Journal of Supercomputer Applications*, 4(4):71–89, December 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400406.

Hart:1992:CMB

[HOPB92] Richard T. Hart, Z. Maria Oden, Susannah W. Parrish, and David B. Burr. Computational methods for bone mechanics studies. *The International Journal of Supercomputer Applications*, 6(2):164–174, June 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600204.

Horvath:2016:KSR

[HPW+16] Zsolt Horváth, Rui Ap Perdigão, Jürgen Waser, Daniel Cornel, Artem Konev, and Günter Blöschl. Kepler shuffle for real-world flood simulations on GPUs. *The International Journal of High Performance Computing Applications*, 30(4):379–395, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016630800.

Heath:1997:PFP

[HR97] Michael T. Heath and Padma Raghavan. Performance of a fully parallel sparse solver. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(1):49–64, Spring 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100104.

Hsu:1989:ADV

[HRM89] P. Y.-T. Hsu, B. R. Rau, and K. J. M. Moriarty. Applications development on the very long instruction word CYDRA-5. *The International Journal of Supercomputer Applications*, 3(3):91–98, September 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300307.

Huber:2019:ACR

[HRW19] Markus Huber, Ulrich Rüde, and Barbara Wohlmuth. Adaptive control in roll-forward recovery for extreme scale multigrid. *The International Journal of High Performance Computing Applications*, 33(5):817–837, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018817088.

Huo:1993:EMP

[HS93] Yan Huo and Robert Schreiber. Efficient, massively parallel eigenvalue computation. *The International Journal of Supercomputer Applications*, 7(4):292–303, December 1993.

CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700402.

Hunter:2011:LSP

[HSLK11] Abigail Hunter, Faisal Saied, Chinh Le, and Marisol Koslowski. Large-scale 3D phase field dislocation dynamics simulations on high-performance architectures. *The International Journal of High Performance Computing Applications*, 25(2):223–235, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/2/223.full.pdf+html.

Hey:2004:USP

[HT04a] Tony Hey and Anne E. Trefethen. UK e-Science Programme: Next generation Grid applications. *The International Journal of High Performance Computing Applications*, 18(3):285–291, Fall 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/3/285.full.pdf+html.

Huang:2004:PAM

[HT04b] Weicheng Huang and Danesh K. Tafti. A parallel adaptive mesh refinement algorithm for solving nonlinear dynamical systems. *The International Journal of High Performance Computing Applications*, 18 (2):171–181, Summer 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/2/171.full.pdf+html.

Haidar:2014:NHC

[HTD+14] Azzam Haidar, Stanimire Tomov, Jack Dongarra, Raffaele Solcà, and Thomas Schulthess. A novel hybrid CPU-GPU generalized eigensolver for electronic structure calculations based on fine-grained memory aware tasks. *The International Journal of High Performance Computing Applications*, 28(2):196–209, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/2/196.

Hagiwara:1990:SAS

[HTSK90] Ichiro Hagiwara, Masaaki Tsuda, Yoshihiro Sato, and Yuichi Kitagawa. Simulation of automobile side member collapse for crash energy management. *The International Journal of Supercomputer Applications*, 4(2):107–114, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400209.

Harrison:2008:WRW

[HTWS08] Andrew Harrison, Ian Taylor, Ian Wang, and Matthew Shields. WS-RF workflow in

Triana. *The International Journal of High Performance Computing Applications*, 22 (3):268–283, Fall 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/3/268.full.pdf+html.

Huang:2003:IJB

[Hua03] Yan Huang. JISGA: a Jini-based service-oriented Grid architecture. *The International Journal of High Performance Computing Applications*, 17(3):317–327, Fall 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003173001.

Hoffman:2005:VCL

[HVKW05] Forrest M. Hoffman, Mariana Vertenstein, Hideyuki Kitabata, and James B. White III. Vectorizing the Community Land Model. *The International Journal of High Performance Computing Applications*, 19(3):247–260, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/247.full.pdf+html.

He:2009:PMAb

[HVSW09] Jian He, Alex Verstak, M. Sosonkina, and L. T. Watson. Performance modeling and analysis of a massively parallel direct—part 2. *The International Journal of High Performance Computing Applications*, 23 (1):29–41, Spring 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/1/29.full.pdf+html.

He:2009:PMAa

[HVWS09] Jian He, Alex Verstak, L. T. Watson, and M. Sosonkina. Performance modeling and analysis of a massively parallel direct—part 1. *The International Journal of High Performance Computing Applications*, 23(1):14–28, Spring 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/1/14.full.pdf+html.

Huang:2003:VDH

[HWP03] Lican Huang, Zhaohui Wu, and Yunhe Pan. Virtual and dynamic hierarchical architecture for e-science Grid. *The International Journal of High Performance Computing Applications*, 17(3):329–347, Fall 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003173007.

Hou:2013:PMD

[HXW+13] Chaofeng Hou, Ji Xu, Peng Wang, Wenlai Huang, Xiaowei Wang, Wei Ge, Xianfeng He, Li Guo, and Jinghai Li. Petascale molecular dynamics simulation of crystalline silicon on Tianhe-1A. *The International Journal of High Performance Computing Applications*, 27(3):307–317, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/3/307.full.pdf+html`.

Hori:2020:OUS

[HYH+20] Atsushi Hori, Kazumi Yoshinaga, Thomas Herault, Aurélien Bouteiller, George Bosilca, and Yutaka Ishikawa. Overhead of using spare nodes. *The International Journal of High Performance Computing Applications*, 34(2):208–226, March 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342020901885`.

Hirokawa:2022:LSI

[HYY+22] Yuta Hirokawa, Atsushi Yamada, Shunsuke Yamada, Masashi Noda, Mitsuharu Uemoto, Taisuke Boku, and Kazuhiro Yabana. Large-scale ab initio simulation of light-matter interaction at the atomic scale in Fugaku. *The International Journal of High Performance Computing Applications*, 36(2):182–197, March 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211065723`.

Hutchinson:1991:FSM

[HZ91] James M. Hutchinson and Stavros A. Zenios. Financial simulations on a massively parallel Connection Machine. *The International Journal of Supercomputer Applications*, 5(2):28–46, June 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500203`.

Isaila:2010:SMP

[IBC+10] Florin Isaila, Francisco Javier Garcia Blas, Jesús Carretero, Wei keng Liao, and Alok Choudhary. A scalable Message Passing Interface implementation of an ad-hoc parallel I/O system. *The International Journal of High Performance Computing Applications*, 24(2):164–184, Summer 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/2/164.full.pdf+html`.

Imbernon:2018:MPM

[ICPSG18] Baldomero Imbernón, José M. Cecilia, Horacio Pérez-Sánchez, and Domingo Giménez. METADOCK: a parallel metaheuristic schema for virtual screening methods. *The International Journal of High Performance Computing Applications*, 32

(6):789–803, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017697471.

Ibtesham:2015:CCS

[IFA15] Dewan Ibtesham, Kurt B. Ferreira, and Dorian Arnold. A checkpoint compression study for high-performance computing systems. *The International Journal of High Performance Computing Applications*, 29(4):387–402, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015570921.

Iakymchuk:2019:HAD

[IGDQO19] Roman Iakymchuk, Stef Graillat, David Defour, and Enrique S. Quintana-Ortí. Hierarchical approach for deriving a reproducible unblocked *LU* factorization. *The International Journal of High Performance Computing Applications*, 33(5):791–803, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019832968.

Iskra:2015:OSR

[IH15] Kamil Iskra and Torsten Hoefler. Operating systems and runtime environments on supercomputers. *The International Journal of High Performance Computing Applications*, 29(1):3–4, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/29/1/3.

Ishiguro:1987:PAV

[IHMM87] Misako Ishiguro, Hiroo Harada, Mitsuhiro Makino, and Joanne L. Martin. Performance analysis of vectorized nuclear codes on a FACOM VP-100 at the Japan Atomic Energy Research Institute. *The International Journal of Supercomputer Applications*, 1(3):45–56, September 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100305.

Imrohoroglu:1993:NAS

[IIJ93] Ayse Imrohoroglu, Selahattin Imrohoroglu, and Douglas H. Joines. A numerical algorithm for solving models with incomplete markets. *The International Journal of Supercomputer Applications*, 7(3):212–230, September 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700304.

Isotton:2022:GAA

[IJB22] Giovanni Isotton, Carlo Janna, and Massimo Bernaschi. A GPU-accelerated adaptive FSAI preconditioner for massively parallel simulations. *The International Journal of High Performance Computing Applications*, 36(2):153–166, March 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211017188.

Iyengar:2002:P

[IK02] S. S. Iyengar and Sri Kumar. Preface. *The International Journal of High Performance Computing Applications*, 16(3):203–205, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160030101.

Iverson:2018:VMM

[IK18] Jeremy Iverson and George Karypis. A virtual memory manager optimized for node-level cooperative multi-tasking in memory constrained systems. *The International Journal of High Performance Computing Applications*, 32(5):744–759, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017690975.

Ivanovic:2019:MLD

[IKMS+19] Milos Ivanović, Ana Kaplarević-Mališić, Boban Stojanović, Marina Svicević, and Srboljub M. Mijailovich. Machine learned domain decomposition scheme applied to parallel multi-scale muscle simulation. *The International Journal of High Performance Computing Applications*, 33(5):885–896, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019833151.

Imamura:2010:HPQ

[IKY+10] Toshiyuki Imamura, Takuma Kano, Susumu Yamada, Masahiko Okumura, and Masahiko Machida. High-performance quantum simulation for coupled Josephson junctions on the Earth Simulator: a challenge to the Schrödinger equation on 256^4 Grids. *The International Journal of High Performance Computing Applications*, 24(3):319–334, Fall 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/3/319.full.pdf+html.

Imbernon:2020:HIV

[ILCLG20] Baldomero Imbernón, Antonio Llanes, José-Matías Cutillas-Lozano, and Domingo Giménez. HYPERDOCK: Improving virtual screening through parallel hyperheuristics. *The International Journal of High Performance Computing Applications*, 34(1):30–

41, January 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019847732.

Iserte:2019:DRN

[IMB+19] Sergio Iserte, Héctor Martínez, Sergio Barrachina, Maribel Castillo, Rafael Mayo, and Antonio J. Peña. Dynamic reconfiguration of noniterative scientific applications: a case study with HPG aligner. *The International Journal of High Performance Computing Applications*, 33(5):804–816, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018802347.

Igual:2011:CTA

[IMH+11] Francisco D. Igual, Rafael Mayo, Timothy Hartley, Ümit V. Çatalyürek, Antonio Ruiz, and Manuel Ujaldon. Color and texture analysis using emerging parallel architectures. *The International Journal of High Performance Computing Applications*, 25(4):404–427, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/4/404.full.pdf+html.

Igual:2012:RCT

[IMH+12] Francisco D. Igual, Rafael Mayo, Timothy D. R. Hartley, Ümit V. Çatalyürek, Antonio Ruiz, and Manuel Ujaldon. Retracted: Color and texture analysis on emerging parallel architectures. *The International Journal of High Performance Computing Applications*, 26(3):237–259, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/3/237.full.pdf+html.

Islam:2016:EMT

[IMS16] Tanzima Islam, Kathryn Mohror, and Martin Schulz. Exploring the MPI tool information interface: features and capabilities. *The International Journal of High Performance Computing Applications*, 30(2):212–222, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015600507.

Ibrahim:2013:AOG

[IMW+13] Khaled Z. Ibrahim, Kamesh Madduri, Samuel Williams, Bei Wang, Stephane Ethier, and Leonid Oliker. Analysis and optimization of gyrokinetic toroidal simulations on homogeneous and heterogeneous platforms. *The International Journal of High Performance Computing Applications*, 27(4):454–473, 2013. CODEN IHPCFL. ISSN 1094-

3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/4/454.full.pdf+html.

Iwasawa:2020:IPB

[INS+20] Masaki Iwasawa, Daisuke Namekata, Ryo Sakamoto, Takashi Nakamura, Yasuyuki Kimura, Keigo Nitadori, Long Wang, Miyuki Tsubouchi, Jun Makino, Zhao Liu, Haohuan Fu, and Guangwen Yang. Implementation and performance of Barnes–Hut n-body algorithm on extreme-scale heterogeneous many-core architectures. *The International Journal of High Performance Computing Applications*, 34(6): 615–628, November 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020943652.

Idomura:2014:COT

[INY+14] Yasuhiro Idomura, Motoki Nakata, Susumu Yamada, Masahiko Machida, Toshiyuki Imamura, Tomohiko Watanabe, Masanori Nunami, Hikaru Inoue, Shigenobu Tsutsumi, Ikuo Miyoshi, and Naoyuki Shida. Communication-overlap techniques for improved strong scaling of gyrokinetic Eulerian code beyond 100k cores on the K-computer. *The International Journal of High Performance Computing Applications*, 28(1):73–86, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/1/73.full.pdf+html.

Ilin:1996:CLS

[IS96] Andrew Ilin and L. Ridgway Scott. Correspondence: Loop splitting for high performance computers. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(4):336–340, Winter 1996. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000404.

Ishiguro:1991:QMA

[Ish91] Misako Ishiguro. Queuing model analysis of the Fujitsu VP2000 with dual scalar architecture. *The International Journal of Supercomputer Applications*, 5(3):46–62, September 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500305.

Iakymchuk:2020:RPP

[IVG+20] Roman Iakymchuk, Maria Barreda Vayá, Stef Graillat, José I. Aliaga, and Enrique S. Quintana-Ortí. Reproducibility of parallel preconditioned conjugate gradient in hybrid programming environments. *The International Journal of High Performance Computing Applications*, 34(5):502–

518, September 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020932650.

Ibeid:2016:PMC

[IYK16] Huda Ibeid, Rio Yokota, and David Keyes. A performance model for the communication in fast multipole methods on high-performance computing platforms. *The International Journal of High Performance Computing Applications*, 30(4):423–437, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016634819.

Im:2004:SOF

[IYV04] Eun-Jin Im, Katherine Yelick, and Richard Vuduc. Sparsity: Optimization framework for sparse matrix kernels. *The International Journal of High Performance Computing Applications*, 18(1): 135–158, Spring 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/1/135.full.pdf+html.

Jansson:2019:CSF

[JBOT19] Niclas Jansson, Rahul Bale, Keiji Onishi, and Makoto Tsubokura. CUBE: a scalable framework for large-scale industrial simulations. *The International Journal of High Performance Computing Applications*, 33(4):678–698, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018816377.

Joo:2012:LQG

[JC12] Bálint Joó and Mike A. Clark. Lattice QCD on GPU clusters, using the Quda library and the Chroma software system. *The International Journal of High Performance Computing Applications*, 26(4):386–398, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/4/386.full.pdf+html.

Jurczuk:2021:FER

[JCK21] Krzysztof Jurczuk, Marcin Czajkowski, and Marek Kretowski. Fitness evaluation reuse for accelerating GPU-based evolutionary induction of decision trees. *The International Journal of High Performance Computing Applications*, 35(1):20–32, January 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020957393.

Jagode:2019:PSD

[JDAD19] Heike Jagode, Anthony Danalis, Hartwig Anzt, and Jack Dongarra. PAPI software-defined events for in-depth performance analysis. *The International Journal of High Performance Computing Applications*, 33(6):1113–1127, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019846287`.

Jagode:2018:ANC

[JDD18] Heike Jagode, Anthony Danalis, and Jack Dongarra. Accelerating NWChem Coupled Cluster through dataflow-based execution. *The International Journal of High Performance Computing Applications*, 32(4):540–551, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016672543`.

Jin:2017:SSM

[JdSA+17] Chao Jin, Bronis R. de Supinski, David Abramson, Heidi Poxon, Luiz DeRose, Minh Ngoc Dinh, Mark Endrei, and Elizabeth R. Jessup. A survey on software methods to improve the energy efficiency of parallel computing. *The International Journal of High Performance Computing Applications*, 31(6):517–549, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016665471`.

Jeannot:2013:SMA

[Jea13] Emmanuel Jeannot. Symbolic mapping and allocation for the Cholesky factorization on NUMA machines: Results and optimizations. *The International Journal of High Performance Computing Applications*, 27(3):283–290, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/3/283.full.pdf+html`.

Jurczuk:2018:GBC

[JKBW18] Krzysztof Jurczuk, Marek Kretowski, and Johanne Bezy-Wendling. GPU-based computational modeling of magnetic resonance imaging of vascular structures. *The International Journal of High Performance Computing Applications*, 32(4):496–511, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016677586`.

Jagode:2011:TBP

[JKD+11] Heike Jagode, Andreas Knüpfer, Jack Dongarra, Matthias Jurenz, Matthias S. Müller, and Wolfgang E. Nagel. Trace-based performance analysis for the petascale simulation code Flash. *The International Journal of High Performance Computing Applications*, 25(4):428–439, 2011. CODEN IHPCFL. ISSN 1094-

3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/25/4/428.full.pdf+html`.

Jespersen:1989:CFD

[JL89] Dennis C. Jespersen and Creon Levit. A computational fluid dynamics algorithm on a massively parallel computer. *The International Journal of Supercomputer Applications*, 3(4):9–27, December 1989. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208900300403`.

Jalby:2004:WNS

[JLL04] W. Jalby, C. Lemuet, and X. Le Pasteur. WBTK: a new set of microbenchmarks to explore memory system performance for scientific computing. *The International Journal of High Performance Computing Applications*, 18(2):211–224, Summer 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/18/2/211.full.pdf+html`.

Jacob:2005:CPI

[JLO05] Robert Jacob, Jay Larson, and Everest Ong. $M \times N$ communication and parallel interpolation in Community Climate System Model Version 3 using the Model Coupling Toolkit. *The International Journal of High Performance Computing Applications*, 19(3):293–307, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/19/3/293.full.pdf+html`.

Jin:2005:IPR

[JMC05] Guohua Jin and John Mellor-Crummey. Improving performance by reducing the memory footprint of scientific applications. *The International Journal of High Performance Computing Applications*, 19(4):433–451, Winter 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/19/4/433.full.pdf+html`.

Jacobs:2021:ERC

[JMM+21] Sam Ade Jacobs, Tim Moon, Kevin Mcloughlin, Derek Jones, David Hysom, Dong H. Ahn, John Gyllenhaal, Pythagoras Watson, Felice C. Lightstone, Jonathan E. Allen, Ian Karlin, and Brian Van Essen. Enabling rapid COVID-19 small molecule drug design through scalable deep learning of generative models. *The International Journal of High Performance Computing Applications*, 35(5):469–482, September 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211010930`.

Jones:2002:TDS

[JMP02] Mark T. Jones, Shashank Mehrotra, and Jae H. Park. Tasking distributed sensor networks. *The International Journal of High Performance Computing Applications*, 16(3):243–257, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/10943420020160030501`.

Johnson:1990:MPO

[JO90] Mark A. Johnson and James J. O'Brien. Modeling the Pacific Ocean. *The International Journal of Supercomputer Applications*, 4(2):37–47, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400204`.

Johnsson:1992:LBL

[JO92] S. Lennart Johnsson and Luis F. Ortiz. Local Basic Linear Algebra Subroutines (LBLAS) for distributed memory architectures and languages with array syntax. *The International Journal of Supercomputer Applications*, 6 (4):322–350, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209200600403`.

Johnston:2001:UCD

[Joh01] William E. Johnston. Using computing and data grids for large-scale science and engineering. *The International Journal of High Performance Computing Applications*, 15(3):223–242, Fall 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200101500303`.

Jones:1992:PSS

[Jon92] Robert Jones. Protein sequence and structure comparison on massively parallel computers. *The International Journal of Supercomputer Applications*, 6(2):138–146, June 1992. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209200600202`.

Jones:2012:LKC

[Jon12] Terry Jones. Linux kernel co-scheduling and bulk synchronous parallelism. *The International Journal of High Performance Computing Applications*, 26(2):136–145, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/2/136.full.pdf+html`.

Jones:1993:CEV

[JP93] Mark T. Jones and Paul E. Plassmann. Computation of equilibrium vortex structures for Type-II superconductors. *The International Journal of Supercomputer Ap-*

plications, 7(2):129–143, June 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700204.

Jaros:2016:FWN

[JRT16] Jiri Jaros, Alistair P. Rendell, and Bradley E. Treeby. Full-wave nonlinear ultrasound simulation on distributed clusters with applications in high-intensity focused ultrasound. *The International Journal of High Performance Computing Applications*, 30(2):137–155, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015581024.

James:2009:AFT

[JSSZ09] Mark L. James, Andrew A. Shapiro, Paul L. Springer, and Hans P. Zima. Adaptive fault tolerance for scalable cluster computing in space. *The International Journal of High Performance Computing Applications*, 23(3):227–241, Fall 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/3/227.full.pdf+html.

Jeannot:2006:SMD

[JW06] Emmanuel Jeannot and Frédéric Wagner. Scheduling messages for data redistribution: An experimental study. *The International Journal of High Performance Computing Applications*, 20(4):443–454, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/4/443.full.pdf+html.

Kahaner:2007:P

[Kah07] David K. Kahaner. Preface. *The International Journal of High Performance Computing Applications*, 21(4):387, Winter 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/4/387.full.pdf+html.

Kale:2009:EAD

[Kal09a] Laxmikant Kale. Early application development/tuning and application characterization/segmentation. *The International Journal of High Performance Computing Applications*, 23(4):411–412, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/411.full.pdf+html.

Kale:2009:PME

[Kal09b] Laxmikant Kale. Programming models at exascale: Adaptive runtime systems, incomplete simple languages, and interoperability. *The International Journal of High Performance Computing Applications*, 23(4):344–346, Winter 2009. CO-

DEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/344.full.pdf+html.

Keahey:2000:LCA

[KBA00] Katarzyna Keahey, Peter Beckman, and James Ahrens. Ligature: Component architecture for high performance applications. *The International Journal of High Performance Computing Applications*, 14(4):347–356, Winter 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400406.

Kirby:2019:WFS

[KBY+19] Andrew C. Kirby, Michael J. Brazell, Zhi Yang, Rajib Roy, Behzad R. Ahrabi, Michael K. Stoellinger, Jay Sitaraman, and Dimitri J. Mavriplis. Wind farm simulations using an overset hp-adaptive approach with blade-resolved turbine models. *The International Journal of High Performance Computing Applications*, 33(5):897–923, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019832960.

Kim:1992:EPAa

[KC92a] S. K. Kim and A. T. Chronopoulos. An efficient parallel algorithm for extreme eigenvalues of sparse nonsymmetric matrices. *The International Journal of Supercomputer Applications*, 6(1):98–111, April 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600106.

Kim:1992:EPAb

[KC92b] S. K. Kim and A. T. Chronopoulos. An efficient parallel algorithm for extreme eigenvalues of sparse nonsymmetric matrices. *The International Journal of Supercomputer Applications*, 6(4):407–420, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600411.

Kong:2018:SSI

[KC18] Fande Kong and Xiao-Chuan Cai. Scalability study of an implicit solver for coupled fluid-structure interaction problems on unstructured meshes in 3D. *The International Journal of High Performance Computing Applications*, 32(2):207–219, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016646437.

Kreaseck:2006:IAS

[KCC+06] Barbara Kreaseck, Larry Carter, Henri Casanova, Jeanne Ferrante, and Sagnik Nandy.

Interference-aware scheduling. *The International Journal of High Performance Computing Applications*, 20(1):45–59, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/1/45.full.pdf+html.

Karimi:2011:HPP

[KDH11] Kamran Karimi, Neil Dickson, and Firas Hamze. High-performance physics simulations using multi-core CPUs and GPGPUs in a volunteer computing context. *The International Journal of High Performance Computing Applications*, 25(1):61–69, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/1/61.full.pdf+html.

Kronbichler:2018:FMP

[KDH18] Martin Kronbichler, Ababacar Diagne, and Hanna Holmgren. A fast massively parallel two-phase flow solver for microfluidic chip simulation. *The International Journal of High Performance Computing Applications*, 32(2):266–287, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016671790.

Kerlick:2001:PTP

[KDL01] David Kerlick, Eric Dillon, and David Levine. Performance testing of a parallel multi-block CFD solver. *The International Journal of High Performance Computing Applications*, 15(1):22–35, Spring 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500103.

Katti:2018:EFD

[KDNE18] Amogh Katti, Giuseppe Di Fatta, Thomas Naughton, and Christian Engelmann. Epidemic failure detection and consensus for extreme parallelism. *The International Journal of High Performance Computing Applications*, 32(5):729–743, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017690910.

Kemal:2016:MSA

[KDO16] Jonathan Y. Kemal, Roger L. Davis, and John D. Owens. Multidisciplinary simulation acceleration using multiple shared memory graphical processing units. *The International Journal of High Performance Computing Applications*, 30(4):486–508, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://

journals.sagepub.com/doi/full/10.1177/1094342016639114.

Kiar:2020:CPM

[KdOCR+20] Gregory Kiar, Pablo de Oliveira Castro, Pierre Rioux, Eric Petit, Shawn T. Brown, Alan C. Evans, and Tristan Glatard. Comparing perturbation models for evaluating stability of neuroimaging pipelines. *The International Journal of High Performance Computing Applications*, 34(5):491–501, September 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020926237.

Kepner:2004:HPC

[Kep04a] Jeremy Kepner. High performance computing productivity model synthesis. *The International Journal of High Performance Computing Applications*, 18(4):505–516, Winter 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/4/505.full.pdf+html.

Kepner:2004:HPO

[Kep04b] Jeremy Kepner. HPC productivity: An overarching view. *The International Journal of High Performance Computing Applications*, 18(4):393–397, Winter 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/4/393.full.pdf+html.

Kougkas:2017:RKV

[KES+17] Anthony Kougkas, Hassan Eslami, Xian-He Sun, Rajeev Thakur, and William Gropp. Rethinking key–value store for parallel I/O optimization. *The International Journal of High Performance Computing Applications*, 31(4):335–356, July 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016677084.

Keyes:2009:PDE

[Key09] David Keyes. Partial differential equation-based applications and solvers at extreme scale. *The International Journal of High Performance Computing Applications*, 23(4):366–368, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/366.full.pdf+html.

Kadupitiya:2020:MLP

[KFJ20] Jcs Kadupitiya, Geoffrey C. Fox, and Vikram Jadhao. Machine learning for parameter auto-tuning in molecular dynamics simulations: Efficient dynamics of ions near polarizable nanoparticles. *The International Journal of High Performance Computing Applica-*

tions, 34(3):357–374, May 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019899457.

Kumar:2010:ACC

[KFM+10] Sameer Kumar, Ahmad Faraj, Amith R. Mamidala, Brian Smith, Gabor Dozsa, Bob Cernohous, John Gunnels, Douglas Miller, Joseph Ratterman, and Philip Heidelberger. Architecture of the component collective messaging interface. *The International Journal of High Performance Computing Applications*, 24 (1):16–33, Spring 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/1/16.full.pdf+html.

Kolev:2021:EED

[KFM+21] Tzanio Kolev, Paul Fischer, Misun Min, Jack Dongarra, Jed Brown, Veselin Dobrev, Tim Warburton, Stanimire Tomov, Mark S. Shephard, Ahmad Abdelfattah, Valeria Barra, Natalie Beams, Jean-Sylvain Camier, Noel Chalmers, Yohann Dudouit, Ali Karakus, Ian Karlin, Stefan Kerkemeier, Yu-Hsiang Lan, David Medina, Elia Merzari, Aleksandr Obabko, Will Pazner, Thilina Rathnayake, Cameron W. Smith, Lukas Spies, Kasia Świrydowicz, Jeremy Thompson, Ananias Tomboulides, and Vladimir Tomov. Efficient exascale discretizations: High-order finite element methods. *The International Journal of High Performance Computing Applications*, 35(6): 527–552, November 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211020803.

Kurc:2009:HGC

[KHK+09] Tahsin Kurc, Shannon Hastings, Vijay Kumar, Stephen Langella, Ashish Sharma, Tony Pan, Scott Oster, David Ervin, Justin Permar, Sivaramakrishnan Narayanan, Yolanda Gil, Ewa Deelman, Mary Hall, and Joel Saltz. HPC and Grid computing for integrative biomedical research. *The International Journal of High Performance Computing Applications*, 23 (3):252–264, Fall 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/3/252.full.pdf+html.

Kerbyson:2004:PEA

[KHP+04] Darren J. Kerbyson, Adolfy Hoisie, Scott Pakin, Fabrizio Petrini, and Harvey J. Wasserman. A performance evaluation of an Alpha EV7 processing node. *The Interna-*

tional Journal of High Performance Computing Applications, 18(2):199–209, Summer 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/18/2/199.full.pdf+html`.

Kohl:2019:SEC

[KHS+19] Nils Kohl, Johannes Hötzer, Florian Schornbaum, Martin Bauer, Christian Godenschwager, Harald Köstler, Britta Nestler, and Ulrich Rüde. A scalable and extensible checkpointing scheme for massively parallel simulations. *The International Journal of High Performance Computing Applications*, 33(4):571–589, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018767736`.

Kulkarni:2013:OPC

[KILL13] Abhishek Kulkarni, Latchesar Ionkov, Michael Lang, and Andrew Lumsdaine. Optimizing process creation and execution on multi-core architectures. *The International Journal of High Performance Computing Applications*, 27(2):147–161, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/2/147.full.pdf+html`.

Kitchens:1990:UDE

[Kit90] Tom Kitchens. The U.S. Department of Energy's "grand challenge" program. *The International Journal of Supercomputer Applications*, 4(3):3–5, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400301`.

Kerbyson:2005:PMP

[KJ05] Darren J. Kerbyson and Philip W. Jones. A performance model of the Parallel Ocean Program. *The International Journal of High Performance Computing Applications*, 19(3):261–276, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/19/3/261.full.pdf+html`.

Kramer:1996:LBL

[KJH96] David Kramer, S. Lennart Johnsson, and Yu Hu. Local Basic Linear Algebra Subroutines (LBLAS) for the CM-5/SE. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(4):300–335, Winter 1996. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209601000403`.

Katz:2001:ERT

[KK01] Daniel S. Katz and Jeremy Kepner. Embedded/ real-time systems. *The International Journal of High Performance Computing Applications*, 15(2):186–190, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500212.

Kohnke:2021:CFM

[KKB+21] Bartosz Kohnke, Carsten Kutzner, Andreas Beckmann, Gert Lube, Ivo Kabadshow, Holger Dachsel, and Helmut Grubmüller. A CUDA fast multipole method with highly efficient M2L far field evaluation. *The International Journal of High Performance Computing Applications*, 35(1):97–117, January 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020964857.

Kandaswamy:1998:ESA

[KKCB98] Meenakshi A. Kandaswamy, Mahmut T. Kandemir, Alok N. Choudhary, and David E. Bernholdt. An experimental study to analyze and optimize Hartree–Fock application's I/O with PASSION. *The International Journal of High Performance Computing Applications*, 12(4):411–439, Winter 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209801200403.

Kranzlmuller:2005:RAP

[KKD05] Dieter Kranzlmüller, Peter Kacsuk, and Jack Dongarra. Recent advances in Parallel Virtual Machine and Message Passing Interface. *The International Journal of High Performance Computing Applications*, 19(2):99–101, Summer 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/2/99.full.pdf+html.

Kranzlmuller:2003:RAP

[KKDV03] Dieter Kranzlmüller, Peter Kacsuk, Jack Dongarra, and Jens Volkert. Recent advances in Parallel Virtual Machine and Message Passing Interface (select papers from the EuroPVMMPI 2002 Conference). *The International Journal of High Performance Computing Applications*, 17(1):3–5, Spring 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003017001001.

Klusek:2019:EMT

[KKL+19] Adrian Kłusek, Adrian Kłusek, Marcin Łoś, Maciej Paszyński, and Witold Dzwinel. Efficient model of tumor dynamics simulated in multi-GPU environment. *The International Journal of High Performance Computing Applications*, 33(3):489–506, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018816772.

Kennedy:2004:DMP

[KKS04] Ken Kennedy, Charles Koelbel, and Robert Schreiber. Defining and measuring the productivity of programming languages. *The International Journal of High Performance Computing Applications*, 18(4):441–448, Winter 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/4/441.full.pdf+html.

Kocoloski:2013:ICN

[KL13] Brian Kocoloski and John Lange. Improving compute node performance using virtualization. *The International Journal of High Performance Computing Applications*, 27(2):124–135, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/2/124.full.pdf+html.

Liao:2007:CCS

[kLCCW07] Wei keng Liao, Kenin Coloma, Alok Choudhary, and Lee Ward. Cooperative client-side file caching for MPI applications. *The International Journal of High Performance Computing Applications*, 21(2):144–154, Summer 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/2/144.full.pdf+html.

Kao:1987:EIM

[KLJ87] S. T. Kao, E. L. Leiss, and Olin Johnson. An experimental implementation of migration algorithms on the Intel Hypercube. *The International Journal of Supercomputer Applications*, 1(2):75–99, June 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100206.

Klawonn:2021:EEN

[KLR+21] Axel Klawonn, Martin Lanser, Oliver Rheinbach, Gerhard Wellein, and Markus Wittmann. Energy efficiency of nonlinear domain decomposition methods. *The International Journal of High Performance Computing Applications*, 35(3):237–253, May 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020953891.

Kumaran:1995:CPL

[KM95] Santhosh Kumaran and Robert N.

Miller. A comparison of parallelization techniques for a finite element quasigeostrophic model of regional ocean circulation. *The International Journal of Supercomputer Applications and High Performance Computing*, 9 (4):256–279, Winter 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900402.

Keyrouz:2020:CSI

[KM20] Walid Keyrouz and Michael Mascagni. CRE2019 special issue introduction IJHPCA. *The International Journal of High Performance Computing Applications*, 34(5): 481–482, September 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020946877.

Kumar:2014:OMC

[KMH+14] Sameer Kumar, Amith Mamidala, Philip Heidelberger, Dong Chen, and Daniel Faraj. Optimization of MPI collective operations on the IBM Blue Gene/Q supercomputer. *The International Journal of High Performance Computing Applications*, 28(4):450–464, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/4/450.

Kumahata:2016:HPC

[KMM16] Kiyoshi Kumahata, Kazuo Minami, and Naoya Maruyama. High-performance conjugate gradient performance improvement on the K computer. *The International Journal of High Performance Computing Applications*, 30(1):55–70, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015607950.

Kurzak:2008:AGF

[KMPJ08] Jakub Kurzak, Dragan Mirković, B. Montgomery Pettitt, and S. Lennart Johnsson. Automatic generation of FFT for translations of multipole expansions in spherical harmonics. *The International Journal of High Performance Computing Applications*, 22(2):219–230, Summer 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/2/219.full.pdf+html.

Keyes:2013:MSC

[KMW+13] David E. Keyes, Lois C. McInnes, Carol Woodward, William Gropp, Eric Myra, Michael Pernice, John Bell, Jed Brown, Alain Clo, Jeffrey Connors, Emil Constantinescu, Don Estep, Kate Evans, Charbel Farhat, Ammar Hakim, Glenn Hammond, Glen Hansen, Judith Hill, Tobin Isaac, Xiangmin Jiao, Kirk Jordan, Dinesh Kaushik, Efthimios Kaxiras, Alice Koniges, Kihwan Lee, Aaron Lott, Qiming Lu, John Magerlein, Reed Maxwell, Michael McCourt, Miriam Mehl, Roger Pawlowski, Amanda P. Randles, Daniel Reynolds, Beatrice Rivière, Ulrich Rüde, Tim Scheibe, John Shadid, Brendan Sheehan, Mark Shephard, Andrew Siegel, Barry Smith, Xianzhu Tang, Cian Wilson, and Barbara Wohlmuth. Multiphysics simulations: Challenges and opportunities. *The International Journal of High Performance Computing Applications*, 27(1):4–83, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/1/4.full.pdf+html`.

Kim:1987:DIV

[KNP+87] Michelle Y. Kim, Anil Nigam, George Paul, Robert J. Flynn, and Garry H. Rodrigue. Disk interleaving and very large Fast Fourier Transforms. *The International Journal of Supercomputer Applications*, 1 (3):75–96, September 1987. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208700100307`.

Kondratyuk:2021:GAM

[KNPS21] Nikolay Kondratyuk, Vsevolod Nikolskiy, Daniil Pavlov, and Vladimir Stegailov. GPU-accelerated molecular dynamics: State-of-art software performance and porting from Nvidia CUDA to AMD HIP. *The International Journal of High Performance Computing Applications*, 35(4):312–324, July 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211008288`.

Koide:1990:VSC

[Koi90] Akio Koide. Visual simulation of a chemical reaction. *The International Journal of Supercomputer Applications*, 4(2):115–123, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400210`.

Kok:1988:PPA

[Kok88] Jan Kok. Parallel programming with Ada. *The International Journal of Supercomputer Applications*, 2 (4):100–108, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208800200410`.

Kerbel:1996:ISE

[KPM+96] Gary D. Kerbel, Tim Pierce, J. L. Milovich, Dan E. Shumaker, Alan Verlo, Ronald E. Waltz, Gregory W. Hammett, Mike A. Beer, and Bill Dorland. Interactive scientific exploration of gyrofluid Tokamak turbulence. *The International Journal of Supercomputer Applications and High Performance Computing*, 10 (2–3):182–198, Summer/Fall 1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000206.

Kirmani:2017:ESS

[KPR17] Shad Kirmani, Jeonghyung Park, and Padma Raghavan. An embedded sectioning scheme for multiprocessor topology-aware mapping of irregular applications. *The International Journal of High Performance Computing Applications*, 31 (1):91–103, January 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015597082.

Kuan:2018:MSA

[KPST18] Lídia Kuan, Frederico Pratas, Leonel Sousa, and Pedro Tomás. MrBayes sMC^3: Accelerating Bayesian inference of phylogenetic trees. *The International Journal of High Performance Computing Applications*, 32(2):246–265, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016652461.

Kremer:1994:COR

[KR94] Ulrich Kremer and Marcelo Ramé. Compositional oil reservoir simulation in Fortran d: a feasibility study on Intel iPsc/860. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(2):119–128, Summer 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800204. See erratum [KR95].

Kremer:1995:ECO

[KR95] U. Kremer and M. Ramé. Erratum: Compositional Oil Reservoir Simulation in Fortran D: a Feasibility Study on Intel iPSC/860. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(1): 71, Spring 1995. CODEN IJSAE9. ISSN 0890-2720. See [KR94].

Korch:2011:PLS

[KR11] Matthias Korch and Thomas Rauber. Parallel low-storage Runge–Kutta solvers for ODE systems with limited access distance. *The International Journal of High Performance Computing Applications*, 25 (2):236–255, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.

sagepub.com/content/25/2/236.full.pdf+html.

Kormann:2019:MPS

[KRR19] Katharina Kormann, Klaus Reuter, and Markus Rampp. A massively parallel semi-Lagrangian solver for the six-dimensional Vlasov–Poisson equation. *The International Journal of High Performance Computing Applications*, 33 (5):924–947, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019834644.

Kaufman:1989:STD

[KS89] Linda Kaufman and Norm Schryer. Solving two-dimensional partial differential equations on vector and scalar machines. *The International Journal of Supercomputer Applications*, 3(1):10–33, March 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300103.

Kurzyniec:2005:FRH

[KS05] Dawid Kurzyniec and Vaidy Sunderam. Failure resilient heterogeneous parallel computing across multidomain clusters. *The International Journal of High Performance Computing Applications*, 19 (2):143–155, Summer 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/2/143.full.pdf+html.

Kramer:2009:CAP

[KS09a] William Kramer and David Skinner. Consistent application performance at the exascale. *The International Journal of High Performance Computing Applications*, 23 (4):392–394, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/392.full.pdf+html.

Kramer:2009:EAS

[KS09b] William Kramer and David Skinner. An exascale approach to software and hardware design. *The International Journal of High Performance Computing Applications*, 23 (4):389–391, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/389.full.pdf+html.

Kennedy:1994:CSM

[KT94] Ken Kennedy and Kevin Timson. Centers of supercomputing — making parallel computing truly usable: research, education, and knowledge transfer at the Center for Research on Parallel Computation. *The International Journal of Supercomputer Applications and High Performance*

Computing, 8(2):73–79, Summer 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800201.

Kimura:1999:DPC

[KT99] Toshiya Kimura and Hiroshi Takemiya. Distributed parallel computing for fluid-structure coupled simulations on a heterogeneous parallel computer cluster. *The International Journal of High Performance Computing Applications*, 13(4):320–333, Winter 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300403.

Klusek:2018:ISD

[KTWL18] Adrian Klusek, Paweł Topa, Jarosław Was, and Robert Lubaś. An implementation of the Social Distances Model using multi-GPU systems. *The International Journal of High Performance Computing Applications*, 32(4):482–495, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016679492.

Kuck:2004:PHP

[Kuc04] David J. Kuck. Productivity in high performance computing. *The International Journal of High Performance Computing Applications*, 18 (4):489–504, Winter 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/4/489.full.pdf+html.

Kurc:2000:EPP

[KUE+00] Tahsin Kurc, Mustafa Uysal, Hyeonsang Eom, Jeff Hollingsworth, Joel Saltz, and Alan Sussman. Efficient performance prediction for large-scale data-intensive applications. *The International Journal of High Performance Computing Applications*, 14(3):216–227, Fall 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400305.

Kumar:1989:STL

[Kum89] Swarn P. Kumar. Solving tridiagonal linear systems on the Butterfly parallel computer. *The International Journal of Supercomputer Applications*, 3(1):75–81, March 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300106.

Kim:2019:IED

[KV19] Jungwon Kim and Jeffrey S. Vetter. Implementing efficient data compression and encryption in a persistent key–value store for HPC. *The International Journal of High Performance Computing Ap-*

plications, 33(6):1098–1112, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019847264`.

Kalia:1990:QMD

[KVY+90] Rajiv K. Kalia, Priya Vashishta, Lin H. Yang, Fred W. Dech, and John Rowlan. Quantum molecular dynamics: a new algorithm for linear and nonlinear electron transport in disordered materials. *The International Journal of Supercomputer Applications*, 4(3):22–33, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400304`.

Kohl:2006:CIH

[KWB06] James A. Kohl, Torsten Wilde, and David E. Bernholdt. Cumulvs: Interacting with high-performance scientific simulations, for visualization, steering and fault tolerance. *The International Journal of High Performance Computing Applications*, 20(2):255–285, Summer 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/2/255.full.pdf+html`.

Kamburugamuve:2018:AML

[KWEF18] Supun Kamburugamuve, Pulasthi Wickramasinghe, Saliya Ekanayake, and Geoffrey C. Fox. Anatomy of machine learning algorithm implementations in MPI, Spark, and Flink. *The International Journal of High Performance Computing Applications*, 32(1):61–73, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342017712976`.

Kepner:2007:P

[KZ07] Jeremy Kepner and Hans Zima. Preface. *The International Journal of High Performance Computing Applications*, 21(3):249–250, Fall 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/3/249.full.pdf+html`.

Lai:1993:DDM

[Lai93] C.-H. Lai. Domain decomposition methods for semiconductor device problems on a Cray S-MP. *The International Journal of Supercomputer Applications*, 7(4):337–348, December 1993. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209300700404`.

Lapworth:2022:PEI

[Lap22] Leigh Lapworth. Parallel encryption of input and output data for HPC applications. *The International Journal of High Performance Computing Applications*, 36 (2):231–250, March 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211016516.

Labarta:2009:BVT

[LAV09] Jesús Labarta, Eduard Ayguadé, and Mateo Valero. BSC vision towards exascale. *The International Journal of High Performance Computing Applications*, 23(4):340–343, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/340.full.pdf+html.

Li:2017:DFB

[LBB17] Peng Li, Jonathan C. Beard, and Jeremy D. Buhler. Deadlock-free buffer configuration for stream computing. *The International Journal of High Performance Computing Applications*, 31(5):441–450, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016675679.

Lusk:2018:EMP

[LBP18] Ewing Lusk, Ralph Butler, and Steven C. Pieper. Evolution of a minimal parallel programming model. *The International Journal of High Performance Computing Applications*, 32(1):4–13, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017703448.

Lee:1990:NCS

[LC90] Larry Lee and Sunny Christensen. The North Carolina Supercomputing Center: a study of economic development impact. *The International Journal of Supercomputer Applications*, 4(4):3–8, December 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400401.

Liu:2006:RLS

[LC06] X. Liu and A. A. Chien. Realistic large-scale online network simulation. *The International Journal of High Performance Computing Applications*, 20(3):383–399, Fall 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/3/383.full.pdf+html.

Lu:2015:CIO

[LCZ+15] Yin Lu, Yong Chen, Yu Zhuang, Jialin Liu, and Rajeev Thakur. Collective input/output under memory constraints. *The International Journal of High Performance Computing Applications*, 29(1):21–36, 2015. CODEN IHPCFL. ISSN 1094-

3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/29/1/21`.

Luszczek:2007:HPD

[LD07] Piotr Luszczek and Jack Dongarra. High performance development for high end computing with Python Language Wrapper (PLW). *The International Journal of High Performance Computing Applications*, 21(3):360–369, Fall 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/3/360.full.pdf+html`.

Lusk:2006:IAS

[LDB+06] E. Lusk, N. Desai, R. Bradshaw, A. Lusk, and R. Butler. An interoperability approach to system software, tools, and libraries for clusters. *The International Journal of High Performance Computing Applications*, 20(3):401–407, Fall 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/3/401.full.pdf+html`.

Laflamme:2003:APS

[LDGR03] Sébastien Laflamme, Julien Dompierre, François Guibault, and Robert Roy. Applying Parmetis to structured remeshing for industrial CFD applications. *The International Journal of High Performance Computing Applications*, 17(1):63–76, Spring 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/1094342003017001006`.

Langr:2019:AMN

[LDLD19] Daniel Langr, Tomás Dytrych, Kristina D. Launey, and Jerry P. Draayer. Accelerating many-nucleon basis generation for high performance computing enabled ab initio nuclear structure studies. *The International Journal of High Performance Computing Applications*, 33(3):522–533, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019838314`.

Li:2012:LSF

[LDW+12] Yan Li, Jeffrey R. Diamond, Xu Wang, Haibo Lin, Yudong Yang, and Zhenxing Han. Large-scale Fast Fourier Transform on a heterogeneous multicore system. *The International Journal of High Performance Computing Applications*, 26(2):148–158, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/2/148.full.pdf+html`.

Lee:2003:BAP

[Lee03] Craig A. Lee. Best applications papers from the Third International Workshop on Grid Computing. *The International Journal of High Performance Computing Applications*, 17(4):351, Winter 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420030174001.

Levy:2015:SVE

[LFB+15] Scott Levy, Kurt B. Ferreira, Patrick G. Bridges, Aidan P. Thompson, and Christian Trott. A study of the viability of exploiting memory content similarity to improve resilience to memory errors. *The International Journal of High Performance Computing Applications*, 29(1):5–20, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/29/1/5.

Liu:2016:PBP

[LGDH16] Yi Liu, Xiongzi Ge, David Hung-Chang Du, and Xiaoxia Huang. Par-BF: a parallel partitioned Bloom filter for dynamic data sets. *The International Journal of High Performance Computing Applications*, 30(3):259–275, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015618452.

Lam:2018:FGF

[LH18] Michael O. Lam and Jeffrey K. Hollingsworth. Fine-grained floating-point precision analysis. *The International Journal of High Performance Computing Applications*, 32(2):231–245, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016652462.

Loffeld:2019:AIH

[LH19] J. Loffeld and Jaf Hittinger. On the arithmetic intensity of high-order finite-volume discretizations for hyperbolic systems of conservation laws. *The International Journal of High Performance Computing Applications*, 33(1):25–52, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017691876.

Liu:1990:HSI

[Liu90] Keh-Fei Liu. Hadron structure and interaction from lattice quantum chromodynamics calculations. *The International Journal of Supercomputer Applications*, 4(3):72–80, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400308.

Liu:2010:CTC

[LJC+10] Ke Liu, Hai Jin, Jinjun Chen, Xiao Liu, Dong Yuan, and Yun Yang. A compromised-time-cost scheduling algorithm in SwinDeW-C for instance-intensive cost-constrained workflows on a cloud computing platform. *The International Journal of High Performance Computing Applications*, 24 (4):445–456, Winter 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/4/445.full.pdf+html`.

Larson:2005:MCT

[LJO05] Jay Larson, Robert Jacob, and Everest Ong. The Model Coupling Toolkit: a new Fortran90 toolkit for building multiphysics parallel coupled models. *The International Journal of High Performance Computing Applications*, 19 (3):277–292, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/19/3/277.full.pdf+html`.

Lin:2001:RCB

[LK01] Jen-Chih Lin and Huan-Chao Keh. Reconfiguration of complete binary trees in full IEH graphs and faulty hypercubes. *The International Journal of High Performance Computing Applications*, 15(1):47–55, Spring 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200101500105`.

Lastovetsky:2010:RAP

[LK10] Alexey Lastovetsky and Tahar Kechadi. Recent advances in Parallel Virtual Machine and Message Passing Interface. *The International Journal of High Performance Computing Applications*, 24(1):3–4, Spring 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/1/3.full.pdf+html`.

Li:2003:ALS

[LM03] Yaohang Li and Michael Mascagni. Analysis of large-scale Grid-based Monte Carlo applications. *The International Journal of High Performance Computing Applications*, 17(4):369–382, Winter 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/10943420030174003`.

Lauritzen:2012:IND

[LMT+12] Peter H. Lauritzen, Arthur A. Mirin, John Truesdale, Kevin Raeder, Jeffrey L. Anderson, Julio Bacmeister, and Richard B. Neale. Implementation of new diffusion/filtering operators in the CAM–FV dynamical core. *The Interna-*

tional Journal of High Performance Computing Applications, 26(1):63–73, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/1/63.full.pdf+html`.

Lyngaas:2022:SPE

[LNK22] Isaac Lyngaas, Matthew Norman, and Youngsung Kim. SAM++: Porting the E3SM-MMF cloud resolving model using a C++ portability library. *The International Journal of High Performance Computing Applications*, 36 (2):214–230, March 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211044495`.

Lopez-Novoa:2015:EIK

[LNSMMA15] Unai Lopez-Novoa, Jon Sáenz, Alexander Mendiburu, and Jose Miguel-Alonso. An efficient implementation of kernel density estimation for multi-core and many-core architectures. *The International Journal of High Performance Computing Applications*, 29(3):331–347, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015576813`.

Li:2010:EPS

[LP10] Hong Li and Linda Petzold. Efficient parallelization of the stochastic simulation algorithm for chemically reacting systems on the graphics processing unit. *The International Journal of High Performance Computing Applications*, 24(2):107–116, Summer 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/2/107.full.pdf+html`.

Lim:2016:HPS

[LPB+16] Rone Kwei Lim, J. William Pro, Matthew R. Begley, Marcel Utz, and Linda R. Petzold. High-performance simulation of fracture in idealized brick and mortar composites using adaptive Monte Carlo minimization on the GPU. *The International Journal of High Performance Computing Applications*, 30(2):186–199, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015593395`.

Little:1988:SPV

[LPG88] James J. Little, Tomaso Poggio, and Edward B. Gamble, Jr. Seeing in parallel: the Vision Machine. *The International Journal of Supercomputer Applications*, 2 (4):13–28, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL `http://`

journals.sagepub.com/doi/pdf/10.1177/109434208800200403.

Lockey:1998:CRM

[LPJ98] P. Lockey, R. Proctor, and I. D. James. Characterization of I/O requirements in a massively parallel shelf sea model. *The International Journal of High Performance Computing Applications*, 12(3):320–332, Fall 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209801200302.

Liu:2016:SPG

[LQJG16] Bozhong Liu, Weidong Qiu, Lin Jiang, and Zheng Gong. Software pipelining for graphic processing unit acceleration: Partition, scheduling and granularity. *The International Journal of High Performance Computing Applications*, 30(2):169–185, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015585845.

Lastovetsky:2007:DPF

[LR07] Alexey Lastovetsky and Ravi Reddy. Data partitioning with a functional performance model of heterogeneous processors. *The International Journal of High Performance Computing Applications*, 21 (1):76–90, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/1/76.full.pdf+html.

Lastovetsky:2009:AEE

[LR09] Alexey Lastovetsky and Vladimir Rychkov. Accurate and efficient estimation of parameters of heterogeneous communication performance models. *The International Journal of High Performance Computing Applications*, 23(2):123–139, Summer 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/2/123.full.pdf+html.

Lim:1989:VAL

[LRBS89] Hwa A. Lim, Gregory Riccardi, Charles M. Bauer, and Sanjay Sharma. A vector algorithm for lattice gas hydrodynamics. *The International Journal of Supercomputer Applications*, 3(4):64–67, December 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300406.

Laguna:2016:EEU

[LRG+16] Ignacio Laguna, David F. Richards, Todd Gamblin, Martin Schulz, Bronis R. de Supinski, Kathryn Mohror, and Howard Pritchard. Evaluating and extending user-level fault tolerance in MPI applications.

The International Journal of High Performance Computing Applications, 30(3):305–319, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015623623`.

Lima:2019:PEA

[LRLG19] João Vicente Ferreira Lima, Issam Raïs, Laurent Lefèvre, and Thierry Gautier. Performance and energy analysis of OpenMP runtime systems with dense linear algebra algorithms. *The International Journal of High Performance Computing Applications*, 33(3):431–443, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018792079`.

Lastovetsky:2010:AHC

[LRO10] Alexey Lastovetsky, Vladimir Rychkov, and Maureen O'Flynn. Accurate heterogeneous communication models and a software tool for their efficient estimation. *The International Journal of High Performance Computing Applications*, 24(1):34–48, Spring 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/1/34.full.pdf+html`.

Latham:2007:IMI

[LRT07] Robert Latham, Robert Ross, and Rajeev Thakur. Implementing MPI-IO atomic mode and shared file pointers using MPI one-sided communication. *The International Journal of High Performance Computing Applications*, 21(2):132–143, Summer 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/2/132.full.pdf+html`.

Lazowska:1990:WSC

[LS90] Edward D. Lazowska and Kenneth C. Sevcik. Workshop on Scientific Computing Performance Analysis. *The International Journal of Supercomputer Applications*, 4(1):95–97, March 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400109`.

Lee:2006:USD

[LS06] Cynthia Bailey Lee and Allan Snavely. On the user–scheduler dialogue: Studies of user-provided runtime estimates and utility functions. *The International Journal of High Performance Computing Applications*, 20(4):495–506, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/4/495.full.pdf+html`.

Duff:1989:CEC

[lSD89] Iain S. Duff. CERFACS: a European center for high-performance computation. *The International Journal of Supercomputer Applications*, 3 (2):6–9, June 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300202.

Lawson:2020:AEH

[LSES20] Gary Lawson, Masha Sosonkina, Tal Ezer, and Yuzhong Shen. Applying EMD/HHT analysis to power traces of applications executed on systems with Intel Xeon Phi. *The International Journal of High Performance Computing Applications*, 34(2):187–198, March 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017731612.

Liu:2020:PHB

[LSLR+20] Yang Liu, Wissam Sid-Lakhdar, Elizaveta Rebrova, Pieter Ghysels, and Xiaoye Sherry Li. A parallel hierarchical blocked adaptive cross approximation algorithm. *The International Journal of High Performance Computing Applications*, 34 (4):394–408, July 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020918305.

Lowther:1993:IAV

[LSS93] K. Lowther, J. C. Salem, and J. A. Sethian. Interactive, animated visualization environment for three-dimensional fluid flow. *The International Journal of Supercomputer Applications*, 7 (4):277–291, December 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700401.

Lee:2015:HPE

[LST15] Hee Won Lee, Mihail L. Sichitiu, and David Thuente. High-performance emulation of heterogeneous systems using adaptive time dilation. *The International Journal of High Performance Computing Applications*, 29(2):166–183, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342014554789.

Lescrenier:1988:LSU

[LT88] M. Lescrenier and Ph. L. Tointt. Large scale unconstrained optimization on the FPS 164 and CRAY X-MP vector processors. *The International Journal of Supercomputer Applications*, 2(1):66–81, March 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200105.

Leiss:1990:TDD

[LT90] Ernst L. Leiss and Raj H. Thapar. Three-dimensional dip moveout on the SX-2: An XMU implementation. *The International Journal of Supercomputer Applications*, 4(1):31–48, March 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400104.

Langer:2017:EOC

[LTPK17] Akhil Langer, Ehsan Totoni, Udatta Palekar, and Laxmikant V. Kalé. Energy-optimal configuration selection for manycore chips with variation. *The International Journal of High Performance Computing Applications*, 31(5):451–466, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016672082.

Lucas:2009:MPF

[Luc09] Robert F. Lucas. Musings on the path forward to exascale. *The International Journal of High Performance Computing Applications*, 23 (4):409–410, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/409.full.pdf+html.

Lusk:2009:STE

[Lus09a] Ewing Lusk. Slouching towards exascale. *The International Journal of High Performance Computing Applications*, 23(4):337–339, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/337.full.pdf+html.

Luszczek:2009:PPM

[Lus09b] Piotr Luszczek. Parallel programming in MATLAB. *The International Journal of High Performance Computing Applications*, 23(3):277–283, Fall 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/3/277.full.pdf+html.

Lobeiras:2013:PSW

[LVA+13] Jacobo Lobeiras, Moisés Viñas, Margarita Amor, Basilio B. Fraguela, Manuel Arenaz, J. A. García, and M. J. Castro. Parallelization of shallow water simulations on current multi-threaded systems. *The International Journal of High Performance Computing Applications*, 27(4):493–512, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/4/493.full.pdf+html.

Liu:2005:PAL

[LWL05] Chun-Ho Liu, Chat-Ming Woo, and Dennis Y. C. Leung. Performance analysis of a Linux PC cluster using a direct numerical simulation of fluid turbulence code. *The International Journal of High Performance Computing Applications*, 19(4):365–374, Winter 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/4/365.full.pdf+html.

Ludwig:1997:OIL

[LWOB97] Thomas Ludwig, Roland Wismüller, Michael Oberhuber, and Arndt Bode. An open interface for the on-line monitoring of parallel and distributed programs. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(2):160–174, Summer 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100208.

Lively:2011:EPC

[LWT+11] Charles Lively, Xingfu Wu, Valerie Taylor, Shirley Moore, Hung-Ching Chang, and Kirk Cameron. Energy and performance characteristics of different parallel implementations of scientific applications on multicore systems. *The International Journal of High Performance Computing Applications*, 25(3):342–350, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/3/342.full.pdf+html.

Liu:2016:THR

[LYL+16] Yiqun Liu, Chao Yang, Fangfang Liu, Xianyi Zhang, Yutong Lu, Yunfei Du, Canqun Yang, Min Xie, and Xiangke Liao. 623 Tflop/s HPCG run on Tianhe-2: Leveraging millions of hybrid cores. *The International Journal of High Performance Computing Applications*, 30(1):39–54, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015616266.

Menasce:1989:AMS

[MA89] Daniel A. Menascé and Virgilio A. F. Almeida. Analytic models of supercomputer performance in multiprogramming environments. *The International Journal of Supercomputer Applications*, 3(2):71–91, June 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300205.

Ma:2000:CIP

[Ma00] Sangback Ma. Comparisons of the ILU(0), point-SSOR, and SPAI preconditioners on the CRAY-T3E for nonsymmetric sparse linear systems arising from PDEs on structured grids. *The International Journal of High Performance Computing Applications*, 14(1):39–48, Spring 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200001400103`.

Magoules:2015:AAL

[MA15] Frédéric Magoulès and Abal-Kassim Cheik Ahamed. Alinea: an advanced linear algebra library for massively parallel computations on graphics processing units. *The International Journal of High Performance Computing Applications*, 29(3):284–310, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015576774`.

Mavriplis:2007:HRA

[MAB07] Dimitri J. Mavriplis, Michael J. Aftosmis, and Marsha Berger. High resolution aerospace applications using the NASA Columbia Supercomputer. *The International Journal of High Performance Computing Applications*, 21(1):106–126, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/1/106.full.pdf+html`.

Malas:2013:OPS

[MAB+13] Tareq Malas, Aron J. Ahmadia, Jed Brown, John A. Gunnels, and David E. Keyes. Optimizing the performance of streaming numerical kernels on the IBM Blue Gene/P PowerPC 450 processor. *The International Journal of High Performance Computing Applications*, 27(2):193–209, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/2/193.full.pdf+html`.

Musser:2022:MEP

[MAF+22] Jordan Musser, Ann S. Almgren, William D. Fullmer, Oscar Antepara, John B. Bell, Johannes Blaschke, Kevin Gott, Andrew Myers, Roberto Porcu, Deepak Rangarajan, Michele Rosso, Weiqun Zhang, and Madhava Syamlal. MFIX-Exa: a path toward exascale CFD-DEM simulations. *The International Journal of High Performance Computing Applications*, 36(1):40–58, January 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211009293`.

Mahaffy:1990:DNI

[Mah90] Mary-Anne Mahaffy. The direction of numerically intensive computing in higher education. *The International*

Journal of Supercomputer Applications, 4(1):81–87, March 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400107.

Maisel:1987:SSD

[Mai87] Merry Maisel. Science at the San Diego Supercomputer Center. *The International Journal of Supercomputer Applications*, 1(2):6–10, June 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100202.

Mohamed:2003:SBD

[MAJJS03] Nader Mohamed, Jameela Al-Jaroodi, Hong Jiang, and David Swanson. Scalable bulk data transfer in wide area networks. *The International Journal of High Performance Computing Applications*, 17(3):237–248, Fall 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003173005.

Manneback:1997:SIS

[Man97] Pierre Manneback. Solving irregular sparse linear systems on a multicomputer using the CGNR method. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(3):205–211, Fall 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100303.

Martin:1987:BRH

[Mar87a] Joanne L. Martin. Book reviews: *High-Speed Computing: Scientific Applications and Algorithm Design*. *The International Journal of Supercomputer Applications*, 1(1):113, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100111.

Martin:1987:BRS

[Mar87b] Joanne L. Martin. Book reviews: *Supercomputers and Their Use*. *The International Journal of Supercomputer Applications*, 1(4):110–111, December 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100410.

Martin:1987:IP

[Mar87c] Joanne L. Martin. An invitation to participate. *The International Journal of Supercomputer Applications*, 1(1):3–4, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100101.

Martin:1987:MP

[Mar87d] Joanne L. Martin. The missing pieces. *The International Journal of Supercomputer Applications*, 1(3):3–4, September 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100301.

Martin:1988:BRS

[Mar88a] Joanne L. Martin. Book review: *Supercomputer Research in Chemistry and Chemical Engineering* (ACS Symposium Series, Vol. 353). *The International Journal of Supercomputer Applications*, 2(2):82–83, June 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200206.

Martin:1988:R

[Mar88b] Joanne L. Martin. A retrospective. *The International Journal of Supercomputer Applications*, 2(3):3–5, September 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200301.

Martin:1989:SNP

[Mar89a] Joanne L. Martin. Supercomputers, networks, and privacy. *The International Journal of Supercomputer Applications*, 3(1):3–4, March 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300101.

Martin:1989:SBD

[Mar89b] Joanne L. Martin. Supercomputing: Beyond the daily planet. *The International Journal of Supercomputer Applications*, 3(3):3–4, September 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300301.

Martin:1991:MSF

[Mar91] Joanne L. Martin. In Memoriam — Sidney Fernbach (1917-1991). *The International Journal of Supercomputer Applications*, 5(3):3, September 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500301.

Martin:1992:E

[Mar92] Joanne L. Martin. Editorial. *The International Journal of Supercomputer Applications*, 6(1):3, April 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600101.

Martin:1994:E

[Mar94] Joanne L. Martin. Editorial. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(1):3–4, Spring 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800101.

Mascagni:2019:CSI

[Mas19] Michael Mascagni. CRE2017 special issue introduction IJHPCA. *The International Jour-*

nal of High Performance Computing Applications, 33(5): 761–762, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019868861.

Mattson:1995:PEP

[Mat95] Timothy G. Mattson. Programming environments for parallel and distributed computing: a comparison of P4, PVM, Linda, and TCGMSG. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(2):138–161, Summer 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900206.

Mateescu:2003:QSG

[Mat03] Gabriel Mateescu. Qaulity of service on the Grid via metascheduling with resource co-scheduling and co-reservation. *The International Journal of High Performance Computing Applications*, 17(3): 209–218, Fall 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003173006.

Mavriplis:2002:PPI

[Mav02] Dimitri J. Mavriplis. Parallel performance investigations of an unstructured mesh Navier–Stokes solver. *The International Journal of High Performance Computing Applications*, 16(4):395–407, Winter 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200201600403.

Martin:1987:SVM

[MB87] William R. Martin and Forrest B. Brown. Status of vectorized Monte Carlo for particle transport analysis. *The International Journal of Supercomputer Applications*, 1(2):11–32, June 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100203.

Martinez:2018:FGS

[MBC+18] Héctor Martínez, Sergio Barrachina, Maribel Castillo, Joaquín Tárraga, Ignacio Medina, Joaquín Dopazo, and Enrique S. Quintana-Ortí. A framework for genomic sequencing on clusters of multicore and manycore processors. *The International Journal of High Performance Computing Applications*, 32(3):393–406, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016653243.

Migliori:2011:PCT

[MBF+11] Silvio Migliori, Giovanni Bracco, Lorella Fatone, Maria Cristina Recchioni, and Francesco Zirilli. A parallel code for time-dependent acoustic scattering involving passive or smart obstacles. *The International Journal of High Performance Computing Applications*, 25 (1):70–92, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/1/70.full.pdf+html.

Mniszewski:2021:EPA

[MBF+21] Susan M. Mniszewski, James Belak, Jean-Luc Fattebert, Christian Fa Negre, Stuart R. Slattery, Adetokunbo A. Adedoyin, Robert F. Bird, Choongseok Chang, Guangye Chen, Stéphane Ethier, Shane Fogerty, Salman Habib, Christoph Junghans, Damien Lebrun-Grandié, Jamaludin Mohd-Yusof, Stan G. Moore, Daniel Osei-Kuffuor, Steven J. Plimpton, Adrian Pope, Samuel Temple Reeve, Lee Ricketson, Aaron Scheinberg, Amil Y. Sharma, and Michael E. Wall. Enabling particle applications for exascale computing platforms. *The International Journal of High Performance Computing Applications*, 35(6): 572–597, November 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211022829.

McDonagh:2015:ASS

[MBHF15] Steven McDonagh, Cigdem Beyan, Phoenix X. Huang, and Robert B. Fisher. Applying semi-synchronised task farming to large-scale computer vision problems. *The International Journal of High Performance Computing Applications*, 29(4):437–460, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342014532965.

Marker:2013:CSM

[MBvdG13] Bryan Marker, Don Batory, and Robert van de Geijn. A case study in mechanically deriving dense linear algebra code. *The International Journal of High Performance Computing Applications*, 27(4):440–453, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/4/440.full.pdf+html.

Ma:1990:IIM

[MC90] Sangback Ma and Anthony T. Chronopoulos. Implementation of iterative methods for large sparse nonsymmetric linear systems on a parallel vector machine. *The International Journal of Supercomputer Applications*, 4(4):9–24, December 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://

journals.sagepub.com/doi/pdf/10.1177/109434209000400402.

Ma:2021:PBI

[MC21] Wenpeng Ma and Xiao-Chuan Cai. Point-block incomplete *LU* preconditioning with asynchronous iterations on GPU for multiphysics problems. *The International Journal of High Performance Computing Applications*, 35(2):121–135, March 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020981153.

Mellor-Crummey:2004:OSM

[MCG04] John Mellor-Crummey and John Garvin. Optimizing sparse matrix–vector product computations using unroll and jam. *The International Journal of High Performance Computing Applications*, 18(2):225–236, Summer 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/2/225.full.pdf+html.

McNamara:1987:MMS

[McN87] Brendan McNamara. The mass market for supercomputing. *The International Journal of Supercomputer Applications*, 1(4):3–4, December 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100401.

McNamara:1989:STB

[McN89] Brendan McNamara. Supercomputer throughput benchmarks for the Cray-1s and Cyber 205 with estimates for Class VII supercomputers. *The International Journal of Supercomputer Applications*, 3(3):69–85, September 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300305.

McRae:1987:BRC

[McR87] Gregory J. McRae. Book reviews: *The Characteristics of Parallel Algorithms*. *The International Journal of Supercomputer Applications*, 1(4):109–110, December 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100409.

Merelli:2017:PBA

[MCR+17] Ivan Merelli, Paolo Cozzi, Elisabetta Ronchieri, Daniele Cesini, and Daniele D'Agostino. Porting bioinformatics applications from grid to cloud: a macromolecular surface analysis application case study. *The International Journal of High Performance Computing Applications*, 31(3):182–195, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://

journals.sagepub.com/doi/full/10.1177/1094342015588565.

Morrison:2006:WGC

[MCS+06] J. P. Morrison, B. Coghlan, A. Shearer, S. Foley, D. Power, and R. Perrott. WEBCOM-G: a candidate middleware for Grid-Ireland. *The International Journal of High Performance Computing Applications*, 20(3):409–422, Fall 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/3/409.full.pdf+html.

Meswani:2013:MPP

[MCU+13] Mitesh R. Meswani, Laura Carrington, Didem Unat, Allan Snavely, Scott Baden, and Stephen Poole. Modeling and predicting performance of high performance computing applications on hardware accelerators. *The International Journal of High Performance Computing Applications*, 27(2):89–108, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/2/89.full.pdf+html.

McManus:2000:SSP

[MCW+00] Kevin McManus, Mark Cross, Chris Walshaw, Steve Johnson, and Peter Leggett. A scalable strategy for the parallelization of multiphysics unstructured mesh-iterative codes on distributed-memory systems. *The International Journal of High Performance Computing Applications*, 14(2):137–174, Summer 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400203.

McCoy:1999:PPS

[MD99] R. Alan McCoy and Yuefan Deng. Parallel particle simulations of thin-film deposition. *The International Journal of High Performance Computing Applications*, 13(1):16–32, Spring 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300102.

Marques:2006:P

[MD06] Osni Marques and Tony Drummond. Preface. *The International Journal of High Performance Computing Applications*, 20(2):161–162, Summer 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/2/161.full.pdf+html.

Messer:2018:MDP

[MDH+18] Oe Bronson Messer, Ed D'Azevedo, Judy Hill, Wayne Joubert, Mark Berrill, and Christopher Zimmer. MiniApps derived from production HPC applications using multiple programming models. *The International Journal of High Performance Computing Applications*, 32(4):582–593, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016668241.

Meng:2014:SIA

[ME14] Jiayuan Meng and Toshio Endo. Special issue on applications for the heterogeneous computing era. *The International Journal of High Performance Computing Applications*, 28(3):253–254, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/3/253.

Mahajan:2019:OSR

[MEK+19] Salil Mahajan, Katherine J. Evans, Joseph H. Kennedy, Min Xu, Mathew R. Norman, and Marcia L. Branstetter. Ongoing solution reproducibility of earth system models as they progress toward exascale computing. *The International Journal of High Performance Computing Applications*, 33 (5):784–790, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019837341.

Menasce:2000:WPM

[Men00] Daniel A. Menascé. Web performance modeling issues. *The International Journal of High Performance Computing Applications*, 14(4):292–303, Winter 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400402.

Meredith:1987:STC

[Mer87] Dennis Meredith. Science and technology at Cornell's theory center. *The International Journal of Supercomputer Applications*, 1(4):5–9, December 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100402.

Meurant:1988:DDM

[Meu88] Gérard Meurant. Domain decomposition methods for partial differential equations on parallel computers. *The International Journal of Supercomputer Applications*, 2 (4):5–12, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200402.

Mencagli:2019:SIP

[MFB+19] Gabriele Mencagli, Felipe Mg França, Cristiana Barbosa Bentes, Leandro Augusto Justen Marzulo, and Mauricio Lima Pilla. Special issue on parallel applications for in-situ computing on the next-generation computing platforms. *The International Journal of High Performance Computing Applications*, 33 (3):429–430, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018820155`.

Maccabe:2009:RM

[MFK09] Arthur Maccabe, Hugo Falter, and William Kramer. Resource management. *The International Journal of High Performance Computing Applications*, 23(4):347–349, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/23/4/347.full.pdf+html`.

Moreton-Fernandez:2018:CAE

[MFOAGE18] Ana Moreton-Fernandez, Hector Ortega-Arranz, and Arturo Gonzalez-Escribano. Controllers: an abstraction to ease the use of hardware accelerators. *The International Journal of High Performance Computing Applications*, 32(6): 838–853, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017702962`.

Miranda:2017:EPP

[MFP+17] Sebastião Miranda, Jonas Feldt, Frederico Pratas, Ricardo A. Mata, Nuno Roma, and Pedro Tomás. Efficient parallelization of perturbative Monte Carlo QM/MM simulations in heterogeneous platforms. *The International Journal of High Performance Computing Applications*, 31(6):499–516, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016649420`.

Melhem:1987:TEI

[MG87] Rami Melhem and Dennis Gannon. Toward efficient implementation of preconditioned conjugate gradient methods on vector supercomputers. *The International Journal of Supercomputer Applications*, 1(1):70–98, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208700100106`.

Malawski:2012:CBA

[MGB12] Maciej Malawski, Tomasz Gubala, and Marian Bubak. Component-based approach for programming and running scientific applications on grids and clouds. *The International Journal of High Performance Computing Applications*, 26(3):275–295, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/3/275.full.pdf+html`.

Moutafis:2020:HMP

[MGFP20] Byron E. Moutafis, George A. Gravvanis, and Christos K. Filelis-Papadopoulos. Hybrid multi-projection method using sparse approximate inverses on GPU clusters. *The International Journal of High Performance Computing Applications*, 34(3):282–305, May 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342020905637`.

Markidis:2015:OAN

[MGS+15] Stefano Markidis, Jing Gong, Michael Schliephake, Erwin Laure, Alistair Hart, David Henty, Katherine Heisey, and Paul Fischer. OpenACC acceleration of the Nek5000 spectral element code. *The International Journal of High Performance Computing Applications*, 29(3):311–319, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015576846`.

Murtaza:2011:CAS

[MHS11] S. Murtaza, A. G. Hoekstra, and P. M. A. Sloot. Cellular automata simulations on a FPGA cluster. *The International Journal of High Performance Computing Applications*, 25(2):193–204, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/25/2/193.full.pdf+html`.

Mozdzynski:2015:PGA

[MHW15] George Mozdzynski, Mats Hamrud, and Nils Wedi. A partitioned global address space implementation of the European Centre for Medium Range Weather Forecasts Integrated Forecasting System. *The International Journal of High Performance Computing Applications*, 29(3):261–273, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015576773`.

Michielse:2009:AAP

[Mic09] Peter Michielse. Application analysis and porting in the PRACE Project. *The International Journal of High Performance Computing Applications*, 23(4):369–373, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/23/4/369.full.pdf+html`.

Mirin:1990:NER

[Mir90] Arthur A. Mirin. The National Energy Research Supercomputer Center. *The International Journal of Supercomputer Applications*, 4(3):6–10, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://`

journals.sagepub.com/doi/pdf/10.1177/109434209000400302.

Mirkovic:2004:APT

[MJ04] Dragan Mirković and Lennart Johnsson. Automatic performance tuning for Fast Fourier Transforms. *The International Journal of High Performance Computing Applications*, 18 (1):47–64, Spring 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/1/47.full.pdf+html.

Miao:2016:IPE

[MJD16] Xinqiang Miao, Xianlong Jin, and Junhong Ding. Improving the parallel efficiency of large-scale structural dynamic analysis using a hierarchical approach. *The International Journal of High Performance Computing Applications*, 30(2):156–168, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015581402.

Minotto:2013:GBA

[MJGL13] Vicente Peruffo Minotto, Claudio Rosito Jung, Luiz Gonzaga da Silveira, Jr., and Bowon Lee. GPU-based approaches for real-time sound source localization using the SRP–PHAT algorithm. *The International Journal of High Performance Computing Applications*, 27(3):291–306, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/3/291.full.pdf+html.

Madavan:1990:SAG

[MKG90] Nateri K. Madavan, Paul Kelaita, and Sharad Gavali. Supercomputer applications in gas turbine flowfield simulation. *The International Journal of Supercomputer Applications*, 4(2):81–95, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400207.

Muller:2019:SSN

[MKM+19] Andreas Müller, Michal A. Kopera, Simone Marras, Lucas C. Wilcox, Tobin Isaac, and Francis X. Giraldo. Strong scaling for numerical weather prediction at petascale with the atmospheric model NUMA. *The International Journal of High Performance Computing Applications*, 33(2):411–426, March 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018763966.

Mo:2020:ISS

[ML20] Tieqiang Mo and Renfa Li. Iteratively solving sparse linear system based on PaRSEC task scheduling. *The Inter-*

national Journal of High Performance Computing Applications, 34(3):306–315, May 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019899997`.

McNamara:1990:CAS

[MM90] B. McNamara and K. J. M. Moriarty. Computer-aided software development tools for the supercomputer environment. *The International Journal of Supercomputer Applications*, 4(4):56–70, December 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400405`.

Mackay:1998:SPF

[MMD98] David Mackay, G. Mahinthakumar, and Ed D'Azevedo. A study of I/O in a parallel finite element groundwater transport code. *The International Journal of High Performance Computing Applications*, 12(3):307–319, Fall 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209801200301`.

Mironov:2019:EMO

[MMDA19] Vladimir Mironov, Alexander Moskovsky, Michael D'Mello, and Yuri Alexeev. An efficient MPI/OpenMP parallelization of the Hartree–Fock–Roothaan method for the first generation of Intel(R) Xeon Phi^{TM} processor architecture. *The International Journal of High Performance Computing Applications*, 33(1):212–224, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017732628`.

MacDonald:2011:GMM

[MMHL11] Alexander E. MacDonald, Jacques Middlecoff, Tom Henderson, and Jin-Luen Lee. A general method for modeling on irregular grids. *The International Journal of High Performance Computing Applications*, 25(4):392–403, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/25/4/392.full.pdf+html`.

Mohr:2009:PE

[MMN09] Bernd Mohr, Matthias S. Müller, and Wolfgang E. Nagel. Performance at exascale. *The International Journal of High Performance Computing Applications*, 23(4):355–356, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/23/4/355.full.pdf+html`.

McRae:1988:CRS

[MMS88] Gregory J. McRae, Jana B. Milford, and Barbara J. Slompak. Changing roles for supercomputing in chemical engineering. *The International Journal of Supercomputer Applications*, 2(2):16–40, June 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200203.

Mohr:2009:SIW

[Moh09] Bernd Mohr. Summary of the IESP white papers. *The International Journal of High Performance Computing Applications*, 23(4):323–327, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/323.full.pdf+html.

Mackenzie:2000:CMN

[MOK00] Lewis Mackenzie and Mohamed Ould-Khaoua. Comparative modeling of network topologies and routing strategies in multicomputers. *The International Journal of High Performance Computing Applications*, 14(3):252–267, Fall 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400307.

Montry:1989:MPM

[Mon89] Gary R. Montry. Massively parallel mathematical sieves. *The International Journal of Supercomputer Applications*, 3(1):59–74, March 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300105.

Monitzer:2012:CLB

[Mon12] Andreas Monitzer. Combining lattice Boltzmann and discrete element methods on a graphics processor. *The International Journal of High Performance Computing Applications*, 26(3):215–226, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/3/215.full.pdf+html.

Moriarty:1989:OSL

[Mor89a] K. J. M. Moriarty. Optimizing the SU(3) lattice gauge theory algorithm on the NEC SX-2 supercomputer. *The International Journal of Supercomputer Applications*, 3(4):54–63, December 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300405.

Moriarty:1989:PPL

[Mor89b] K. J. M. Moriarty. Parallel processing of large-scale applications on powerful multiple processors. *The International Journal of Supercomputer Applications*, 3(1):82–87, March 1989. CODEN IJSAE9.

ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300107.

Mertz:1994:MDC

[MP94] John E. Mertz and B. Montgomery Pettitt. Molecular dynamics at a constant pH. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(1):47–53, Spring 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800106.

Maartensson-Pendrill:1995:PTT

[MP95] Ann-Marie Mårtensson-Pendrill. Perspectives: Turnaround times at a supercomputing center. *The International Journal of Supercomputer Applications and High Performance Computing*, 9 (4):312–314, Winter 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900405.

Memeti:2018:MLA

[MP18] Suejb Memeti and Sabri Pllana. A machine learning approach for accelerating DNA sequence analysis. *The International Journal of High Performance Computing Applications*, 32(3):363–379, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016654214.

Martin:2012:AAV

[MPD+12] Richard L. Martin, Prabhat, David D. Donofrio, James A. Sethian, and Maciej Haranczyk. Accelerating analysis of void space in porous materials on multicore and GPU platforms. *The International Journal of High Performance Computing Applications*, 26(4):347–357, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/4/347.full.pdf+html.

Mastin:1993:MPD

[MPG93] Gary A. Mastin, Steven J. Plimpton, and Dennis C. Ghiglia. A massively parallel digital processor for spotlight synthetic aperture radar. *The International Journal of Supercomputer Applications*, 7(2):97–112, June 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700202.

MF:1998:SIM

[MPI98] MPI Forum. Special issue: MPI2: a message-passing interface standard. *The International Journal of High Performance Computing Applications*, 12(1–2):1–299, Spring–Summer 1998. CODEN

IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic).

Magoules:2015:IAE

[MPS15] Frédéric Magoulès, Mark Parsons, and Lorna Smith. Innovative algorithms for extreme scale computing. *The International Journal of High Performance Computing Applications*, 29(3):247–248, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015576772.

Moriarty:1990:SMS

[MR90] Kevin J. M. Moriarty and Claudio Rebbi. Supercomputer methods for the solution of fundamental problems of particle physics. *The International Journal of Supercomputer Applications*, 4(1):10–30, March 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400103.

Mendes:2004:MLS

[MR04] Celso L. Mendes and Daniel A. Reed. Monitoring large systems via statistical sampling. *The International Journal of High Performance Computing Applications*, 18(2):267–277, Summer 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/2/267.full.pdf+html.

Minervini:2015:LSA

[MRD+15] Massimo Minervini, Cristian Rusu, Mario Damiano, Valter Tucci, Angelo Bifone, Alessandro Gozzi, and Sotirios A. Tsaftaris. Large-scale analysis of neuroimaging data on commercial clouds with content-aware resource allocation strategies. *The International Journal of High Performance Computing Applications*, 29(4):473–488, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342013519483.

Moyer:1995:PPA

[MS95] Steven A. Moyer and Vaidy S. Sunderam. Parallel I/O as a parallel application. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(2):95–107, Summer 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900203.

Mahinthakumar:2002:HMO

[MS02] G. Mahinthakumar and F. Saied. A hybrid MPI-OpenMP implementation of an implicit finite-element code on parallel architectures. *The International Journal of High Performance Computing Applications*, 16(4):371–393, Winter 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846

(electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200201600402.

Mirin:2005:SIF

[MS05] Arthur A. Mirin and William B. Sawyer. A scalable implementation of a finite-volume dynamical core in the Community Atmosphere Model. *The International Journal of High Performance Computing Applications*, 19(3):203–212, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/203.full.pdf+html.

Mach:2009:PAE

[MS09] Werner Mach and Erich Schikuta. Parallel algorithms for the execution of relational database operations revisited on Grids. *The International Journal of High Performance Computing Applications*, 23 (2):152–170, Summer 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/2/152.full.pdf+html.

Molano:2019:DFP

[MS19] Hector Emilio Barrios Molano and Kamy Sepehrnoori. Development of a framework for parallel reservoir simulation. *The International Journal of High Performance Computing Applications*, 33 (4):632–650, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018792710.

McIntosh-Smith:2018:ABF

[MSHPV18] Simon McIntosh-Smith, Rob Hunt, James Price, and Alex Warwick Vesztrocy. Application-based fault tolerance techniques for sparse matrix solvers. *The International Journal of High Performance Computing Applications*, 32 (5):627–640, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017694946.

Moriarty:1992:PPS

[MSK92] K. J. M. Moriarty, S. Sanielevici, and D. W. Kuba. Parallel processing and the sustained production performance of the CRAY Y-MP: Benchmarks using optimized microtasked lattice SU(3) code. *The International Journal of Supercomputer Applications*, 6 (4):361–370, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600405.

Morgan:2021:UPV

[MSKM21] Hannah Morgan, Patrick Sanan, Matthew Knepley, and Richard Tran Mills. Understanding performance variability in standard and pipelined parallel Krylov solvers. *The International Journal of High Performance Computing Applications*, 35(1):47–59, January 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020966835.

Malony:2007:CMO

[MSMW07] Allen D. Malony, Sameer Shende, Alan Morris, and Felix Wolf. Compensation of measurement overhead in parallel performance profiling. *The International Journal of High Performance Computing Applications*, 21(2):174–194, Summer 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/2/174.full.pdf+html.

McIntosh-Smith:2015:HPS

[MSPSI15] Simon McIntosh-Smith, James Price, Richard B. Sessions, and Amaurys A. Ibarra. High performance in silico virtual drug screening on many-core processors. *The International Journal of High Performance Computing Applications*, 29(2):119–134, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342014528252.

Mierendorff:1988:SS

[MST88] Hermann Mierendorff, Karl Solchenbach, and Ulrich Trottenberg. On the SUPRENUM system. *The International Journal of Supercomputer Applications*, 2(4):109–117, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200411.

Mandell:1989:PPT

[MT89] David A. Mandell and Harold E. Trease. Parallel processing a three-dimensional free-Lagrange code: a case history. *The International Journal of Supercomputer Applications*, 3(2):92–99, June 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300206.

Mccallen:2022:CRG

[MTW+22] David Mccallen, Houjun Tang, Suiwen Wu, Eric Eckert, Junfei Huang, and N. Anders Petersson. Coupling of regional geophysics and local soil-structure models in the EQSIM fault-to-structure earthquake simulation framework. *The International Journal of High Performance Computing Applications*, 36(1):78–92, January 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211019118.

Mantas:2020:HOC

[MV20] José M. Mantas and Francesco

Vecil. Hybrid OpenMP–CUDA parallel implementation of a deterministic solver for ultrashort DG-MOSFETs. *The International Journal of High Performance Computing Applications*, 34(1):81–102, January 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019879985`.

Mirin:2012:IPS

[MW12] Arthur A. Mirin and Patrick H. Worley. Improving the performance scalability of the Community Atmosphere Model. *The International Journal of High Performance Computing Applications*, 26(1):17–30, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/1/17.full.pdf+html`.

Martin:1987:MCP

[MWAR+87] William R. Martin, Tzu-Chiang Wan, Tarek S. Abdel-Rahman, Trevor N. Mudge, and Kenichi Miura. Monte Carlo photon transport on shared memory and distributed memory parallel processors. *The International Journal of Supercomputer Applications*, 1(3):57–74, September 1987. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208700100306`.

McManus:2005:ASM

[MWC+05] Kevin McManus, Alison Williams, Mark Cross, Nick Croft, and Chris Walshaw. Assessing the scalability of multiphysics tools for modeling solidification and melting processes on parallel clusters. *The International Journal of High Performance Computing Applications*, 19(1):1–27, Spring 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/19/1/1.full.pdf+html`.

Ma:2008:GEW

[MWM+08] Ru-Yue Ma, Yong-Wei Wu, Xiang-Xu Meng, Shi-Jun Liu, and Li Pan. Grid-enabled workflow management system based on BPEL. *The International Journal of High Performance Computing Applications*, 22(3):238–249, Fall 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/22/3/238.full.pdf+html`.

Moon:1992:MLP

[MYC92] S. Y. Moon, C. S. Yoon, and T. J. Chung. Multitasking for local parallelism in applications to chemically reacting supersonic flows on CRAY Y-MP. *The International Journal of Supercomputer Applications*, 6(4):371–382, December 1992. CODEN IJSAE9.

ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600406.

Marchal:2006:SSS

[MYCR06] L. Marchal, Y. Yang, H. Casanova, and Y. Robert. Steady-state scheduling of multiple divisible load applications on wide-area distributed computing platforms. *The International Journal of High Performance Computing Applications*, 20 (3):365–381, Fall 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/3/365.full.pdf+html.

Nagumey:1989:BRP

[Nag89] Anna Nagumey. Book review: *Parallel and Distributed Computation: Numerical Methods*. *The International Journal of Supercomputer Applications*, 3(4):73–74, December 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300408.

Nagurney:1993:ISI

[Nag93] Anna Nagurney. Introduction to the special issue. *The International Journal of Supercomputer Applications*, 7 (3):187–188, September 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700301.

Nakano:1999:RBB

[Nak99] Aiichiro Nakano. A rigid-body-based multiple time scale molecular dynamics simulation of nanophase materials. *The International Journal of High Performance Computing Applications*, 13 (2):154–162, Summer 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300205.

Nassersharif:1992:CSS

[Nas92] Bahram Nassersharif. Centers of supercomputing — science and engineering at the Texas A&M University Supercomputer Center. *The International Journal of Supercomputer Applications*, 6(1):4–12, April 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600102.

Norman:1996:GCW

[NBB+96] Michael L. Norman, Peter Beckman, Greg Bryan, John Dubinski, Dennis Gannon, Lars Hernquist, Kate Keahey, Jeremiah P. Ostriker, John Shalf, Joel Welling, and Shelby Yang. Galaxies collide on the I-WAY: An example of heterogeneous wide-area collaborative supercomputing. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(2–3):132–144, Summer/Fall

1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000202.

Norman:2022:UCR

[NBE+22] Matthew R. Norman, David A. Bader, Christopher Eldred, Walter M. Hannah, Benjamin R. Hillman, Christopher R. Jones, Jungmin M. Lee, Lr Leung, Isaac Lyngaas, Kyle G. Pressel, Sarat Sreepathi, Mark A. Taylor, and Xingqiu Yuan. Unprecedented cloud resolution in a GPU-enabled full-physics atmospheric climate simulation on OLCF's summit supercomputer. *The International Journal of High Performance Computing Applications*, 36(1):93–105, January 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211027539.

Nogueras:2018:ASI

[NC18] Rafael Nogueras and Carlos Cotta. Analyzing self-⋆ island-based memetic algorithms in heterogeneous unstable environments. *The International Journal of High Performance Computing Applications*, 32(5):676–692, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016678665.

Nayak:2021:EAS

[NCA21] Pratik Nayak, Terry Cojean, and Hartwig Anzt. Evaluating asynchronous Schwarz solvers on GPUs. *The International Journal of High Performance Computing Applications*, 35(3):226–236, May 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020946814.

Neuman:2020:FGR

[NDMR20] Brett Neuman, Andy Dubois, Laura Monroe, and Robert W. Robey. Fast, good, and repeatable: Summations, vectorization, and reproducibility. *The International Journal of High Performance Computing Applications*, 34(5): 519–531, September 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020938425.

Nieplocha:1998:CHP

[NFK98] Jarek Nieplocha, Ian Foster, and Rick A. Kendall. ChemIO: High performance parallel I/O for computational chemistry applications. *The International Journal of High Performance Computing Applications*, 12(3):345–363, Fall 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846

(electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209801200304.

Nelson:1996:NPO

[NHG+96] Mark T. Nelson, William F. Humphrey, Attila Gursoy, Andrew Dalke, Laxmikant V. Kalé, Robert D. Skeel, and Klaus Schulten. NAMD: a parallel object-oriented molecular dynamics program. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(4):251–268, Winter 1996. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000401.

Nagurney:1989:PSV

[NK89] Anna Nagurney and Dae-Shik S. Kim. Parallel and serial variational inequality decomposition algorithms for multicommodity market equilibrium problems. *The International Journal of Supercomputer Applications*, 3(1):34–58, March 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300104.

Nakano:2008:NUA

[NKiN+08] Aiichiro Nakano, Rajiv K. Kalia, Ken ichi Nomura, Ashish Sharma, Priya Vashishta, Fuyuki Shimojo, Adri C. T. van Duin, William A. Goddard, Rupak Biswas, Deepak Srivastava, and Lin H. Yang. De novo ultrascale atomistic simulations on high-end parallel supercomputers. *The International Journal of High Performance Computing Applications*, 22(1):113–128, Spring 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/1/113.full.pdf+html.

Nudd:2000:PTP

[NKP+00] G. R. Nudd, D. J. Kerbyson, E. Papaefstathiou, S. C. Perry, J. S. Harper, and D. V. Wilcox. PACE — a toolset for the performance prediction of parallel and distributed systems. *The International Journal of High Performance Computing Applications*, 14(3):228–251, Fall 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200001400306.

Nagurney:1990:SPE

[NKR90] Anna Nagurney, Dae-Shik Kim, and Alan G. Robinson. Serial and parallel equilibration of large-scale constrained matrix problems with application to the social and economic sciences. *The International Journal of Supercomputer Applications*, 4(1):49–71, March 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400105.

Narayanan:2013:HMP

[NMAE13] Kiran Narayanan, Angel Mora, Nicholas Allsopp, and Tamer El Sayed. A hybrid, massively parallel implementation of a genetic algorithm for optimization of the impact performance of a metal/polymer composite plate. *The International Journal of High Performance Computing Applications*, 27(2):217–227, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/2/217.full.pdf+html`.

Nakao:2019:IEH

[NMI+19] Masahiro Nakao, Hitoshi Murai, Hidetoshi Iwashita, Taisuke Boku, and Mitsuhisa Sato. Implementation and evaluation of the HPC challenge benchmark in the XcalableMP PGAS language. *The International Journal of High Performance Computing Applications*, 33 (1):110–123, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017698214`.

Nakao:2019:EXT

[NOM+19] Masahiro Nakao, Tetsuya Odajima, Hitoshi Murai, Akihiro Tabuchi, Norihisa Fujita, Toshihiro Hanawa, Taisuke Boku, and Mitsuhisa Sato. Evaluation of XcalableACC with tightly coupled accelerators/InfiniBand hybrid communication on accelerated cluster. *The International Journal of High Performance Computing Applications*, 33 (5):869–884, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018821163`.

Nieplocha:2006:AAP

[NPT+06] Jarek Nieplocha, Bruce Palmer, Vinod Tipparaju, Manojkumar Krishnan, Harold Trease, and Edoardo Aprà. Advances, applications and performance of the Global Arrays Shared Memory Programming Toolkit. *The International Journal of High Performance Computing Applications*, 20(2):203–231, Summer 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/2/203.full.pdf+html`.

Nickolayev:1997:RTS

[NRR97] Oleg Y. Nickolayev, Philip C. Roth, and Daniel A. Reed. Real-time statistical clustering for event trace reduction. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(2):144–159, Summer 1997. CODEN IJSCFG. ISSN 1078-3482. URL `http://`

journals.sagepub.com/doi/pdf/10.1177/109434209701100207.

Novakovic:2021:IHZ

[NS21] Vedran Novaković and Sanja Singer. Implicit Hari–Zimmermann algorithm for the generalized SVD on the GPUs. *The International Journal of High Performance Computing Applications*, 35(2):170–205, March 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020972772.

Nikolic:2020:OPP

[NSI20] Srdan Nikolić, Nenad Stevanović, and Milos Ivanović. Optimizing parallel particle tracking in Brownian motion using machine learning. *The International Journal of High Performance Computing Applications*, 34(5):532–546, September 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020936019.

Nath:2010:IMG

[NTD10] Rajib Nath, Stanimire Tomov, and Jack Dongarra. An improved Magma GEMM for Fermi graphics processing units. *The International Journal of High Performance Computing Applications*, 24(4):511–515, Winter 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/4/511.full.pdf+html.

Nieplocha:2006:HPR

[NTKP06] J. Nieplocha, V. Tipparaju, M. Krishnan, and D. K. Panda. High performance remote memory access communication: The ARMCI approach. *The International Journal of High Performance Computing Applications*, 20(2):233–253, Summer 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/2/233.full.pdf+html.

Numrich:2004:PMB

[Num04] Robert W. Numrich. Performance metrics based on computational action. *The International Journal of High Performance Computing Applications*, 18(4):449–458, Winter 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/4/449.full.pdf+html.

Nunns:1987:SWC

[Nun87] Tricia Nunns. Supercomputing in Western Canada. *The International Journal of Supercomputer Applications*, 1(3):5–11, September 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://

journals.sagepub.com/doi/pdf/10.1177/109434208700100302.

Nielsen:1993:MPP

[NZ93] Soren S. Nielsen and Stavros A. Zenios. Massively parallel proximal algorithms for solving linear stochastic network programs. *The International Journal of Supercomputer Applications*, 7 (4):349–364, December 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700405.

Oliker:2008:SAP

[OCC+08] Leonid Oliker, Andrew Canning, Jonathan Carter, John Shalf, and Stéphane Ethier. Scientific application performance on leading scalar and vector supercomputering platforms. *The International Journal of High Performance Computing Applications*, 22 (1):5–20, Spring 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/1/5.full.pdf+html.

Onat:2007:PIR

[ODD07] Berk Onat, Sondan Durukanoḡlu, and Hasan Daḡ. A parallel implementation: Real space Green's function technique. *The International Journal of High Performance Computing Applications*, 21(1):66–74, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/1/66.full.pdf+html.

Oden:2017:IVG

[OF17] Lena Oden and Holger Fröning. InfiniBand Verbs on GPU: a case study of controlling an InfiniBand network device from the GPU. *The International Journal of High Performance Computing Applications*, 31(4):274–284, July 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015588142.

Otten:2016:MOI

[OGM+16] Matthew Otten, Jing Gong, Azamat Mametjanov, Aaron Vose, John Levesque, Paul Fischer, and Misun Min. An MPI/OpenACC implementation of a high-order electromagnetics solver with GPUDirect communication. *The International Journal of High Performance Computing Applications*, 30(3):320–334, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015626584.

Obrecht:2011:TPM

[OKTR11] Christian Obrecht, Frédéric Kuznik, Bernard Tourancheau, and Jean-Jacques Roux. The

Thelma Project: Multi-GPU implementation of the lattice Boltzmann method. *The International Journal of High Performance Computing Applications*, 25(3):295–303, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/3/295.full.pdf+html.

Orlando:2005:PSP

[OL05] Salvatore Orlando and Domenico Laforenza. Preface: Selected papers from the EUROPVM/MPI 2003 Conference, Venice, Italy, 29 September–2 October 2003. *The International Journal of High Performance Computing Applications*, 19 (1):47, Spring 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/1/47.full.pdf+html.

Olivier:2012:OTS

[OPW+12] Stephen L. Olivier, Allan K. Porterfield, Kyle B. Wheeler, Michael Spiegel, and Jan F. Prins. OpenMP task scheduling strategies for multicore NUMA systems. *The International Journal of High Performance Computing Applications*, 26(2):110–124, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/2/110.full.pdf+html.

Oliker:2013:ISI

[OV13] Leonid Oliker and Richard Vuduc. Introduction for special issue on autotuning. *The International Journal of High Performance Computing Applications*, 27(4):377–378, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/4/377.full.pdf+html.

Ozik:2021:PDD

[OWC+21] Jonathan Ozik, Justin M. Wozniak, Nicholson Collier, Charles M. Macal, and Mickaël Binois. A population data-driven workflow for COVID-19 modeling and learning. *The International Journal of High Performance Computing Applications*, 35(5):483–499, September 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211035164.

Oldfield:1998:EPS

[OWO98] Ron A. Oldfield, David E. Womble, and Curtis C. Ober. Efficient parallel I/O in seismic processing. *The International Journal of High Performance Computing Applications*, 12(3):333–344, Fall 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209801200303.

Ozsoy:2016:EPL

[Ozs16] Adnan Ozsoy. An efficient parallelization of longest prefix match and application on data compression. *The International Journal of High Performance Computing Applications*, 30(3):276–289, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015621367.

Pavan:2011:SIP

[PA11] Balaji Pavan and Vishnu Abhinav. Special issue on programming models, software and tools for high-end computing. *The International Journal of High Performance Computing Applications*, 25(4):353–354, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/4/353.full.pdf+html.

Pancake:1992:WSW

[Pan92] Cherri M. Pancake. What should we expect from parallel language standards? *The International Journal of Supercomputer Applications*, 6(1):112–117, April 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600107.

Pancake:1997:CUP

[Pan97] Cherri M. Pancake. Can users play an effective role in parallel tools research? *The International Journal of Supercomputer Applications and High Performance Computing*, 11(2):84–94, Summer 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100202.

Papadopoulos:2011:ECA

[Pap11] Philip M. Papadopoulos. Extending clusters to Amazon EC2 using the Rocks toolkit. *The International Journal of High Performance Computing Applications*, 25(3):317–327, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/3/317.full.pdf+html.

Patrinos:2005:P

[Pat05] Aristides Patrinos. Preface. *The International Journal of High Performance Computing Applications*, 19(3):175, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/175.full.pdf+html.

Peise:2019:EFE

[PB19] Elmar Peise and Paolo Bientinesi. The ELAPS framework: Experimental Linear Algebra Performance Studies. *The International Journal of High Performance Computing Applications*, 33(2):353–365, March 1, 2019. CO-

DEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018763042.

Planas:2009:HTB

[PBAL09] Judit Planas, Rosa M. Badia, Eduard Ayguadé, and Jesus Labarta. Hierarchical task-based programming with StarSs. *The International Journal of High Performance Computing Applications*, 23(3):284–299, Fall 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/3/284.full.pdf+html.

Peterka:2020:PRD

[PBB+20] Tom Peterka, Deborah Bard, Janine C. Bennett, E. Wes Bethel, Ron A. Oldfield, Line Pouchard, Christine Sweeney, and Matthew Wolf. Priority research directions for in situ data management: Enabling scientific discovery from diverse data sources. *The International Journal of High Performance Computing Applications*, 34(4):409–427, July 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020913628.

Petitet:2001:NLG

[PBD+01] Antoine Petitet, Susan Blackford, Jack Dongarra, Brett Ellis, Graham Fagg, Kenneth Roche, and Sathish Vadhiyar. Numerical libraries and the Grid. *The International Journal of High Performance Computing Applications*, 15(4):359–374, Winter 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500403.

Pouchard:2019:CRS

[PBE+19] Line Pouchard, Sterling Baldwin, Todd Elsethagen, Shantenu Jha, Bibi Raju, Eric Stephan, Li Tang, and Kerstin Kleese Van Dam. Computational reproducibility of scientific workflows at extreme scales. *The International Journal of High Performance Computing Applications*, 33(5):763–776, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019839124.

Plaza:2008:CVF

[PC08a] Antonio Plaza and Chein-I Chang. Clusters versus FPGA for parallel processing of hyperspectral imagery. *The International Journal of High Performance Computing Applications*, 22(4):366–385, Winter 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.

sagepub.com/content/22/4/366.full.pdf+html.

Plaza:2008:P

[PC08b] Antonio Plaza and Chein-I Chang. Preface. *The International Journal of High Performance Computing Applications*, 22(4):363–365, Winter 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/4/363.full.pdf+html.

Phillips:2016:PAH

[PF16] Everett Phillips and Massimiliano Fatica. Performance analysis of the high-performance conjugate gradient benchmark on GPUs. *The International Journal of High Performance Computing Applications*, 30(1):28–38, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015599239.

Ponte-Fernandez:2020:FST

[PFGDM20] Christian Ponte-Fernández, Jorge González-Domínguez, and María J. Martín. Fast search of third-order epistatic interactions on CPU and GPU clusters. *The International Journal of High Performance Computing Applications*, 34(1):20–29, January 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019852128.

Prabhu:2018:DRC

[PG18] Tarun Prabhu and William Gropp. DAME: Runtime-compilation for data movement. *The International Journal of High Performance Computing Applications*, 32(5):760–774, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017695444.

Palmer:2010:CBF

[PGTS10] Bruce Palmer, Vidhya Gurumoorthi, Alexandre Tartakovsky, and Tim Scheibe. A component-based framework for smoothed particle hydrodynamics simulations of reactive fluid flow in porous media. *The International Journal of High Performance Computing Applications*, 24(2):228–239, Summer 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/2/228.full.pdf+html.

Persons:1991:DAD

[PH91] Michael P. Persons and Lawrence L. Halcomb. Decoupled asynchronous I/O for data processing applications on supercomputers. *The International Journal of Supercomputer Applications*, 5(2):92–95, June 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500207.

Pichler:2019:FEM

[PH19] Franz Pichler and Gundolf Haase. Finite element method completely implemented for graphic processor units using parallel algorithm libraries. *The International Journal of High Performance Computing Applications*, 33(1):53–66, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017694703.

Primet:2004:GNM

[PHB04] Pascale Vicat-Blanc Primet, Robert Harakaly, and Franck Bonnassieux. Grid network monitoring in the European Datagrid Project. *The International Journal of High Performance Computing Applications*, 18(3):293–304, Fall 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/3/293.full.pdf+html.

Pichel:2010:ILI

[PHC+10] J. C. Pichel, D. B. Heras, J. C. Cabaleiro, A. J. García-Loureiro, and F. F. Rivera. Increasing the locality of iterative methods and its application to the simulation of semiconductor devices. *The International Journal of High Performance Computing Applications*, 24(2):136–153, Summer 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/2/136.full.pdf+html.

Pieper:2021:DSL

[PHF21] Andreas Pieper, Georg Hager, and Holger Fehske. A domain-specific language and matrix-free stencil code for investigating electronic properties of Dirac and topological materials. *The International Journal of High Performance Computing Applications*, 35(1):60–77, January 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020959423.

Prades:2020:MRU

[PIR+20] Javier Prades, Baldomero Imbernón, Carlos Reaño, Jorge Peña-García, Jose Pedro Cerón-Carrasco, Federico Silla, and Horacio Pérez-Sánchez. Maximizing resource usage in multifold molecular dynamics with rCUDA. *The International Journal of High Performance Computing Applications*, 34(1):5–19, January 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://

journals.sagepub.com/doi/full/10.1177/1094342019857131.

Post:2004:SPM

[PK04] D. E. Post and R. P. Kendall. Software project management and quality engineering practices for complex, coupled multiphysics, massively parallel computational simulations: Lessons learned from ASCI. *The International Journal of High Performance Computing Applications*, 18(4): 399–416, Winter 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/4/399.full.pdf+html.

Plank:2009:RLC

[Pla09] James S. Plank. The Raid-6 Liber8Tion code. *The International Journal of High Performance Computing Applications*, 23(3):242–251, Fall 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/3/242.full.pdf+html.

Putman:2005:CPP

[PLS05] William M. Putman, Shian-Jiann Lin, and Bo-Wen Shen. Cross-platform performance of a portable communication module and the NASA Finite Volume General Circulation Model. *The International Journal of High Performance Computing Applications*, 19(3):213–223, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/213.full.pdf+html.

Porcu:2020:HSB

[PMP+20] Roberto Porcù, Edie Miglio, Nicola Parolini, Mattia Penati, and Noemi Vergopolan. HPC simulations of brownout: a noninteracting particles dynamic model. *The International Journal of High Performance Computing Applications*, 34(3):267–281, May 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020905971.

Puschel:2004:SGP

[PMS+04] Markus Püschel, José M. F. Moura, Bryan Singer, Jianxin Xiong, Jeremy Johnson, David Padua, Manuela Veloso, and Robert W. Johnson. Spiral: a generator for platform-adapted libraries of signal processing algorithms. *The International Journal of High Performance Computing Applications*, 18 (1):21–45, Spring 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/1/21.full.pdf+html.

Pianu:2016:NAT

[PNFC16] Daniele Pianu, Roberto Nerino, Claudia Ferraris, and Antonio Chimienti. A novel approach to train random forests on GPU for computer vision applications using local features. *The International Journal of High Performance Computing Applications*, 30(3):290–304, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015622672`.

Pozo:1997:TNT

[Poz97] Roldan Pozo. Template numerical toolkit for linear algebra: High performance programming with C++ and the Standard Template Library. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(3):251–263, Fall 1997. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209701100307`.

Palmer:2016:GFD

[PPC+16] Bruce Palmer, William Perkins, Yousu Chen, Shuangshuang Jin, David Callahan, Kevin Glass, Ruisheng Diao, Mark Rice, Stephen Elbert, Mallikarjuna Vallem, and Zhenyu Huang. GridPACK^{TM}: a framework for developing power grid simulations on high-performance computing platforms. *The International Journal of High Performance Computing Applications*, 30(2):223–240, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015607609`.

Papadopoulos:2004:CLH

[PPK+04] Philip M. Papadopoulos, Caroline A. Papadopoulos, Mason J. Katz, William J. Link, and Greg Bruno. Configuring large high-performance clusters at lightspeed: a case study. *The International Journal of High Performance Computing Applications*, 18(3):317–326, Fall 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/18/3/317.full.pdf+html`.

Park:2009:OHC

[PPK09] Jin Woo Park, Si Hyong Park, and Seung Jo Kim. Optimization with high-cost objective function evaluations in a computing Grid and an application to simulation-based design. *The International Journal of High Performance Computing Applications*, 23(1):62–83, Spring 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/23/1/62.full.pdf+html`.

Perez:2003:PCC

[PPR03] Christian Pérez, Thierry Priol,

and André Ribes. A parallel CORBA component model for numerical code coupling. *The International Journal of High Performance Computing Applications*, 17(4):417–429, Winter 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/10943420030174006`.

Patra:2009:ESS

[PPS09] Abani Patra, Rob Pennington, and Ed Seidel. Exascale software: Some questions to drive the development. *The International Journal of High Performance Computing Applications*, 23(4):421–422, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/23/4/421.full.pdf+html`.

Pavarino:1995:NEO

[PR95] Luca F. Pavarino and Marcelo Ramé. Numerical experiments with an overlapping additive Schwarz solver for 3-D parallel reservoir simulation. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(1):3–17, Spring 1995. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209500900101`.

Pramanick:2001:HA

[Pra01] Ira Pramanick. High availability. *The International Journal of High Performance Computing Applications*, 15(2):169–174, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200101500209`.

Pohorille:1990:DDA

[PRT90] Andrew Pohorille, Wilson S. Ross, and Ignacio Tinoco, Jr. DNA dynamics in aqueous solution: Opening the double helix. *The International Journal of Supercomputer Applications*, 4(3):81–96, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400309`.

Petersen:1987:CSL

[PS87] Christian E. Petersen and Christopher A. Sims. Computer simulation of large scale econometric models: Project LINK. *The International Journal of Supercomputer Applications*, 1(4):31–53, December 1987. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208700100404`.

Perrotte:2012:FGP

[PS12] Lancelot Perrotte and Guillaume Saupin. Fast GPU perspective grid construction and triangle tracing for exhaustive ray tracing of highly coherent rays. *The International Journal of High Performance Computing Applications*, 26(3):192–202, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/3/192.full.pdf+html`.

Park:2016:OHP

[PSV+16] Jongsoo Park, Mikhail Smelyanskiy, Karthikeyan Vaidyanathan, Alexander Heinecke, Dhiraj D. Kalamkar, Md Mosotofa Ali Patwary, Vadim Pirogov, Pradeep Dubey, Xing Liu, Carlos Rosales, Cyril Mazauric, and Christopher Daley. Optimizations in a high-performance conjugate gradient benchmark for IA-based multi- and many-core processors. *The International Journal of High Performance Computing Applications*, 30(1):11–27, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015593157`.

Pineda-Torres:2002:IFS

[PTGB02] Ivo H. Pineda-Torres, Ibrahim Gokcen, and Bill P. Buckles. Image feature set for correspondence mappings. *The International Journal of High Performance Computing Applications*, 16(3):273–283, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/10943420020160030701`.

Profeta:1994:RES

[PUR94] Salvatore Profeta, Jr., Rayomand J. Unwalla, and Daniel J. Russell. Relative energies and structural features of small amines and their ammonium analogs: Results from 6-31G* optimizations and an MM2 ammonium force field. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(1):35–46, Spring 1994. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209400800105`.

Quan:2008:MHC

[QH08] Dang Minh Quan and D. Frank Hsu. Mapping heavy communication Grid-based workflows onto Grid resources within an SLA context using metaheuristics. *The International Journal of High Performance Computing Applications*, 22(3):330–346, Fall 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/22/3/330.full.pdf+html`.

Qawasmeh:2017:PPR

[QHCC17] Ahmad Qawasmeh, Maxime R. Hugues, Henri Calandra, and

Barbara M. Chapman. Performance portability in reverse time migration and seismic modelling via OpenACC. *The International Journal of High Performance Computing Applications*, 31(5):422–440, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016675678.

Qin:2020:SPD

[QSX+20] Xinming Qin, Honghui Shang, Lei Xu, Wei Hu, Jinlong Yang, Shigang Li, and Yunquan Zhang. The static parallel distribution algorithms for hybrid density-functional calculations in HONPAS package. *The International Journal of High Performance Computing Applications*, 34(2):159–168, March 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019845046.

Qi:2002:HPS

[QWIC02] Hairong Qi, Xiaoling Wang, S. Sitharama Iyengar, and Krishnendu Chakrabarty. High performance sensor integration in distributed sensor networks using mobile agents. *The International Journal of High Performance Computing Applications*, 16(3):325–335, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160031101.

Reverdy:2015:DFO

[RAB+15] Vincent Reverdy, Jean-Michel Alimi, Vincent Bouillot, Yann Rasera, Pier-Stefano Corasaniti, Irène Balmès, Stéphane Requena, Xavier Delaruelle, and Jean-Noel Richet. DEUS full observable universe simulations: Numerical challenge and outlooks. *The International Journal of High Performance Computing Applications*, 29(3):249–260, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015576845.

Radziunas:2018:MSB

[Rad18] Mindaugas Radziunas. Modeling and simulations of broad-area edge-emitting semiconductor devices. *The International Journal of High Performance Computing Applications*, 32(4):512–522, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016677086.

Raw:1993:HCC

[RAGW93] Juli Raw, Donald C. Aston, Karinne W. Gordon, and Kyle Wheeler. The 0th heterogeneous computing challenge: Fun and (sometimes too much) excitement. *The International*

Journal of Supercomputer Applications, 7(2):91–96, June 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700201.

Rao:2002:NEE

[Rao02] Nageswara S. V. Rao. Netlets for end-to-end delay minimization in distributed computing over the Internet using two-paths. *The International Journal of High Performance Computing Applications*, 16(3):285–292, Fall 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420020160030801.

Rodriguez:2008:EMP

[RBL08] German Rodriguez, Rosa M. Badia, and Jesus Labarta. An evaluation of Marenostrum performance. *The International Journal of High Performance Computing Applications*, 22(1):81–96, Spring 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/1/81.full.pdf+html.

Rogers:1987:DIG

[RBMF87] Stuart E. Rogers, Pieter G. Buning, Fergus J. Merritt, and Steven E. Follin. Distributed interactive graphics applications in computational fluid dynamics. *The International Journal of Supercomputer Applications*, 1(4):96–105, December 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100407.

Ramon-Cortes:2020:AAP

[RCAE+20] Cristian Ramon-Cortes, Ramon Amela, Jorge Ejarque, Philippe Clauss, and Rosa M. Badia. AutoParallel: Automatic parallelisation and distributed execution of affine loop nests in Python. *The International Journal of High Performance Computing Applications*, 34(6):659–675, November 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020937050.

Ries:2012:TSL

[RDG12] Florian Ries, Tommaso De Marco, and Roberto Guerrieri. Tuning solution of large non-Hermitian linear systems on multiple graphics processing unit accelerated workstations. *The International Journal of High Performance Computing Applications*, 26(3):296–309, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/3/296.full.pdf+html.

Reeke:1987:SNN

[RES87] George N. Reeke, Jr., Gerald M. Edelman, and Dan Sulzbach. Selective neural networks and their implications for recognition automata. *The International Journal of Supercomputer Applications*, 1(1):44–69, March 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100105.

Reusch:1992:EPV

[Reu92] Hans-Georg Reusch. Experiences with the parallelization and vectorization of simulation codes for heavy-ion reactions. *The International Journal of Supercomputer Applications*, 6(3):224–240, September 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600302.

Rucci:2018:OOS

[RGB+18] Enzo Rucci, Carlos Garcia, Guillermo Botella, Armando E. De Giusti, Marcelo Naiouf, and Manuel Prieto-Matias. OSWALD: OpenCL Smith–Waterman on Altera's FPGA for large protein databases. *The International Journal of High Performance Computing Applications*, 32(3):337–350, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016654215.

Rojek:2021:CCA

[RHK21] Krzysztof Rojek, Kamil Halbiniak, and Lukasz Kuczynski. CFD code adaptation to the FPGA architecture. *The International Journal of High Performance Computing Applications*, 35(1):33–46, January 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020972461.

Ripeanu:2001:PPN

[RIF01] Matei Ripeanu, Adriana Iamnitchi, and Ian Foster. Performance predictions for a numerical relativity package in Grid environments. *The International Journal of High Performance Computing Applications*, 15(4):375–387, Winter 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500404.

Rogers:1990:NSF

[RKKC90] Stuart E. Rogers, Dochan Kwak, Cetin Kiris, and I-Dee Chang. Numerical simulation of flow through biofluid devices. *The International Journal of Supercomputer Applications*, 4(2):96–106, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400208.

Rizzi:2018:PDE

[RMS+18] F. Rizzi, K. Morris, K. Sargsyan, P. Mycek, C. Safta, O. Le Maître, O. Knio, and B. Debusschere. Partial differential equations preconditioner resilient to soft and hard faults. *The International Journal of High Performance Computing Applications*, 32(5):658–673, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016684975`.

Riha:2019:MPM

[RMV+19] Lubomir Riha, Michal Merta, Radim Vavrik, Tomas Brzobohaty, Alexandros Markopoulos, Ondrej Meca, Ondrej Vysocky, Tomas Kozubek, and Vit Vondrak. A massively parallel and memory-efficient FEM toolbox with a hybrid total FETI solver with accelerator support. *The International Journal of High Performance Computing Applications*, 33(4):660–677, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018798452`.

Rea:2019:GAT

[RPdB+19] Domenico Rea, Giansimone Perrino, Diego di Bernardo, Livia Marcellino, and Diego Romano. A GPU algorithm for tracking yeast cells in phase-contrast microscopy images. *The International Journal of High Performance Computing Applications*, 33(4):651–659, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018801482`.

Rauber:1996:PII

[RR96] Thomas Rauber and Gudula Rünger. Parallel implementations of iterated Runge–Kutta methods. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(1):62–90, Spring 1996. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209601000103`.

Russek:2020:SLC

[RRJ+20] Paweł Russek, Paweł Russek, Ernest Jamro, Agnieszka Dabrowska-Boruch, and Kazimierz Wiatr. A study of the loops control for reconfigurable computing with OpenCL in the LABS local search problem. *The International Journal of High Performance Computing Applications*, 34(1):103–114, January 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019868515`.

Renard:2006:DRA

[RRV06] Hélène Renard, Yves Robert,

and Frédéric Vivien. Data redistribution algorithms for heterogeneous processor rings. *The International Journal of High Performance Computing Applications*, 20(1):31–43, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/1/31.full.pdf+html`.

Roskies:1988:SPS

[RS88] Ralph Z. Roskies and Penny D. Sackett. Science at the Pittsburgh supercomputing center. *The International Journal of Supercomputer Applications*, 2(1):5–11, March 1988. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208800200102`.

Ruchkys:2003:PSI

[RS03] D. P. Ruchkys and S. W. Song. A parallel solution to infer genetic network architectures in gene expression analysis. *The International Journal of High Performance Computing Applications*, 17(2):163–172, Summer 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/1094342003017002006`.

Rycerz:2007:IBS

[RTRG+07] Katarzyna Rycerz, Alfredo Tirado-Ramos, Alessia Gualandris, Simon F. Portegies Zwart, Marian Bubak, and Peter M. A. Sloot. Interactive N-body simulations on the Grid: HLA versus MPI. *The International Journal of High Performance Computing Applications*, 21(2):210–221, Summer 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/2/210.full.pdf+html`.

Raghavan:2015:AEH

[RV15] Hari K. Raghavan and Sathish S. Vadhiyar. Adaptive executions of hyperbolic block-structured AMR applications on GPU systems. *The International Journal of High Performance Computing Applications*, 29(2):135–153, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342014545546`.

Rabenseifner:2003:COA

[RW03] Rolf Rabenseifner and Gerhard Wellein. Communication and optimization aspects of parallel programming models on hybrid architectures. *The International Journal of High Performance Computing Applications*, 17(1):49–62, Spring 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/1094342003017001005`.

Robertsen:2017:DGP

[RWM17] Fredrik Robertsén, Jan Westerholm, and Keijo Mattila. Designing a graphics processing unit accelerated petaflop capable lattice Boltzmann solver: Read aligned data layouts and asynchronous communication. *The International Journal of High Performance Computing Applications*, 31(3):246–255, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016658109.

Sabelli:1991:PRH

[Sab91] Nora H. Sabelli. Perspectives: Role of high-performance computing in science education. *The International Journal of Supercomputer Applications*, 5(2):95–98, June 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500208.

Sanjurjo:2013:PMC

[SABD13] José R. Sanjurjo, Margarita Amor, Montserrat Bóo, and Ramón Doallo. Parallel Monte Carlo radiosity using scene partitioning. *The International Journal of High Performance Computing Applications*, 27(3):318–334, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/3/318.full.pdf+html.

Stouch:1994:SSB

[SABK94] Terry R. Stouch, Howard E. Alper, and Donna Bassolino-Klimas. Supercomputing studies of biomembranes. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(1):6–23, Spring 1994. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209400800103.

Salzman:1987:VSC

[Sal87] David Salzman. Visualization in scientific computing: Summary of an NSF-sponsored panel report on graphics, image processing, and workstations. *The International Journal of Supercomputer Applications*, 1(4):106–108, December 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100408.

Snir:2004:FMS

[SB04] Marc Snir and David A. Bader. A framework for measuring supercomputer productivity. *The International Journal of High Performance Computing Applications*, 18(4):417–432, Winter 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/4/417.full.pdf+html.

Scogland:2018:I

[SB18] Tom Scogland and David Beckingsale. Introduction. *The International Journal of High Performance Computing Applications*, 32(4):553–554, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017708877.

Szustak:2019:PPP

[SB19] Lukasz Szustak and Pawel Bratek. Performance portable parallel programming of heterogeneous stencils across shared-memory platforms with modern Intel processors. *The International Journal of High Performance Computing Applications*, 33(3):534–553, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019828153.

Sunder:2006:DPA

[SBBS06] C. Shyam Sunder, G. Baskar, V. Babu, and David Strenski. A detailed performance analysis of the interpolation supplemented Lattice Boltzmann Method on the Cray T3E and Cray X1. *The International Journal of High Performance Computing Applications*, 20(4):557–570, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/4/557.full.pdf+html.

Saati:1990:SNS

[SBF90] Abdulmannan Saati, Sedat Biringen, and Charbel Farhat. Solving Navier–Stokes equations on a massively parallel processor: Beyond the 1 GFLOP performance. *The International Journal of Supercomputer Applications*, 4(1):72–80, March 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400106.

Su:2010:PPW

[SBG10] Hung-Hsun Su, Max Billingsley, and Alan D. George. Parallel performance wizard: a performance system for the analysis of partitioned global-address-space applications. *The International Journal of High Performance Computing Applications*, 24(4):485–510, Winter 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/4/485.full.pdf+html.

Su:1999:UAS

[SBWS99] Alan Su, Francine Berman, Richard Wolski, and Michelle Mills Strout. Using AppLeS to schedule simple SARA on the computational grid. *The International Journal of High Performance Computing Ap-*

plications, 13(3):253–262, Fall 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300308.

Sellappa:2004:CEM

[SC04a] Sriram Sellappa and Siddhartha Chatterjee. Cache-efficient multigrid algorithms. *The International Journal of High Performance Computing Applications*, 18(1):115–133, Spring 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/1/115.full.pdf+html.

Sievert:2004:SMP

[SC04b] Otto Sievert and Henri Casanova. A simple MPI process swapping architecture for iterative applications. *The International Journal of High Performance Computing Applications*, 18(3):341–352, Fall 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/3/341.full.pdf+html.

Skinner:2009:IEE

[SC09] David Skinner and Alok Choudary. On the importance of end-to-end application performance monitoring and workload analysis at the exascale. *The International Journal of High Performance Computing Applications*, 23(4):357–360, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/357.full.pdf+html.

Shapiro:1995:OPA

[SCB+95] Bruce A. Shapiro, Jih-Hsiang Chen, Tim Busse, Joseph Navetta, Wojciech Kasprzak, and Jacob V. Maizel, Jr. Optimization and performance analysis of a massively parallel dynamic programming algorithm for RNA secondary structure prediction. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(1):29–39, Spring 1995. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900103.

Saillard:2014:PCS

[SCB14] Emmanuelle Saillard, Patrick Carribault, and Denis Barthou. PARCOACH: Combining static and dynamic validation of MPI collective communications. *The International Journal of High Performance Computing Applications*, 28(4):425–434, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/4/425.

Serpa:2019:OSG

[SCD+19] Matheus S. Serpa, Eduardo Hm Cruz, Matthias Diener, Arthur M. Krause, Philippe Oa Navaux, Jairo Panetta, Albert Farrés, Claudia Rosas, and Mauricio Hanzich. Optimization strategies for geophysics models on manycore systems. *The International Journal of High Performance Computing Applications*, 33(3):473–486, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018824150`.

Strout:2004:STS

[SCFK04] Michelle Mills Strout, Larry Carter, Jeanne Ferrante, and Barbara Kreaseck. Sparse tiling for stationary iterative methods. *The International Journal of High Performance Computing Applications*, 18 (1):95–113, Spring 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/18/1/95.full.pdf+html`.

SSSTCSAICS:1992:NSC

[Sci92] Scientific Supercomputing Subcommittee, Technical Committee on Supercomputing Applications, IEEE Computer Society. NSF Supercomputer Center study: February 1992. *The International Journal of Supercomputer Applications*, 6(3):288–303, Fall 1992. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209200600306`.

Swirydowicz:2019:ATP

[ŚCKW19] Kasia Świrydowicz, Noel Chalmers, Ali Karakus, and Tim Warburton. Acceleration of tensor-product operations for high-order finite element methods. *The International Journal of High Performance Computing Applications*, 33(4):735–757, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018816368`.

Shantharam:2011:EDS

[SCR11] Manu Shantharam, Anirban Chatterjee, and Padma Raghavan. Exploiting dense substructures for fast sparse matrix vector multiplication. *The International Journal of High Performance Computing Applications*, 25(3):328–341, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/25/3/328.full.pdf+html`.

Sullivan:1987:ADL

[SD87] Francis Sullivan and Jack Dongarra. Algorithm design for large-scale computations. *The International Journal of Supercomputer Applications*, 1(1):99–105, March

1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100107.

Skjellum:2001:SA

[SDA+01] Anthony Skjellum, Rossen Dimitrov, Srihari Venkata Angaluri, David Lifka, George Coulouris, Putchong Uthayopas, Stephen L. Scott, and Rasit Eskicioglu. Systems administration. *The International Journal of High Performance Computing Applications*, 15(2):143–161, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500207.

Spataro:2017:NSF

[SDF+17] Davide Spataro, Donato D'Ambrosio, Giuseppe Filippone, Rocco Rongo, William Spataro, and Davide Marocco. The new SCIARA-fv3 numerical model and acceleration by GPGPU strategies. *The International Journal of High Performance Computing Applications*, 31(2):163–176, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015584520.

Stegailov:2019:AIM

[SDI+19] Vladimir Stegailov, Ekaterina Dlinnova, Timur Ismagilov, Mikhail Khalilov, Nikolay Kondratyuk, Dmitry Makagon, Alexander Semenov, Alexei Simonov, Grigory Smirnov, and Alexey Timofeev. Angara interconnect makes GPU-based desmos supercomputer an efficient tool for molecular dynamics calculations. *The International Journal of High Performance Computing Applications*, 33(3):507–521, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019826667.

Schmitt:2017:SCP

[SDJ17] Felix Schmitt, Robert Dietrich, and Guido Juckeland. Scalable critical-path analysis and optimization guidance for hybrid MPI–CUDA applications. *The International Journal of High Performance Computing Applications*, 31(6):485–498, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016661865.

Simon:2012:ISI

[SDS12] Horst Simon, Jack Dongarra, and Hemant Shukla. Introduction to the Special Issue. *The International Journal of High Performance Computing Applications*, 26(4):335–336, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http:/

/hpc.sagepub.com/content/26/4/335.full.pdf+html.

Sirovich:1992:MAL

[SE92] Lawrence Sirovich and Richard Everson. Management and analysis of large scientific datasets. *The International Journal of Supercomputer Applications*, 6(1):50–68, April 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600104.

Shahingohar:2012:FGA

[SE12] Aria Shahingohar and Roy Eagleson. A framework for GPU accelerated deformable object modeling. *The International Journal of High Performance Computing Applications*, 26(3):203–214, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/3/203.full.pdf+html.

Said:2018:LAP

[SFLC18] Issam Said, Pierre Fortin, Jean-Luc Lamotte, and Henri Calandra. Leveraging the accelerated processing units for seismic imaging: a performance and power efficiency comparison against CPUs and GPUs. *The International Journal of High Performance Computing Applications*, 32(6):819–837, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017696562.

Sun:2002:SPS

[SFP02] Xian-He Sun, Thomas Fahringer, and Mario Pantano. Scala: a performance system for scalable computing. *The International Journal of High Performance Computing Applications*, 16(4):357–370, Winter 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200201600401.

Smooke:1991:NMA

[SG91] M. D. Smooke and V. Giovangigli. Numerical modeling of axisymmetric laminar diffusion flames by a parallel boundary value method. *The International Journal of Supercomputer Applications*, 5(4):34–49, December 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500404.

Sonmez:2007:NEB

[SG07] Omer Ozan Sonmez and Attila Gursoy. A novel economic-based scheduling heuristic for computational Grids. *The International Journal of High Performance Computing Applications*, 21(1):21–29, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http:/

/hpc.sagepub.com/content/21/1/21.full.pdf+html.

Seager:2009:CHS

[SG09a] Mark Seager and Brent Gorda. The case for a hierarchical system model for Linux clusters. *The International Journal of High Performance Computing Applications*, 23(4): 350–354, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/350.full.pdf+html.

Seager:2009:CCM

[SG09b] Mark Seager and Brent Gorda. A collaboration and commercialization model for exascale software research. *The International Journal of High Performance Computing Applications*, 23(4):395–397, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/395.full.pdf+html.

Song:2009:EPA

[SGFC09] Shuaiwen Song, Rong Ge, Xizhou Feng, and Kirk W. Cameron. Energy profiling and analysis of the HPC challenge benchmarks. *The International Journal of High Performance Computing Applications*, 23(3):265–276, Fall 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/3/265.full.pdf+html.

Somwaru:1993:GCA

[SH93] Agapi L. Somwaru and Kenneth Hanson. Globally convex agricultural production system: parameter estimation. *The International Journal of Supercomputer Applications*, 7(3):265–271, September 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700307.

Shapiro:1988:PPV

[Sha88] Linda G. Shapiro. Programming parallel vision algorithms: a dataflow language approach. *The International Journal of Supercomputer Applications*, 2(4):29–44, December 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200404.

Szustak:2018:POS

[SHK+18] Lukasz Szustak, Kamil Halbiniak, Lukasz Kuczynski, Joanna Wrobel, and Adam Kulawik. Porting and optimization of solidification application for CPU-MIC hybrid platforms. *The International Journal of High Performance Computing Applications*, 32(4):523–539, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://

journals.sagepub.com/doi/full/10.1177/1094342016677740.

Simmendinger:2019:ISG

[SIC+19] Christian Simmendinger, Roman Iakymchuk, Luis Cebamanos, Dana Akhmetova, Valeria Bartsch, Tiberiu Rotaru, Mirko Rahn, Erwin Laure, and Stefano Markidis. Interoperability strategies for GASPI and MPI in large-scale scientific applications. *The International Journal of High Performance Computing Applications*, 33(3):554–568, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018808359.

Simon:1990:HPS

[Sim90] Horst D. Simon. Are highly parallel systems ready for prime time? *The International Journal of Supercomputer Applications*, 4(1):88–94, March 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400109.

Shirayama:1990:FVC

[SK90] Susumu Shirayama and Kunio Kuwahara. Flow visualization in computational fluid dynamics. *The International Journal of Supercomputer Applications*, 4(2):66–80, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400206.

Strip:1992:SMM

[SK92] David Strip and Michael Karasick. Solid modeling on a massively parallel processor. *The International Journal of Supercomputer Applications*, 6(2):175–192, June 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600205.

Stevens:2020:MBA

[SK20] James D. Stevens and Andreas Klöckner. A mechanism for balancing accuracy and scope in cross-machine black-box GPU performance modeling. *The International Journal of High Performance Computing Applications*, 34(6):589–614, November 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020921340.

Sterling:2001:HPC

[SKB01] Thomas Sterling, Daniel S. Katz, and Larry Bergman. High performance computing systems for autonomous spaceborne missions. *The International Journal of High Performance Computing Applications*, 15(3):282–296, Fall 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500306.

Sun:2010:HPC

[SKC10] Ninghui Sun, David Kahaner, and Debbie Chen. High-performance computing in China: Research and applications. *The International Journal of High Performance Computing Applications*, 24 (4):363–409, Winter 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/24/4/363.full.pdf+html`.

Suchyta:2022:EFH

[SKP+22] Eric Suchyta, Scott Klasky, Norbert Podhorszki, Matthew Wolf, Abolaji Adesoji, Cs Chang, Jong Choi, Philip E. Davis, Julien Dominski, Stéphane Ethier, Ian Foster, Kai Germaschewski, Berk Geveci, Chris Harris, Kevin A. Huck, Qing Liu, Jeremy Logan, Kshitij Mehta, Gabriele Merlo, Shirley V. Moore, Todd Munson, Manish Parashar, David Pugmire, Mark S. Shephard, Cameron W. Smith, Pradeep Subedi, Lipeng Wan, Ruonan Wang, and Shuangxi Zhang. The Exascale Framework for High Fidelity coupled Simulations (EFFIS): Enabling whole device modeling in fusion science. *The International Journal of High Performance Computing Applications*, 36 (1):106–128, January 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211019119`.

Solomou:2013:DPR

[SKS+13] Ekaterini Solomou, Spiros Kostopoulos, Konstantinos Sidiropoulos, Emmanouil Athanasiadis, Eleftherios Lavdas, Dimitris Glotsos, George Sakellaropoulos, Petros Zampakis, John Stonham, and Dionisis Cavouras. Designing a pattern recognition system on GPU for discriminating between patients with micro-ischaemic and multiple sclerosis lesions, using MRI images. *The International Journal of High Performance Computing Applications*, 27(3):348–359, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/27/3/348.full.pdf+html`.

Sundriyal:2019:EFS

[SKSG19] Vaibhav Sundriyal, Kristopher Keipert, Masha Sosonkina, and Mark S. Gordon. Effect of frequency scaling granularity on energy-saving strategies. *The International Journal of High Performance Computing Applications*, 33 (4):590–601, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018774405`.

Shahzad:2018:BUF

[SKZ+18] Faisal Shahzad, Moritz Kreutzer, Thomas Zeiser, Rui Machado, Andreas Pieper, Georg Hager, and Gerhard Wellein. Building and utilizing fault tolerance support tools for the GASPI applications. *The International Journal of High Performance Computing Applications*, 32(5):613–626, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016677085`.

Skjellum:1995:EAM

[SLG95] Anthony Skjellum, Ewing Lusk, and William Gropp. Early applications in the Message-Passing Interface (MPI). *The International Journal of Supercomputer Applications and High Performance Computing*, 9(2):79–94, Summer 1995. CODEN IJSCFG. ISSN 1078-3482. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209500900202`.

Sato:2019:PRP

[SLL+19] Kento Sato, Ignacio Laguna, Gregory L. Lee, Martin Schulz, Christopher M. Chambreau, Simone Atzeni, Michael Bentley, Ganesh Gopalakrishnan, Zvonimir Rakamaric, Geof Sawaya, Joachim Protze, and Dong H. Ahn. Pruners: Providing reproducibility for uncovering non-deterministic errors in runs on supercomputers. *The International Journal of High Performance Computing Applications*, 33(5): 777–783, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019834621`.

Shende:2006:TPP

[SM06] Sameer S. Shende and Allen D. Malony. The Tau Parallel Performance System. *The International Journal of High Performance Computing Applications*, 20(2):287–311, Summer 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/2/287.full.pdf+html`.

Sun:2020:SVM

[SMK+20] Tianjiao Sun, Lawrence Mitchell, Kaushik Kulkarni, Andreas Klöckner, David A. Ham, and Paul H. J. Kelly. A study of vectorization for matrix-free finite element methods. *The International Journal of High Performance Computing Applications*, 34(6):629–644, November 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342020945005`.

Szymanski:1987:PPR

[SMW87] Bolesław K. Szymanski and Dieter Mueller-Wichards. Parallel programming with recurrent equations. *The Interna-*

tional Journal of Supercomputer Applications, 1(2):44–74, June 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100205.

Subasi:2018:UFT

[SMZ+18] Omer Subasi, Tatiana Martsinkevich, Ferad Zyulkyarov, Osman Unsal, Jesus Labarta, and Franck Cappello. Unified fault-tolerance framework for hybrid task-parallel message-passing applications. *The International Journal of High Performance Computing Applications*, 32(5):641–657, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016669416.

Schreiber:2018:BSS

[SPHW18] Martin Schreiber, Pedro S. Peixoto, Terry Haut, and Beth Wingate. Beyond spatial scalability limitations with a massively parallel method for linear oscillatory problems. *The International Journal of High Performance Computing Applications*, 32(6): 913–933, November 1, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342016687625.

Symeonidou:2014:DRB

[SPNB14] Christi Symeonidou, Polyvios Pratikakis, Dimitrios S. Nikolopoulos, and Angelos Bilas. Distributed region-based memory allocation and synchronization. *The International Journal of High Performance Computing Applications*, 28 (4):406–414, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/4/406.

Sprunt:2006:MCP

[Spr06] Brinkley Sprunt. Managing the complexity of performance monitoring hardware: The Brink Andabyss approach. *The International Journal of High Performance Computing Applications*, 20 (4):533–540, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/4/533.full.pdf+html.

Setoain:2008:GPB

[SPTT08] Javier Setoain, Manuel Prieto, Christian Tenllado, and Francisco Tirado. GPU for parallel on-board hyperspectral image processing. *The International Journal of High Performance Computing Applications*, 22 (4):424–437, Winter 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/4/424.full.pdf+html.

Simitci:1998:CLP

[SR98] Huseyin Simitci and Daniel A. Reed. A comparison of logical and physical parallel I/O patterns. *The International Journal of High Performance Computing Applications*, 12(3):364–380, Fall 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209801200305.

Steensland:2005:PCM

[SR05] Johan Steensland and Jaideep Ray. A partitioner-centric model for structured adaptive mesh refinement partitioning trade-off optimization: Part I. *The International Journal of High Performance Computing Applications*, 19 (4):409–422, Winter 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/4/409.full.pdf+html.

Sethian:1989:AIF

[SS89] J. A. Sethian and James B. Salem. Animation of interactive fluid flow visualization tools on a data parallel machine. *The International Journal of Supercomputer Applications*, 3(2):10–39, June 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300203.

Sterling:1999:TTB

[SS99] Thomas Sterling and Daniel F. Savarese. From toys to teraflops: Bridging the Beowulf gap. *The International Journal of High Performance Computing Applications*, 13(3):191–200, Fall 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300303.

Siegel:2010:MMA

[SS10] Stephen F. Siegel and Andrew R. Siegel. Madre: the Memory-Aware Data Redistribution Engine. *The International Journal of High Performance Computing Applications*, 24(1):93–104, Spring 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/1/93.full.pdf+html.

Sankaran:2005:LMC

[SSB+05] Sriram Sankaran, Jeffrey M. Squyres, Brian Barrett, Vishal Sahay, Andrew Lumsdaine, Jason Duell, Paul Hargrove, and Eric Roman. The LAM/MPI checkpoint/restart framework: System-initiated checkpointing. *The International Journal of High Performance Computing Applications*, 19 (4):479–493, Winter 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.

sagepub.com/content/19/4/479.full.pdf+html.

Strelak:2019:GAD

[SSCF19] David Strelák, Carlos Óscar S. Sorzano, José María Carazo, and Jirí Filipovic. A GPU acceleration of 3-d Fourier reconstruction in cryo-EM. *The International Journal of High Performance Computing Applications*, 33(5):948–959, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019832958.

Sittig:1992:PCM

[SSNM92] Dean F. Sittig, Mark A. Shifman, Prakash Nadkarni, and Perry L. Miller. Parallel computation for medicine and biology: Applications of Linda at Yale University. *The International Journal of Supercomputer Applications*, 6(2):147–163, June 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600203.

Shan:2008:PAL

[SSQ08] Hongzhang Shan, Erich Strohmaier, and Ji Qiang. Performance analysis of leading HPC architectures with Beambeam3D. *The International Journal of High Performance Computing Applications*, 22(1):21–32, Spring 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/1/21.full.pdf+html.

Siegel:2014:MCP

[SSR+14] Andrew R. Siegel, Kord Smith, Paul K. Romano, Benoit Forget, and Kyle G. Felker. Multicore performance studies of a Monte Carlo neutron transport code. *The International Journal of High Performance Computing Applications*, 28(1):87–96, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/1/87.full.pdf+html.

Scalettar:1991:QMC

[SSSW91] R. T. Scalettar, D. J. Scalapino, R. L. Sugar, and S. R. White. Quantum Monte Carlo simulations of a CuO_2 model. *The International Journal of Supercomputer Applications*, 5(3):36–45, September 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500304.

Stoess:2012:LVM

[SSU+12] Jan Stoess, Udo Steinberg, Volkmar Uhlig, Jens Kehne, Jonathan Appavoo, and Amos Waterland. A lightweight virtual machine monitor for Blue Gene/P. *The International Journal of High Performance Computing Applica-*

tions, 26(2):95–109, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/2/95.full.pdf+html.

Stals:2019:ABF

[Sta19] Linda Stals. Algorithm-based fault recovery of adaptively refined parallel multilevel grids. *The International Journal of High Performance Computing Applications*, 33(1):189–211, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017720801.

Sterling:2001:IPC

[Ste01] Thomas Sterling. An introduction to PC clusters for high performance computing. *The International Journal of High Performance Computing Applications*, 15 (2):92–101, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500202.

Sterling:2004:PMM

[Ste04] Thomas Sterling. Productivity metrics and models for high performance computing. *The International Journal of High Performance Computing Applications*, 18(4):433–440, Winter 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/4/433.full.pdf+html.

Sterling:2009:BNN

[Ste09a] Thomas Sterling. The biggest need: a new model of computation. *The International Journal of High Performance Computing Applications*, 23 (4):335–336, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/335.full.pdf+html.

Sterling:2009:MCE

[Ste09b] Thomas Sterling. Models of computation — enabling exascale. *The International Journal of High Performance Computing Applications*, 23 (4):332–334, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/332.full.pdf+html.

Saltz:2013:FBA

[STP+13] Joel H. Saltz, George Teodoro, Tony Pan, Lee A. D. Cooper, Jun Kong, Scott Klasky, and Tahsin M. Kurc. Feature-based analysis of large-scale spatio-temporal sensor data on hybrid architectures. *The International Journal of High Performance Computing Applications*, 27(3):263–272, 2013.

CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/3/263.full.pdf+html.

Spataro:2017:HPC

[STS17] William Spataro, Giuseppe A. Trunfio, and Georgios Ch. Sirakoulis. High performance computing in modelling and simulation. *The International Journal of High Performance Computing Applications*, 31(2):117–118, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015584473.

Spafford:2013:MSA

[SVBP13] Kyle Spafford, Jeffrey S. Vetter, Thomas Benson, and Mike Parker. Modeling synthetic aperture radar computation with Aspen. *The International Journal of High Performance Computing Applications*, 27(3):255–262, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/3/255.full.pdf+html.

Sivagama:2009:DCE

[SVN09] Sundari M. Sivagama, Sathish S. Vadhiyar, and Ravi S. Nanjundiah. Dynamic component extension: a strategy for performance improvement in multicomponent applications. *The International Journal of High Performance Computing Applications*, 23(1):84–98, Spring 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/1/84.full.pdf+html.

Schikuta:2001:P

[SW01] Erich Schikuta and Helmut Wanek. Parallel I/O. *The International Journal of High Performance Computing Applications*, 15(2):162–168, Summer 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500208.

Swany:2004:BPT

[SW04] Martin Swany and Rich Wolski. Building performance topologies for computational Grids. *The International Journal of High Performance Computing Applications*, 18(2):255–265, Summer 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/2/255.full.pdf+html.

Snir:2014:AFE

[SWA+14] Marc Snir, Robert W. Wisniewski, Jacob A. Abraham, Sarita V. Adve, Saurabh Bagchi, Pavan Balaji, Jim Belak, Pradip Bose, Franck Cappello, Bill Carlson, Andrew A.

Chien, Paul Coteus, Nathan A. DeBardeleben, Pedro C. Diniz, Christian Engelmann, Mattan Erez, Saverio Fazzari, Al Geist, Rinku Gupta, Fred Johnson, Sriram Krishnamoorthy, Sven Leyffer, Dean Liberty, Subhasish Mitra, Todd Munson, Rob Schreiber, Jon Stearley, and Eric Van Hensbergen. Addressing failures in exascale computing. *The International Journal of High Performance Computing Applications*, 28 (2):129–173, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/2/129.

Smith:2003:DQP

[SWG+03] Jim Smith, Paul Watson, Anastasios Gounaris, Norman W. Paton, Alvaro A. A. Fernandes, and Rizos Sakellariou. Distributed query processing on the Grid. *The International Journal of High Performance Computing Applications*, 17(4):353–367, Winter 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/10943420030174002.

Santhanaraman:2005:DZC

[SWHP05] Gopalakrishnan Santhanaraman, Jiesheng Wu, Wei Huang, and Dhabaleswar K. Panda. Designing zero-copy Message Passing Interface derived datatype communication over Infiniband: Alternative approaches and performance evaluation. *The International Journal of High Performance Computing Applications*, 19 (2):129–142, Summer 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/2/129.full.pdf+html.

Salmon:1994:FPT

[SWW94] John K. Salmon, Michael S. Warren, and Gregoire S. Winckelmans. Fast parallel tree codes for gravitational and fluid dynamical N-body problems. *The International Journal of Supercomputer Applications and High Performance Computing*, 8(2):129–142, Summer 1994. CODEN IJSAE9. ISSN 0890-2720. URL ftp://ftp.cacr.caltech.edu/nbody/ijsa.ps.Z; ftp://ftp.cacr.caltech.edu/nbody/ijsanofig.ps.Z; http://journals.sagepub.com/doi/pdf/10.1177/109434209400800205.

Stathopoulos:1996:PIM

[SYF96] Andreas Stathopoulos, Anders B. Ynnerman, and Charlotte Froese Fischer. A PVM implementation of the MCHF atomic structure package. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(1):41–61, Spring 1996. CODEN IJSCFG. ISSN 1078-3482. URL http://

journals.sagepub.com/doi/pdf/10.1177/109434209601000102.

Smith:2011:STS

[SZ11] Barry Smith and Hong Zhang. Sparse triangular solves for *ILU* revisited: data layout crucial to better performance. *The International Journal of High Performance Computing Applications*, 25(4):386–391, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/4/386.full.pdf+html.

Schive:2012:DUH

[SZC12] Hsi-Yu Schive, Ui-Han Zhang, and Tzihong Chiueh. Directionally unsplit hydrodynamic schemes with hybrid Mpi/Openmp/GPU parallelization in AMR. *The International Journal of High Performance Computing Applications*, 26(4):367–377, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/4/367.full.pdf+html.

Tsuboi:2016:TDF

[TAM+16] Seiji Tsuboi, Kazuto Ando, Takayuki Miyoshi, Daniel Peter, Dimitri Komatitsch, and Jeroen Tromp. A 1.8 trillion degrees-of-freedom, 1.24 petaflops global seismic wave simulation on the K computer. *The International Journal of High Performance Computing Applications*, 30(4):411–422, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016632596.

Tiyyagura:2008:TSP

[TAR+08] S. R. Tiyyagura, P. Adamidis, R. Rabenseifner, P. Lammers, S. Borowski, F. Lippold, F. Svensson, O. Marxen, S. Haberhauer, A. P. Seitsonen, J. Furthmüller, K. Benkert, M. Galle, T. Bönisch, U. Küster, and M. M. Resch. Teraflops sustained performance with real world applications. *The International Journal of High Performance Computing Applications*, 22(2):131–148, Summer 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/2/131.full.pdf+html.

Tejedor:2017:PPC

[TBA+17] Enric Tejedor, Yolanda Becerra, Guillem Alomar, Anna Queralt, Rosa M. Badia, Jordi Torres, Toni Cortes, and Jesús Labarta. PyCOMPSs: Parallel computational workflows in Python. *The International Journal of High Performance Computing Applications*, 31(1):66–82, January 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://

journals.sagepub.com/doi/full/10.1177/1094342015594678.

Turner:2022:EMA

[TBB+22] John A. Turner, James Belak, Nathan Barton, Matthew Bement, Neil Carlson, Robert Carson, Stephen Dewitt, Jean-Luc Fattebert, Neil Hodge, Zechariah Jibben, Wayne King, Lyle Levine, Christopher Newman, Alex Plotkowski, Balasubramaniam Radhakrishnan, Samuel Temple Reeve, Matthew Rolchigo, Adrian Sabau, Stuart Slattery, and Benjamin Stump. ExaAM: Metal additive manufacturing simulation at the fidelity of the microstructure. *The International Journal of High Performance Computing Applications*, 36(1):13–39, January 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211042558.

Tuan:2010:AWB

[TC10] Do Van Tuan and Ui-Pil Chong. Audio watermarking based on advanced Wigner distribution and important frequency peaks. *The International Journal of High Performance Computing Applications*, 24(2):154–163, Summer 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/2/154.full.pdf+html.

Trivedi:2006:HAW

[TCW06] Rahul Trivedi, Abhishek Chandra, and Jon Weissman. Heterogeneity-aware workload distribution in donation-based Grids. *The International Journal of High Performance Computing Applications*, 20(4):455–466, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/4/455.full.pdf+html.

Tseng:2008:EPC

[TD08] Yu-Heng Tseng and Chris Ding. Efficient parallel I/O in Community Atmosphere Model (CAM). *The International Journal of High Performance Computing Applications*, 22(2):206–218, Summer 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/2/206.full.pdf+html.

Tao:2019:ZCF

[TDG+19] Dingwen Tao, Sheng Di, Hanqi Guo, Zizhong Chen, and Franck Cappello. Z-checker: a framework for assessing lossy compression of scientific data. *The International Journal of High Performance Computing Applications*, 33(2):285–303, March 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://

journals.sagepub.com/doi/full/10.1177/1094342017737147.

Tordini:2017:NIR

[TDM+17] Fabio Tordini, Maurizio Drocco, Claudia Misale, Luciano Milanesi, Pietro Liò, Ivan Merelli, Massimo Torquati, and Marco Aldinucci. NuChart-II: The road to a fast and scalable tool for Hi-C data analysis. *The International Journal of High Performance Computing Applications*, 31(3):196–211, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016668567.

Teixeira:2019:MCT

[TGP19] Thiago Sfx Teixeira, William Gropp, and David Padua. Managing code transformations for better performance portability. *The International Journal of High Performance Computing Applications*, 33 (6):1290–1306, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019865606.

Thakur:2005:OSO

[TGT05] Rajeev Thakur, William Gropp, and Brian Toonen. Optimizing the synchronization operations in Message Passing Interface one-sided communication. *The International Journal of High Performance Computing Applications*, 19(2):119–128, Summer 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/2/119.full.pdf+html.

Taylor:1996:PMI

[THC+96] Valerie E. Taylor, Milana Huang, Thomas Canfield, Rick Stevens, Daniel Reed, and Stephen Lamm. Performance modeling of interactive; immersive virtual environments for finite element simulations. *The International Journal of Supercomputer Applications and High Performance Computing*, 10 (2–3):145–156, Summer/Fall 1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000203.

Tiwari:2011:ATF

[THC+11] Ananta Tiwari, Jeffrey K. Hollingsworth, Chun Chen, Mary Hall, Chunhua Liao, Daniel J. Quinlan, and Jacqueline Chame. Auto-tuning full applications: a case study. *The International Journal of High Performance Computing Applications*, 25(3):286–294, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/3/286.full.pdf+html.

Trefethen:2009:DHP

[THDC09] Anne Trefethen, Nick Higham, Iain Duff, and Peter Coveney. Developing a high-performance computing/numerical analysis roadmap. *The International Journal of High Performance Computing Applications*, 23 (4):423–426, Winter 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/23/4/423.full.pdf+html.

Teijeiro:2019:OPS

[THDS19] Carlos Teijeiro, Thomas Hammerschmidt, Ralf Drautz, and Godehard Sutmann. Optimized parallel simulations of analytic bond-order potentials on hybrid shared/distributed memory with MPI and OpenMP. *The International Journal of High Performance Computing Applications*, 33(2):227–241, March 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017727060.

Treibig:2013:PLM

[THH+13] Jan Treibig, Georg Hager, Hannes G. Hofmann, Joachim Hornegger, and Gerhard Wellein. Pushing the limits for medical image reconstruction on recent standard multicore processors. *The International Journal of High Performance Computing Applications*, 27(2):162–177, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/2/162.full.pdf+html.

Terki-Hassaine:1988:MDF

[THL88] O. Terki-Hassaine and E. L. Leiss. Multitasking 3-D forward modeling using high order finite difference methods on the CRAY X-MP/416. *The International Journal of Supercomputer Applications*, 2(1):49–65, March 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200104.

Thompson:1990:GFB

[Tho90] W. Reid Thompson. Global four-band spectral classification of Jupiter's clouds: Color/albedo units and trends. *The International Journal of Supercomputer Applications*, 4(2):48–65, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400205.

Tisseur:1997:PIY

[Tis97] Françoise Tisseur. Parallel implementation of the Yau and Lu method for eigenvalue computation. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(3):197–204, Fall 1997. CODEN IJSCFG. ISSN

1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100302.

Teodoro:2017:APA

[TKA+17] George Teodoro, Tahsin Kurc, Guilherme Andrade, Jun Kong, Renato Ferreira, and Joel Saltz. Application performance analysis and efficient execution on systems with multi-core CPUs, GPUs and MICs: a case study with microscopy image analysis. *The International Journal of High Performance Computing Applications*, 31(1):32–51, January 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015594519.

Tago:1988:VCU

[TKSK88] Kazutami Tago, Hiroki Kumahora, Noriyuki Sadaoka, and Kinya Kobayashi. Vectorized calculations and use of fast semiconductor memories in the DV-X α method. *The International Journal of Supercomputer Applications*, 2 (3):58–72, September 1988. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208800200305.

Taylor:2022:DDG

[TLdS22] John A. Taylor, Pablo Larraondo, and Bronis R. de Supinski. Data-driven global weather predictions at high resolutions. *The International Journal of High Performance Computing Applications*, 36(2):130–140, March 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211039818.

Thakur:1998:PAW

[TLG98] Rajeev Thakur, Ewing Lusk, and William Gropp. I/O in parallel applications: The weakest link. *The International Journal of High Performance Computing Applications*, 12(4):389–395, Winter 1998. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209801200401.

Tamches:1999:UDK

[TM99] Ariel Tamches and Barton P. Miller. Using dynamic kernel instrumentation for kernel and application tuning. *The International Journal of High Performance Computing Applications*, 13(3):263–276, Fall 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300309.

Tryby:2010:SFE

[TMMR10] M. E. Tryby, B. Y. Mirghani, G. K. Mahinthakumar, and S. R. Ranjithan. A solution framework for environmental characterization problems. *The International Journal of High Performance Computing Applications*, 24(3):265–283, Fall 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/3/265.full.pdf+html.

Tilson:1999:HPC

[TMW+99] Jeffrey L. Tilson, Mike Minkoff, Albert F. Wagner, Ron Shepard, Paul Sutton, Robert J. Harrison, Ricky A. Kendall, and Adrian T. Wong. High-performance computational chemistry: Hartree–Fock electronic structure calculations on massively parallel processors. *The International Journal of High Performance Computing Applications*, 13(4):291–302, Winter 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300401.

Tawa:1991:AFP

[TMWS91] Gregory J. Tawa, Jules W. Moskowitz, Paula A. Whitlock, and Kevin E. Schmidt. Accurate first principles calculation of many-body interactions. *The International Journal of Supercomputer Applications*, 5(1):57–71, March 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500104.

Thakur:2007:AWP

[TNBG07] S. S. Thakur, S. Nandi, R. Bhattacharjee, and D. Goswami. An asynchronous wakeup power-saving protocol for multi-hop ad hoc networks. *The International Journal of High Performance Computing Applications*, 21(4):429–442, Winter 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/4/429.full.pdf+html.

Tseng:2021:DAI

[TNCC21] Shu-Mei Tseng, Bogdan Nicolae, Franck Cappello, and Aparna Chandramowlishwaran. Demystifying asynchronous I/O interference in HPC applications. *The International Journal of High Performance Computing Applications*, 35(4):391–412, July 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211016511.

Thanakornworakij:2013:RMS

[TNLP13] Thanadech Thanakornworakij, Raja Nassar, Chokchai Box Leangsuksun, and Mihaela Paun. Reliability model of a system of k nodes with simultaneous failures for high-performance computing applications. *The International Journal of High Performance Computing Applications*, 27(4):474–482, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/4/474.full.pdf+html.

Teijeiro:2018:TCB

[TPG+18] Diego Teijeiro, Xoán C. Pardo, Patricia González, Julio R. Banga, and Ramón Doallo. Towards cloud-based parallel metaheuristics. *The International Journal of High Performance Computing Applications*, 32(5):693–705, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016679011.

Timson:1992:CSC

[TR92] Kevin Timson and Ann Redelfs. Centers of supercomputing — Center for Research on Parallel Computation. *The International Journal of Supercomputer Applications*, 6(4):314–321, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600402.

Taufer:2017:SDB

[TR17] Michela Taufer and Arnold L. Rosenberg. Scheduling DAG-based workflows on single cloud instances: High-performance and cost effectiveness with a static scheduler. *The International Journal of High Performance Computing Applications*, 31(1):19–31, January 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015594518.

Thakur:2005:OCC

[TRG05] Rajeev Thakur, Rolf Rabenseifner, and William Gropp. Optimization of collective communication operations in MPICH. *The International Journal of High Performance Computing Applications*, 19(1):49–66, Spring 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/1/49.full.pdf+html.

Traff:2010:PAL

[TRS+10] Jesper Larsson Träff, Andreas Ripke, Christian Siebert, Pavan Balaji, Rajeev Thakur, and William Gropp. A pipelined algorithm for large, irregular all-gather problems. *The International Journal of High Performance Computing Applications*, 24(1):58–68, Spring 2010. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/24/1/58.full.pdf+html.

Tavarageri:2013:APT

[TRS13] Sanket Tavarageri, J. Ramanujam, and P. Sadayappan. Adaptive parallel tiled code generation and accelerated auto-tuning. *The International Journal of High Performance Computing Applications*, 27(4):412–425, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/4/412.full.pdf+html.

Tchipev:2019:TTT

[TSH+19] Nikola Tchipev, Steffen Seckler, Matthias Heinen, Jadran Vrabec, Fabio Gratl, Martin Horsch, Martin Bernreuther, Colin W. Glass, Christoph Niethammer, Nicolay Hammer, Bernd Krischok, Michael Resch, Dieter Kranzlmüller, Hans Hasse, Hans-Joachim Bungartz, and Philipp Neumann. TweTriS: Twenty trillion-atom simulation. *The International Journal of High Performance Computing Applications*, 33(5):838–854, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342018819741.

Turcotte:1995:I

[Tur95] Louis H. Turcotte. Introduction. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(2):77–78, Summer 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900201.

Torney:1987:CSD

[TWK87] David C. Torney, Tony T. Warnock, and Peter Kollman. Computer simulation of diffusion-limited chemical reactions in three dimensions. *The International Journal of Supercomputer Applications*, 1(2):33–43, June 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100204.

Tan:2007:SAO

[TXD+07] G. Tan, L. Xu, Z. Dai, S. Feng, and N. Sun. A study of architectural optimization methods in bioinformatics applications. *The International Journal of High Performance Computing Applications*, 21(3):371–384, Fall 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/3/371.full.pdf+html.

Uziel:1995:PMA

[UB95] Ember Uziel and Michael W. Berry. Parallel models of animal migration in Northern Yellowstone National Park. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(4):237–255, Winter 1995. CODEN IJSCFG. ISSN

1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900401.

Unat:2015:EEC

[UCZ+15] Didem Unat, Cy Chan, Weiqun Zhang, Samuel Williams, John Bachan, John Bell, and John Shalf. ExaSAT: an exascale co-design tool for performance modeling. *The International Journal of High Performance Computing Applications*, 29(2):209–232, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342014568690.

Uddin:2017:OIH

[Udd17] Irfan Uddin. One-IPC high-level simulation of microthreaded many-core architectures. *The International Journal of High Performance Computing Applications*, 31(2):152–162, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015584495.

Umar:1989:MDA

[UF89] Verena Meiser Umar and Charlotte Froese Fischer. Multitasking the Davidson algorithm for the large, sparse eigenvalue problem. *The International Journal of Supercomputer Applications*, 3(4):28–53, December 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300404.

Siraj-ul-Islam:2007:QNP

[uITH07] Siraj ul Islam, Ikram A. Tirmizi, and Fazal Haq. Quartic non-polynomial splines approach to the solution of a system of second-order boundary-value problems. *The International Journal of High Performance Computing Applications*, 21(1):42–49, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/1/42.full.pdf+html.

Ukidave:2014:APE

[UZM+14] Yash Ukidave, Amir Kavyan Ziabari, Perhaad Mistry, Gunar Schirner, and David Kaeli. Analyzing power efficiency of optimization techniques and algorithm design methods for applications on heterogeneous platforms. *The International Journal of High Performance Computing Applications*, 28(3):319–334, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/3/319.

Van-Catledge:1989:TGM

[VC89] Frederic A. Van-Catledge. Toward a general model for evaluating the relative performance of computer systems. *The International Journal of Supercomputer Applications*, 3(2):100–108, June 1989. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208900300207.

Vuduc:2004:SME

[VDB04] Richard Vuduc, James W. Demmel, and Jeff A. Bilmes. Statistical models for empirical search-based performance tuning. *The International Journal of High Performance Computing Applications*, 18 (1):65–94, Spring 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/1/65.full.pdf+html.

Varghese:2017:PAE

[VEMR17] Anish Varghese, Bob Edwards, Gaurav Mitra, and Alistair P. Rendell. Programming the Adapteva Epiphany 64-core network-on-chip coprocessor. *The International Journal of High Performance Computing Applications*, 31(4):285–302, July 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015599238.

Vadhiyar:2004:TAM

[VFD04] Sathish S. Vadhiyar, Graham E. Fagg, and Jack J. Dongarra. Towards an accurate model for collective communications. *The International Journal of High Performance Computing Applications*, 18 (1):159–167, Spring 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/1/159.full.pdf+html.

Vermij:2015:CER

[VFJ+15] Erik Vermij, Leandro Fiorin, Rik Jongerius, Christoph Hagleitner, and Koen Bertels. Challenges in exascale radio astronomy: Can the SKA ride the technology wave? *The International Journal of High Performance Computing Applications*, 29(1):37–50, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/29/1/37.

Valencia:2008:PPR

[VLO+08] David Valencia, Alexey Lastovetsky, Maureen O'Flynn, Antonio Plaza, and Javier Plaza. Parallel processing of remotely sensed hyperspectral images on heterogeneous networks of workstations using HeteroMPI. *The International Journal of High Performance Computing Applications*, 22 (4):386–407, Winter 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/4/386.full.pdf+html.

vonLaszewski:2003:FBS

[vLRA+03] Gregor von Laszewski, Branko Ruscic, Kaizar Amin, Patrick Wagstrom, Sriram Krishnan, and Sandeep Nijsure. A framework for building scientific knowledge Grids applied to thermochemical tables. *The International Journal of High Performance Computing Applications*, 17 (4):431–447, Winter 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/10943420030174007`.

Verma:2020:PIU

[VMPW20] Kevin Verma, Christopher Mccabe, Chong Peng, and Robert Wille. A PCISPH implementation using distributed multi-GPU acceleration for simulating industrial engineering applications. *The International Journal of High Performance Computing Applications*, 34(4):450–464, July 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342020906199`.

Vigueras:2014:ACD

[VOL+14] Guillermo Vigueras, Juan M. Orduña, Miguel Lozano, José M. Cecilia, and José M. García. Accelerating collision detection for large-scale crowd simulation on multi-core and many-core architectures. *The International Journal of High Performance Computing Applications*, 28(1):33–49, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/28/1/33.full.pdf+html`.

Videau:2018:B

[VPG+18] Brice Videau, Kevin Pouget, Luigi Genovese, Thierry Deutsch, Dimitri Komatitsch, Frédéric Desprez, and Jean-François Méhaut. BOAST. *The International Journal of High Performance Computing Applications*, 32(1):28–44, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342017718068`.

Vetter:2000:RTP

[VR00] Jeffrey S. Vetter and Daniel A. Reed. Real-time performance monitoring, adaptive control, and interactive steering of computational grids. *The International Journal of High Performance Computing Applications*, 14(4):357–366, Winter 2000. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434200001400407`.

Venkat:2019:SHP

[VRB+19] Anand Venkat, Tharindu Rusira, Raj Barik, Mary Hall, and Leonard Truong. SWIRL: High-performance many-core CPU code generation for deep neural networks. *The International Journal of High Performance Computing Applications*, 33(6):1275–1289, November 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019866247.

Vega-Rodriguez:2018:PCB

[VRRL18] Miguel A. Vega-Rodríguez and Álvaro Rubio-Largo. Parallelism in computational biology. *The International Journal of High Performance Computing Applications*, 32 (3):317–320, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342016677599.

Vazhkudai:2003:URT

[VS03] Sudharshan Vazhkudai and Jennifer M. Schopf. Using regression techniques to predict large data transfers. *The International Journal of High Performance Computing Applications*, 17(3):249–268, Fall 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003173004.

Vondrous:2014:PCP

[VSHN14] Alexander Vondrous, Michael Selzer, Johannes Hötzer, and Britta Nestler. Parallel computing for phase-field models. *The International Journal of High Performance Computing Applications*, 28(1):61–72, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/1/61.full.pdf+html.

Valin:2013:OPM

[VSS+13] Raúl Valín, Carlos Sampedro, Natalia Seoane, Manuel Aldegunde, Antonio Garcia-Loureiro, Andres Godoy, and Francisco Gámiz. Optimisation and parallelisation of a 2D MOSFET multi-subband ensemble Monte Carlo simulator. *The International Journal of High Performance Computing Applications*, 27(4):483–492, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/4/483.full.pdf+html.

Wadleigh:1999:HPF

[Wad99] Kevin R. Wadleigh. High performance FFT algorithms for cache-coherent multiprocessors. *The International Journal of High Performance Computing Applications*, 13 (2):163–171, Summer 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300206.

Walker:2003:PGC

[Wal03] David W. Walker. Preface: Grid computing: Infrastructure and applications. *The International Journal of High Performance Computing Applications*, 17(3):207–208, Fall 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/1094342003173010`.

Walker:2018:MOA

[Wal18] David W. Walker. Morton ordering of 2D arrays for efficient access to hierarchical memory. *The International Journal of High Performance Computing Applications*, 32(1):189–203, January 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342017725568`.

Wismuller:2004:PAT

[WBFB04] Roland Wismüller, Marian Bubak, Włodzimierz Funika, and Bartosz Baliś. A performance analysis tool for interactive applications on the Grid. *The International Journal of High Performance Computing Applications*, 18(3):305–316, Fall 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/18/3/305.full.pdf+html`.

Wang:2006:PSE

[WBG06] Dali Wang, Michael W. Berry, and Louis J. Gross. On parallelization of a spatially-explicit structured ecological model for integrated ecosystem simulation. *The International Journal of High Performance Computing Applications*, 20(4):571–581, Winter 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/4/571.full.pdf+html`.

Washington:1990:CSG

[WBMY90] Warren M. Washington, Thomas W. Bettge, Gerald A. Meehl, and Jeffery B. Yost. Computer simulation of the global climatic effects of increased greenhouse gases. *The International Journal of Supercomputer Applications*, 4(2):5–19, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400202`.

Walshaw:1999:MMP

[WCDS99] C. Walshaw, M. Cross, R. Diekmann, and F. Schlimbach. Multilevel mesh partitioning for optimizing domain shape. *The International Journal of High Performance Computing Applications*, 13(4):334–353, Winter 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://`

journals.sagepub.com/doi/pdf/10.1177/109434209901300404.

Walshaw:1995:LAO

[WCE95] Chris H. Walshaw, Mark Cross, and Martin G. Everett. A localized algorithm for optimizing unstructured mesh partitions. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(4):280–295, Winter 1995. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900403.

Worley:2005:PPP

[WD05] Patrick H. Worley and John B. Drake. Performance portability in the physical parameterizations of the Community Atmospheric Model. *The International Journal of High Performance Computing Applications*, 19(3):187–201, Fall 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/3/187.full.pdf+html.

Wyrzykowski:2018:GEN

[WD18] Roman Wyrzykowski and Ewa Deelman. Guest Editor's note. *The International Journal of High Performance Computing Applications*, 32(4):480–481, July 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342017694273.

Wyrzykowski:2019:GEN

[WD19] Roman Wyrzykowski and Ewa Deelman. Guest Editor's note: Special issue on challenges and solutions for porting applications to emerging high performance computing systems. *The International Journal of High Performance Computing Applications*, 33(3):487–488, May 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019843718.

Wyrzykowski:2021:GEN

[WD21] Roman Wyrzykowski and Ewa Deelman. Guest editor's note: Special issue on application performance optimization in the era of extreme heterogeneity. *The International Journal of High Performance Computing Applications*, 35(1):3–4, January 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020978033.

Wood:2015:GCM

[WDH+15] Lynn Wood, Jeff Daily, Michael Henry, Bruce Palmer, Karen Schuchardt, Donald Dazlich, Ross Heikes, and David Randall. A global climate model agent for high spatial and temporal resolution data.

The International Journal of High Performance Computing Applications, 29(1):107–116, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/29/1/107`.

Wu:2012:CTU

[WDW+12] Haicheng Wu, Gregory Diamos, Jin Wang, Si Li, and Sudhakar Yalamanchili. Characterization and transformation of unstructured control flow in bulk synchronous GPU applications. *The International Journal of High Performance Computing Applications*, 26(2):170–185, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/2/170.full.pdf+html`.

Weber:1991:NSF

[Web91] Thomas A. Weber. The National Science Foundation Supercomputer Centers Program. *The International Journal of Supercomputer Applications*, 5(4):3, December 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500401`.

Whalen:2012:NTC

[WEPB12] Sean Whalen, Sophie Engle, Sean Peisert, and Matt Bishop. Network-theoretic classification of parallel computation patterns. *The International Journal of High Performance Computing Applications*, 26(2):159–169, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/2/159.full.pdf+html`.

Wang:2019:MGP

[WET+19] Bei Wang, Stephane Ethier, William Tang, Khaled Z. Ibrahim, Kamesh Madduri, Samuel Williams, and Leonid Oliker. Modern gyrokinetic particle-in-cell simulation of fusion plasmas on top supercomputers. *The International Journal of High Performance Computing Applications*, 33 (1):169–188, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342017712059`.

Wong:2007:PPT

[WG07] Adam K. L. Wong and Andrzej M. Goscinski. The performance of a parallel TSP program and byte sequential benchmarks executing on a shared cluster. *The International Journal of High Performance Computing Applications*, 21(4):443–455, Winter 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/4/443.full.pdf+html`.

Wang:1990:TEB

[WGI90] Jack C. M. Wang, John M. Gary, and Hari K. Iyer. A technique to evaluate benchmarks: a case study using the Livermore loops. *The International Journal of Supercomputer Applications*, 4(4):40–55, December 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400404.

Wang:2020:SIA

[WH20] Jue Wang and XinFu He. Special issue on advanced simulation in engineering. *The International Journal of High Performance Computing Applications*, 34(2):157–158, March 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020905932.

Woolf:2003:WSM

[WHL03] Andrew Woolf, Keith Haines, and Chunlei Liu. A Web service model for climate data access on the Grid. *The International Journal of High Performance Computing Applications*, 17(3):281–295, Fall 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/1094342003173002.

Wilhelmson:1987:WF

[Wil87] Robert B. Wilhelmson. A walk into the future. *The International Journal of Supercomputer Applications*, 1(2):3–5, June 1987. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434208700100201.

Witten:1992:EFP

[Wit92] Matthew Witten. Editorial: the Frankenstein Project: Building a man in the machine and the arrival of the computational physician. *The International Journal of Supercomputer Applications*, 6(2):127–137, June 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600201.

Wilhelmson:1990:SEN

[WJS+90] Robert B. Wilhelmson, Brian F. Jewett, Crystal Shaw, Louis J. Wicker, Matthew Arrott, Colleen B. Bushell, Mark Bajuk, Jeffrey Thingvold, and Jeffery B. Yost. A study of the evolution of a numerically modeled severe storm. *The International Journal of Supercomputer Applications*, 4(2):20–36, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400203.

Wichmann:2019:PAO

[WKLW19] Karl-Robert Wichmann, Martin Kronbichler, Rainald Löhner, and Wolfgang A. Wall. Practical applicability of optimizations and performance models to complex stencil-based loop kernels in CFD. *The International Journal of High Performance Computing Applications*, 33(4):602–618, July 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342018774126`.

Wichmann:2021:RBC

[WKLW21] Karl-Robert Wichmann, Martin Kronbichler, Rainald Löhner, and Wolfgang A. Wall. A runtime based comparison of highly tuned lattice Boltzmann and finite difference solvers. *The International Journal of High Performance Computing Applications*, 35 (4):370–390, July 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/10943420211006169`.

Wholey:1992:CFC

[WLB92] Skef Wholey, Clifford Lasser, and Gyan Bhanot. Correspondence: FLO67: a case study in scalable programming. *The International Journal of Supercomputer Applications*, 6(4):383–388, December 1992. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209200600407`.

Wang:1991:PHP

[WLC91] X. W. Wang, Steven G. Louie, and Marvin L. Cohen. Predicting high-pressure and excited-state properties of real materials. *The International Journal of Supercomputer Applications*, 5(1):21–33, March 1991. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209100500102`.

Widener:2016:NPB

[WLFH16] Patrick M. Widener, Scott Levy, Kurt B. Ferreira, and Torsten Hoefler. On noise and the performance benefit of nonblocking collectives. *The International Journal of High Performance Computing Applications*, 30(1):121–133, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342015611952`.

Weeks:2018:HPE

[WLG+18] Nathan T. Weeks, Glenn R. Luecke, Brandon M. Groth, Marina Kraeva, Li Ma, Luke M. Kramer, James E. Koltes, and James M. Reecy. High-performance epistasis detection in quantitative trait GWAS. *The International Journal of High Performance Computing Applications*, 32 (3):321–336, 2018. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016658110`.

Wheless:1996:CBV

[WLVL+96] Glen H. Wheless, Cathy M. Lascara, Arnoldo Valle-Levinson, Donald P. Brutzman, William Sherman, William L. Hibbard, and Brian E. Paul. The Chesapeake Bay Virtual Environment (CBVE): Initial results from the prototypical system. *The International Journal of Supercomputer Applications and High Performance Computing*, 10 (2–3):199–210, Summer/Fall 1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209601000207.

Wong:1995:EHS

[WOG95] W. F. Wong, Yoshio Oyanagi, and Eiichi Goto. Evaluation of the Hitachi S-3800 supercomputer using six benchmarks. *The International Journal of Supercomputer Applications and High Performance Computing*, 9(1):58–70, Spring 1995. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209500900105.

Wehner:2008:TUH

[WOS08] Michael Wehner, Leonid Oliker, and John Shalf. Towards ultra-high resolution models of climate and weather. *The International Journal of High Performance Computing Applications*, 22(2):149–165, Summer 2008. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/22/2/149.full.pdf+html.

Wolski:2001:AMB

[WPBB01] Rich Wolski, James S. Plank, John Brevik, and Todd Bryan. Analyzing market-based resource allocation strategies for the computational Grid. *The International Journal of High Performance Computing Applications*, 15(3):258–281, Fall 2001. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200101500305.

Wright:2012:ART

[Wri12] Melvyn Wright. Adaptive real-time imaging synthesis telescopes. *The International Journal of High Performance Computing Applications*, 26(4):358–366, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/26/4/358.full.pdf+html.

Wang:2005:PCR

[WSCZ05] Ping Wang, Y. Tony Song, Yi Chao, and Hongchun Zhang. Parallel computation of the Regional Ocean Modeling System. *The International Journal of High Performance Computing Applications*, 19 (4):375–385, Winter 2005. CODEN IHPCFL. ISSN 1094-

3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/4/375.full.pdf+html.

Wienke:2014:TAS

[WSD+14] Sandra Wienke, Marcel Spekowius, Alesja Dammer, Dieter an Mey, Christian Hopmann, and Matthias S. Müller. Towards an accurate simulation of the crystallisation process in injection moulded plastic components by hybrid parallelisation. *The International Journal of High Performance Computing Applications*, 28(3):356–367, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/3/356.

Wang:1999:PEM

[WT99] G. Wang and Danesh K. Tafti. Performance enhancement on microprocessors with hierarchical memory systems for solving large sparse linear systems. *The International Journal of High Performance Computing Applications*, 13(1):63–79, Spring 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300104.

Wang:2016:EPI

[WVL+16] Teng Wang, Kevin Vasko, Zhuo Liu, Hui Chen, and Weikuan Yu. Enhance parallel input/output with cross-bundle aggregation. *The International Journal of High Performance Computing Applications*, 30(2):241–256, 2016. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/full/10.1177/1094342015618017.

Wrzesinska:2006:FTS

[WvNM+06] Gosia Wrzesińska, Rob V. van Nieuwpoort, Jason Maassen, Thilo Kielmann, and Henri E. Bal. Fault-tolerant scheduling of fine-grained tasks in Grid environments. *The International Journal of High Performance Computing Applications*, 20(1):103–114, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/1/103.full.pdf+html.

Witten:1992:IOU

[WW92] Matthew Witten and Robert E. Wyatt. Increasing our understanding of biological models through visual and sonic representations: a cortical case study. *The International Journal of Supercomputer Applications*, 6(3):257–280, September 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600304.

Widener:2011:ELA

[WWA+11] Patrick Widener, Matthew

Wolf, Hasan Abbasi, Scott McManus, Mary Payne, Matthew Barrick, Jack Pulikottil, Patrick Bridges, and Karsten Schwan. Exploiting latent I/O asynchrony in petascale science applications. *The International Journal of High Performance Computing Applications*, 25(2):161–179, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/25/2/161.full.pdf+html`.

Wang:2020:ATS

[WZH+20] Xianmeng Wang, Zhifeng Zhou, Changjun Hu, Wen Yang, Minfu Zhao, Zhaoshun Wang, and Peng Shi. Accelerating and tuning small matrix multiplications on Sunway TaihuLight: a case study of spectral element CFD Code Nek5000. *The International Journal of High Performance Computing Applications*, 34 (2):178–186, March 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342019882246`.

Wu:2017:HDB

[WZHG17] Yao Wu, Long Zheng, Brian Heilig, and Guang R. Gao. HAMR: a dataflow-based real-time in-memory cluster computing engine. *The International Journal of High Performance Computing Applications*, 31(5):361–374, 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/full/10.1177/1094342016672080`.

Yeo:2007:PUD

[YB07] Chee Shin Yeo and Rajkumar Buyya. Pricing for utility-driven resource management and allocation in clusters. *The International Journal of High Performance Computing Applications*, 21 (4):405–418, Winter 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/4/405.full.pdf+html`.

Yokota:2012:TSF

[YB12] Rio Yokota and Lorena A. Barba. A tuned and scalable fast multipole method as a preeminent algorithm for exascale systems. *The International Journal of High Performance Computing Applications*, 26(4):337–346, 2012. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/26/4/337.full.pdf+html`.

Yamin:2003:TMC

[YBA+03] Adenauer Corrêa Yamin, Jorge Victória Barbosa, Iara Augustin, Luciano Cavalheiro da Silva, Rodrigo Real, Cláudio Geyer, and Gerson

Cavalheiro. Towards merging context-aware, mobile and Grid computing. *The International Journal of High Performance Computing Applications*, 17(2):191–203, Summer 2003. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/1094342003017002008`.

Ye:1990:TEC

[YCHH90] Y.-Y. Ye, C.-T. Chan, K.-M. Ho, and B. N. Harmon. Total energy calculations for structural phase transformations. *The International Journal of Supercomputer Applications*, 4(3):111–121, September 1990. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209000400311`.

Yasar:2007:P

[YD07] Osman Yaşar and Hasan Dağ. Preface. *The International Journal of High Performance Computing Applications*, 21(1):3–4, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/21/1/3.full.pdf+html`.

Yelick:2004:SIA

[Yel04] Katherine Yelick. Special issue on automatic performance tuning. *The International Journal of High Performance Computing Applications*, 18(1):19, Spring 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/18/1/19.full.pdf+html`.

Young:1996:ICM

[YFH+96] Stephen J. Young, Gary Guo You Fan, David Hessler, Stephan Lamont, T. Todd Elvins, Martin Hadida-Hassan, Gary Alan Hanyzewski, James W. Durkin, Philip Hubbard, Gordon Kindlmann, Eric Wong, Donald Greenberg, Sidney Karin, and Mark H. Ellisman. Implementing a collaboratory for microscopic digital anatomy. *The International Journal of Supercomputer Applications and High Performance Computing*, 10(2–3):170–181, Summer/Fall 1996. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://journals.sagepub.com/doi/pdf/10.1177/109434209601000205`.

You:2014:EMC

[YFS+14] Yang You, Haohuan Fu, Shuaiwen Leon Song, Maryam Mehri Dehnavi, Lin Gan, Xiaomeng Huang, and Guangwen Yang. Evaluating multi-core and many-core architectures through accelerating the three-dimensional Lax–Wendroff correction stencil. *The International Journal of High Performance Computing Applications*, 28(3):301–318, 2014. CODEN IHPCFL.

ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/3/301.

Yelick:2007:PLC

[YHG+07] K. Yelick, P. Hilfinger, S. Graham, D. Bonachea, J. Su, A. Kamil, K. Datta, P. Colella, and T. Wen. Parallel languages and compilers: Perspective from the Titanium experience. *The International Journal of High Performance Computing Applications*, 21 (3):266–290, Fall 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/3/266.full.pdf+html.

Yamazaki:2019:RTS

[YIME19] Tadashi Yamazaki, Jun Igarashi, Junichiro Makino, and Toshikazu Ebisuzaki. Real-time simulation of a cat-scale artificial cerebellum on PEZY-SC processors. *The International Journal of High Performance Computing Applications*, 33 (1):155–168, January 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342017710705.

Yoshii:2011:PSE

[YIN+11] Kazutomo Yoshii, Kamil Iskra, Harish Naik, Pete Beckman, and P. Chris Broekema. Performance and scalability evaluation of 'big memory' on Blue Gene Linux. *The International Journal of High Performance Computing Applications*, 25(2):148–160, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/2/148.full.pdf+html.

Yamazaki:2019:DML

[YIYD19] Ichitaro Yamazaki, Akihiro Ida, Rio Yokota, and Jack Dongarra. Distributed-memory lattice H-matrix factorization. *The International Journal of High Performance Computing Applications*, 33(5):1046–1063, September 1, 2019. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019861139.

Yao:2022:MPT

[YJZN22] Zhi Yao, Revathi Jambunathan, Yadong Zeng, and Andrew Nonaka. A massively parallel time-domain coupled electrodynamics-micromagnetics solver. *The International Journal of High Performance Computing Applications*, 36 (2):167–181, March 1, 2022. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211057906.

Yi:2004:IMH

[YK04] Qing Yi and Ken Kennedy. Improving memory hierarchy performance through combined loop interchange and multi-level fusion. *The International Journal of High Performance Computing Applications*, 18(2):237–253, Summer 2004. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/18/2/237.full.pdf+html.

Yasar:2007:CMH

[YK07] O. Yaşar and M. Koçaş. Computational modeling of hermetic reciprocating compressors. *The International Journal of High Performance Computing Applications*, 21(1):30–41, Spring 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/1/30.full.pdf+html.

Yang:2014:OQD

[YLL+14] Wangdong Yang, Kenli Li, Yan Liu, Lin Shi, and Lanjun Wan. Optimization of quasi-diagonal matrix-vector multiplication on GPU. *The International Journal of High Performance Computing Applications*, 28(2):183–195, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/2/183.

Yarrow:1991:MSC

[YM91] Maurice Yarrow and Unmeel B. Mehta. Multiprocessing on supercomputers for computational aerodynamics. *The International Journal of Supercomputer Applications*, 5(2):47–73, June 1991. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209100500204.

Yang:2002:LSN

[YRA+02] Chao Yang, Padma Raghavan, Lloyd Arrowood, Donald W. Noid, Bobby G. Sumpter, and Robert E. Tuzun. Large-scale normal coordinate analysis on distributed memory parallel systems. *The International Journal of High Performance Computing Applications*, 16(4):409–424, Winter 2002. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434200201600404.

Yonezawa:1990:GT

[YSN90] Fumiko Yonezawa, Shoichi Sakamoto, and Shuichi Nosé. Glass, transition. *The International Journal of Supercomputer Applications*, 4(2):124–133, June 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400211.

Yu:2005:HPB

[YSP+05] Weikuan Yu, Sayantan Sur, Dhabaleswar K. Panda, Rob T. Aulwes, and Rich L. Graham. High performance broadcast support in LA-MPI over quadrics. *The International Journal of High Performance Computing Applications*, 19 (4):453–463, Winter 2005. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/19/4/453.full.pdf+html.

YarKhan:2006:RDG

[YSS+06] Asim YarKhan, Keith Seymour, Kiran Sagi, Zhiao Shi, and Jack Dongarra. Recent developments in GridSolve. *The International Journal of High Performance Computing Applications*, 20(1): 131–141, Spring 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/20/1/131.full.pdf+html.

Ytterstrom:1997:TPS

[Ytt97] Anders Ytterström. A tool for partitioning structured multiblock meshes for parallel computational mechanics. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):336–343, Winter 1997. CODEN IJSCFG. ISSN 1078-3482. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209701100407.

Young:1993:FVC

[YW93] Fongray Frank Young and Chwan-Hwa "John" Wu. A fully vectorized code for nonequilibrium RF glow discharge fluid modeling and its parallel processing on a CRAY X-MP. *The International Journal of Supercomputer Applications*, 7(1):50–63, March 1993. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700104.

Yuan:2014:OFA

[YWL+14] Shijin Yuan, Shicheng Wen, Hongyu Li, Xinfeng Zhang, and Qin Liu. An optimization framework for adjoint-based climate simulations: a case study of the Zebiak–Cane model. *The International Journal of High Performance Computing Applications*, 28(2):174–182, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/2/174.

Yao:2015:DSE

[YZC+15] Erlin Yao, Jiutian Zhang, Mingyu Chen, Guangming Tan, and Ninghui Sun. Detection of soft errors in *LU* decomposition with partial pivoting using algorithm-based fault tolerance. *The International Journal of High Performance Computing Applications*, 29(4):422–436, 2015. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://

journals.sagepub.com/doi/full/10.1177/1094342015578487.

Ye:2021:EGP

[YZZW21] Yutong Ye, Hongyin Zhu, Chaoying Zhang, and Binghai Wen. Efficient graphic processing unit implementation of the chemical-potential multiphase lattice Boltzmann method. *The International Journal of High Performance Computing Applications*, 35 (1):78–96, January 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342020968272.

Zwick:2020:SEL

[ZB20] David Zwick and S. Balachandar. A scalable Euler–Lagrange approach for multiphase flow simulation on spectral elements. *The International Journal of High Performance Computing Applications*, 34(3):316–339, May 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019867756.

Zheng:2011:PHL

[ZBMK11] Gengbin Zheng, Abhinav Bhatelé, Esteban Meneses, and Laxmikant V. Kalé. Periodic hierarchical load balancing for large supercomputers. *The International Journal of High Performance Computing Applications*, 25(4):371–385, 2011. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/25/4/371.full.pdf+html.

Zhu:1992:HMM

[ZC92] Jianping Zhu and Yung Ming Chen. History matching for multiphase reservoir models on shared memory supercomputers. *The International Journal of Supercomputer Applications*, 6(2):193–206, June 1992. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209200600206.

Zhu:2013:PUS

[ZCZ+13] Huming Zhu, Yu Cao, Zhiqiang Zhou, Maoguo Gong, and Licheng Jiao. Parallel unsupervised Synthetic Aperture Radar image change detection on a graphics processing unit. *The International Journal of High Performance Computing Applications*, 27(2):109–122, 2013. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/27/2/109.full.pdf+html.

Zhang:1993:EMC

[ZK93] Shiwei Zhang and M. H. Kalos. Exact Monte Carlo calculations for Fermions on a parallel machine. *The International Journal of Supercomputer Applications*, 7(1):15–24, March 1993. CODEN IJSAE9.

ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209300700102.

Zounmevo:2014:ESC

[ZKRA14] Judicael A. Zounmevo, Dries Kimpe, Robert Ross, and Ahmad Afsahi. Extreme-scale computing services over MPI: Experiences, observations and features proposal for next-generation message passing interface. *The International Journal of High Performance Computing Applications*, 28 (4):435–449, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/28/4/435.

Zaki:1999:TSP

[ZLGS99] Omer Zaki, Ewing Lusk, William Gropp, and Deborah Swider. Toward scalable performance visualization with Jumpshot. *The International Journal of High Performance Computing Applications*, 13(3):277–288, Fall 1999. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://journals.sagepub.com/doi/pdf/10.1177/109434209901300310.

Zender:2007:SPC

[ZM07] Charles S. Zender and Harry Mangalam. Scaling properties of common statistical operators for Gridded datasets. *The International Journal of High Performance Computing Applications*, 21(4):485–498, Winter 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL http://hpc.sagepub.com/content/21/4/485.full.pdf+html.

Zhang:2021:ABS

[ZMG+21] Weiqun Zhang, Andrew Myers, Kevin Gott, Ann Almgren, and John Bell. AMReX: Block-structured adaptive mesh refinement for multiphysics applications. *The International Journal of High Performance Computing Applications*, 35 (6):508–526, November 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/10943420211022811.

Zaider:1990:CAA

[ZOF90] Marco Zaider, David E. Orr, and John L. Fry. Calculational aspects of the assessment of dielectric response function and energy loss in materials: Applications to ice and polyacetylene. *The International Journal of Supercomputer Applications*, 4(4):25–39, December 1990. CODEN IJSAE9. ISSN 0890-2720. URL http://journals.sagepub.com/doi/pdf/10.1177/109434209000400403.

Zhang:2006:SSD

[ZRÇ+06] X. Zhang, B. Rutt, Ü. Çatalyürek, T. Kurç, P. Stoffa, M. Sen, and J. Saltz. Supporting scalable and distributed data subsetting and aggregation in large-scale seismic data analysis. *The International Journal of High Performance Computing Applications*, 20(3):423–438, Fall 2006. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/20/3/423.full.pdf+html`.

Zheng:2021:DPF

[ZWS21] Weijian Zheng, Dali Wang, and Fengguang Song. Designing a parallel feel-the-way clustering algorithm on HPC systems. *The International Journal of High Performance Computing Applications*, 35(2):154–169, March 1, 2021. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `https://journals.sagepub.com/doi/full/10.1177/1094342020975194`.

Zheng:2014:IMS

[ZZG+14] Liang Zheng, Huai Zhang, Taras Gerya, Matthew Knepley, David A. Yuen, and Yaolin Shi. Implementation of a multigrid solver on a GPU for Stokes equations with strongly variable viscosity based on Matlab and CUDA. *The International Journal of High Performance Computing Applications*, 28(1):50–60, 2014. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc.sagepub.com/content/28/1/50.full.pdf+html`.