Laxmikant V KalÃ©

List of Publications by Year
in descending order

53	17,828	1039406 9	996533 15
papers	citations	h-index	g-index

54	54	54	22812
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Scalable molecular dynamics with NAMD. Journal of Computational Chemistry, 2005, 26, 1781-1802.	1.5	15,208
2	Scalable molecular dynamics on CPU and GPU architectures with NAMD. Journal of Chemical Physics, 2020, 153, 044130.	1.2	1,548
3	Parallel Programming with Migratable Objects: Charm++ in Practice. , 2014, , .		105
4	Maximizing Throughput of Overprovisioned HPC Data Centers Under a Strict Power Budget. , 2014, , .		94
5	Optimizing power allocation to CPU and memory subsystems in overprovisioned HPC systems. , 2013, , .		68
6	Scaling Hierarchical N-body Simulations on GPU Clusters. , 2010, , .		52
7	ParFUM: a parallel framework for unstructured meshes for scalable dynamic physics applications. Engineering With Computers, 2006, 22, 215-235.	3.5	49
8	Maximizing Throughput on a Dragonfly Network. , 2014, , .		44
9	A Batch System with Efficient Adaptive Scheduling for Malleable and Evolving Applications. , 2015, , .		37
10	Evaluating HPC Networks via Simulation of Parallel Workloads. , 2016, , .		36
11	Identifying the Culprits Behind Network Congestion. , 2015, , .		35
12	Variation Among Processors Under Turbo Boost in HPC Systems. , 2016, , .		31
13	Hierarchical Load Balancing for Charm++ Applications on Large Supercomputers. , 2010, , .		30
14	Optimizing Data Locality for Fork/Join Programs Using Constrained Work Stealing. , 2014, , .		28
15	Team-Based Message Logging: Preliminary Results. , 2010, , .		25
16	Optimizing communication for Charm++ applications by reducing network contention. Concurrency Computation Practice and Experience, 2011, 23, 211-222.	1.4	25
17	Overcoming the Scalability Challenges of Epidemic Simulations on Blue Waters. , 2014, , .		25
18	Mapping to Irregular Torus Topologies and Other Techniques for Petascale Biomolecular Simulation. , 2014, 2014, 81-91.		24

#	ARTICLE	IF	CITATIONS
19	Using Migratable Objects to Enhance Fault Tolerance Schemes in Supercomputers. IEEE Transactions on Parallel and Distributed Systems, 2015, 26, 2061-2074.	4.0	24
20	Towards realizing the potential of malleable jobs. , 2014, , .		23
21	Supporting dynamic parallel object arrays. Concurrency Computation Practice and Experience, 2003, 15, 371-393.	1.4	19
22	Parallel Simulations of Dynamic Fracture Using Extrinsic Cohesive Elements. Journal of Scientific Computing, 2009, 39, 144-165.	1.1	19
23	Massively Parallel Simulations of Spread of Infectious Diseases over Realistic Social Networks. , 2017, , .		19
24	Thermal aware automated load balancing for HPC applications. , 2013, , .		15
25	Power, Reliability, and Performance: One System to Rule them All. Computer, 2016, 49, 30-37.	1.2	15
26	Partitioning Low-Diameter Networks to Eliminate Inter-Job Interference. , 2017, , .		15
27	OR parallel execution of Prolog programs with side effects. Journal of Supercomputing, 1988, 2, 209-223.	2.4	13
28	Mitigating Processor Variation through Dynamic Load Balancing. , 2016, , .		12
29	Simulation-Based Performance Analysis and Tuning for a Two-Level Directly Connected System. , 2011, , .		11
30	Scalable replay with partial-order dependencies for message-logging fault tolerance. , 2014, , .		11
31	Optimizing the performance of parallel applications on a 5D torus via task mapping. , 2014, , .		11
32	TRAM: Optimizing Fine-Grained Communication with Topological Routing and Aggregation of Messages. , 2014, , .		11
33	Toward Runtime Power Management of Exascale Networks by on/off Control of Links. , 2013, , .		10
34	PARSSSE: AN ADAPTIVE PARALLEL STATE SPACE SEARCH ENGINE. Parallel Processing Letters, 2011, 21, 319-338.	0.4	9
35	Runtime Coordinated Heterogeneous Tasks in Charm++. , 2016, , .		9
36	Using an Adaptive HPC Runtime System to Reconfigure the Cache Hierarchy. , 2014, , .		8

#	Article	IF	Citations
37	Analyzing Energy-Time Tradeoff in Power Overprovisioned HPC Data Centers. , 2015, , .		8
38	FlipBack: Automatic Targeted Protection against Silent Data Corruption. , 2016, , .		8
39	Parallel adaptive simulations of dynamic fracture events. Engineering With Computers, 2008, 24, 341-358.	3.5	7
40	CharmPy: A Python Parallel Programming Model. , 2018, , .		7
41	Optimizing pointâ€toâ€point communication between adaptive MPI endpoints in shared memory. Concurrency Computation Practice and Experience, 2020, 32, e4467.	1.4	7
42	Charm++ and MPI: Combining the Best of Both Worlds. , 2015, , .		5
43	Scalable Asynchronous Contact Mechanics Using Charm++. , 2015, , .		5
44	Scalable Molecular Dynamics for Large Biomolecular Systems. Scientific Programming, 2000, 8, 195-207.	0.5	4
45	Performance Optimization of a Parallel, Two Stage Stochastic Linear Program. , 2012, , .		4
46	Camel: collective-aware message logging. Journal of Supercomputing, 2015, 71, 2516-2538.	2.4	4
47	Parallel branch-and-bound for two-stage stochastic integer optimization. , 2013, , .		1
48	Scaling the ISAM Land Surface Model through Parallelization of Inter-component Data Transfer. , 2014, , .		1
49	Energy-optimal configuration selection for manycore chips with variation. International Journal of High Performance Computing Applications, 2017, 31, 451-466.	2.4	1
50	Runtime Techniques for Programming with Fast and Slow Memory. , 2017, , .		1
51	CkDirect: Unsynchronized One-Sided Communication in a Message-Driven Paradigm. , 2009, , .		0
52	Dynamic load balancing in GPU-based systems for a MPI program. , 2014, , .		0
53	A Fault-Tolerance Protocol for Parallel Applications with Communication Imbalance. , 2015, , .		0