

Sriram Krishnamoorthy

List of Publications by Year in descending order

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53
papers

1,232
citations

759233

12
h-index

642732

23
g-index

55
all docs

55
docs citations

55
times ranked

838
citing authors

#	ARTICLE	IF	CITATIONS
1	From NWChem to NWChemEx: Evolving with the Computational Chemistry Landscape. Chemical Reviews, 2021, 121, 4962-4998.	47.7	39
2	GFCCLib: Scalable and efficient coupled-cluster Green's function library for accurately tackling many-body electronic structure problems. Computer Physics Communications, 2021, 265, 108000.	7.5	8
3	Scalable Heterogeneous Execution of a Coupled-Cluster Model with Perturbative Triples. , 2020, , .		3
4	A Code Generator for High-Performance Tensor Contractions on GPUs. , 2019, , .		21
5	Toward generalized tensor algebra for ab initio quantum chemistry methods. , 2019, , .		10
6	Accelerating the Global Arrays ComEx Runtime Using Multiple Progress Ranks. , 2019, , .		2
7	Ground-Truth Prediction to Accelerate Soft-Error Impact Analysis for Iterative Methods. , 2019, , .		3
8	Efficient Cache Simulation for Affine Computations. Lecture Notes in Computer Science, 2019, , 65-85.	1.3	0
9	Exploring the capabilities of support vector machines in detecting silent data corruptions. Sustainable Computing: Informatics and Systems, 2018, 19, 277-290.	2.2	11
10	GPU code optimization using abstract kernel emulation and sensitivity analysis. , 2018, , .		9
11	Optimizing Tensor Contractions in CCSD(T) for Efficient Execution on GPUs. , 2018, , .		10
12	GPU code optimization using abstract kernel emulation and sensitivity analysis. ACM SIGPLAN Notices, 2018, 53, 736-751.	0.2	1
13	Work stealing for GPU-accelerated parallel programs in a global address space framework. Concurrency Computation Practice and Experience, 2016, 28, 3637-3654.	2.2	1
14	A Domain-Specific Compiler for a Parallel Multiresolution Adaptive Numerical Simulation Environment. , 2016, , .		8
15	PolyCheck: dynamic verification of iteration space transformations on affine programs. ACM SIGPLAN Notices, 2016, 51, 539-554.	0.2	2
16	Efficient execution of recursive programs on commodity vector hardware. ACM SIGPLAN Notices, 2015, 50, 509-520.	0.2	4
17	SCaLeM. , 2014, , .		1
18	Checksumming Strategies for Data in Volatile Memories. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
19	Scalable replay with partial-order dependencies for message-logging fault tolerance. , 2014, , .		11
20	CAST: Contraction Algorithm for Symmetric Tensors. , 2014, , .		1
21	A Communication-Optimal Framework for Contracting Distributed Tensors. , 2014, , .		13
22	Optimizing tensor contraction expressions for hybrid CPU-GPU execution. Cluster Computing, 2013, 16, 131-155.	5.0	32
23	Noniterative Multireference Coupled Cluster Methods on Heterogeneous CPU-GPU Systems. Journal of Chemical Theory and Computation, 2013, 9, 1949-1957.	5.3	37
24	Multi-Fault Tolerance for Cartesian Data Distributions. International Journal of Parallel Programming, 2013, 41, 469-493.	1.5	10
25	Efficient scheduling of recursive control flow on GPUs. , 2013, , .		11
26	A framework for load balancing of tensor contraction expressions via dynamic task partitioning. , 2013, , .		15
27	Steal Tree. ACM SIGPLAN Notices, 2013, 48, 507-518.	0.2	4
28	Work stealing and persistence-based load balancers for iterative overdecomposed applications. , 2012, , .		44
29	Supporting the Global Arrays PGAS Model Using MPI One-Sided Communication. , 2012, , .		36
30	Load Balancing of Dynamical Nucleation Theory Monte Carlo Simulations through Resource Sharing Barriers. , 2012, , .		8
31	Empirical performance model-driven data layout optimization and library call selection for tensor contraction expressions. Journal of Parallel and Distributed Computing, 2012, 72, 338-352.	4.1	13
32	GPU-Based Implementations of the Noniterative Regularized-CCSD(T) Corrections: Applications to Strongly Correlated Systems. Journal of Chemical Theory and Computation, 2011, 7, 1316-1327.	5.3	72
33	Massively parallel implementation of the multireference Brillouin-Wigner CCSD method. Chemical Physics Letters, 2011, 514, 347-351.	2.6	22
34	A Redundant Communication Approach to Scalable Fault Tolerance in PGAS Programming Models. , 2011, , .		20
35	Tolerating correlated failures for generalized Cartesian distributions via bipartite matching. , 2011, , .		9
36	Lifeline-based global load balancing. ACM SIGPLAN Notices, 2011, 46, 201-212.	0.2	15

#	ARTICLE	IF	CITATIONS
37	Scalable implementations of accurate excited-state coupled cluster theories. , 2011, , .		24
38	Application-Specific Fault Tolerance via Data Access Characterization. Lecture Notes in Computer Science, 2011, , 340-352.	1.3	4
39	Scalable Communication Trace Compression. , 2010, , .		9
40	Selective Recovery from Failures in a Task Parallel Programming Model. , 2010, , .		5
41	Active-space completely-renormalized equation-of-motion coupled-cluster formalism: Excited-state studies of green fluorescent protein, free-base porphyrin, and oligoporphyrin dimer. Journal of Chemical Physics, 2010, 132, 154103.	3.0	59
42	EOMCC, MRPT, and TDDFT Studies of Charge Transfer Processes in Mixed-Valence Compounds: Application to the Spiro Molecule^{â€‹}. Journal of Physical Chemistry A, 2010, 114, 8764-8771.	2.5	20
43	Scalable work stealing. , 2009, , .		190
44	Performance Optimization of Tensor Contraction Expressions for Many-Body Methods in Quantum Chemistry. Journal of Physical Chemistry A, 2009, 113, 12715-12723.	2.5	24
45	A compiler framework for optimization of affine loop nests for gpgpus. , 2008, , .		153
46	Solving Large, Irregular Graph Problems Using Adaptive Work-Stealing. , 2008, , .		71
47	Non-collective parallel I/O for global address space programming models. , 2007, , .		2
48	Efficient search-space pruning for integrated fusion and tiling transformations. Concurrency Computation Practice and Experience, 2007, 19, 2425-2443.	2.2	4
49	Automatic code generation for many-body electronic structure methods: the tensor contraction engineâ€‹â€‹. Molecular Physics, 2006, 104, 211-228.	1.7	104
50	Efficient synthesis of out-of-core algorithms using a nonlinear optimization solver. Journal of Parallel and Distributed Computing, 2006, 66, 659-673.	4.1	6
51	Layout transformation support for the disk resident arrays framework. Journal of Supercomputing, 2006, 36, 153-170.	3.6	3
52	Combining analytical and empirical approaches in tuning matrix transposition. , 2006, , .		20
53	Efficient parallel out-of-core matrix transposition. International Journal of High Performance Computing and Networking, 2004, 2, 110.	0.4	14