Ramon Doallo

List of Publications by Year
in descending order

56 papers	1,172 citations	567281 15 h-index	501196 28 g-index
56 all docs	56 docs citations	56 times ranked	1505 citing authors

#	Article	IF	Citations
1	Parameter estimation in large-scale systems biology models: a parallel and self-adaptive cooperative strategy. BMC Bioinformatics, 2017, 18, 52.	2.6	300
2	High performance genetic algorithm for land use planning. Computers, Environment and Urban Systems, 2013, 37, 45-58.	7.1	87
3	Performance analysis of HPC applications in the cloud. Future Generation Computer Systems, 2013, 29, 218-229.	7.5	85
4	Java in the High Performance Computing arena: Research, practice and experience. Science of Computer Programming, 2013, 78, 425-444.	1.9	70
5	Performance Evaluation of MPI, UPC and OpenMP on Multicore Architectures. Lecture Notes in Computer Science, 2009, , 174-184.	1.3	52
6	A population-based iterated greedy algorithm for the delimitation and zoning of rural settlements. Computers, Environment and Urban Systems, 2013, 39, 12-26.	7.1	47
7	Research Article: A GIS-embedded system to support land consolidation plans in Galicia. International Journal of Geographical Information Science, 2003, 17, 377-396.	4.8	46
8	CPPC: a compiler–assisted tool for portable checkpointing of message–passing applications. Concurrency Computation Practice and Experience, 2010, 22, 749-766.	2.2	41
9	ProtTest-HPC: Fast Selection of Best-Fit Models of Protein Evolution. Lecture Notes in Computer Science, 2011, , 177-184.	1.3	41
10	F-MPJ: scalable Java message-passing communications on parallel systems. Journal of Supercomputing, 2012, 60, 117-140.	3.6	30
11	Java for high performance computing. , 2009, , .		23
12	Implementing Parallel Differential Evolution on Spark. Lecture Notes in Computer Science, 2016, , 75-90.	1.3	23
13	High performance air pollution modeling for a power plant environment. Parallel Computing, 2003, 29, 1763-1790.	2.1	20
14	A cloud-based enhanced differential evolution algorithm for parameter estimation problems in computational systems biology. Cluster Computing, 2017, 20, 1937-1950.	5.0	20
15	Parallel Metaheuristics in Computational Biology: An Asynchronous Cooperative Enhanced Scatter Search Method. Procedia Computer Science, 2015, 51, 630-639.	2.0	17
16	Java Fast Sockets: Enabling high-speed Java communications on high performance clusters. Computer Communications, 2008, 31, 4049-4059.	5.1	16
17	NPB-MPJ: NAS Parallel Benchmarks Implementation for Message-Passing in Java. , 2009, , .		15
18	Analysis of I/O Performance on an Amazon EC2 Cluster Compute and High I/O Platform. Journal of Grid Computing, 2013, 11, 613-631.	3.9	15

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19	Supporting multi-resolution out-of-core rendering of massive LiDAR point clouds through non-redundant data structures. International Journal of Geographical Information Science, 2019, 33, 593-617.	4.8	15
20	Big Data Geospatial Processing for Massive Aerial LiDAR Datasets. Remote Sensing, 2020, 12, 719.	4.0	15
21	Automated and accurate cache behavior analysis for codes with irregular access patterns. Concurrency Computation Practice and Experience, 2007, 19, 2407-2423.	2.2	14
22	A simulated annealing algorithm for zoning in planning using parallel computing. Computers, Environment and Urban Systems, 2016, 59, 95-106.	7.1	14
23	Using the Cloud for Parameter Estimation Problems: Comparing Spark vs MPI with a Case-Study. , 2017, , .		11
24	Precise automatable analytical modeling of the cache behavior of codes with indirections. Transactions on Architecture and Code Optimization, 2007, 4, 16.	2.0	10
25	Accurate prediction of the behavior of multithreaded applications in shared caches. Parallel Computing, 2013, 39, 36-57.	2.1	10
26	Towards cloud-based parallel metaheuristics. International Journal of High Performance Computing Applications, 2018, 32, 693-705.	3.7	10
27	A parallel metaheuristic for large mixed-integer dynamic optimization problems, with applications in computational biology. PLoS ONE, 2017, 12, e0182186.	2.5	10
28	Spark implementation of the enhanced Scatter Search metaheuristic: Methodology and assessment. Swarm and Evolutionary Computation, 2020, 59, 100748.	8.1	9
29	Web-GIS tool for the management of rural land markets. Earth Science Informatics, 2013, 6, 209-226.	3.2	8
30	FastMPJ: a scalable and efficient Java message-passing library. Cluster Computing, 2014, 17, 1031-1050.	5.0	8
31	GVLiDAR: an interactive web-based visualization framework to support geospatial measures on lidar data. International Journal of Remote Sensing, 2017, 38, 827-849.	2.9	8
32	Design of efficient Java message-passing collectives onÂmulti-core clusters. Journal of Supercomputing, 2011, 55, 126-154.	3.6	7
33	Evaluation of messaging middleware for high-performance cloud computing. Personal and Ubiquitous Computing, 2013, 17, 1709-1719.	2.8	7
34	COPA. , 2001, , .		6
35	Device level communication libraries for highâ€performance computing in Java. Concurrency Computation Practice and Experience, 2011, 23, 2382-2403.	2.2	5
36	Automatic Generation of Optimized OpenCL Codes Using OCLoptimizer. Computer Journal, 2015, 58, 3057-3073.	2.4	5

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37	Optimizing parcel exchange among landowners: A soft alternative to land consolidation. Computers, Environment and Urban Systems, 2020, 79, 101422.	7.1	5
38	High Performance Air Pollution Simulation Using OpenMP. Journal of Supercomputing, 2004, 28, 311-321.	3.6	4
39	Efficient Java Communication Protocols on High-speed Cluster Interconnects. Local Computer Networks (LCN), Proceedings of the IEEE Conference on, 2006, , .	0.0	4
40	High Performance Java Sockets for Parallel Computing on Clusters. , 2007, , .		4
41	Scalable Java Communication Middleware for Hybrid Shared/Distributed Memory Architectures. , 2011, , .		4
42	Design of scalable Java message-passing communications over InfiniBand. Journal of Supercomputing, 2012, 61, 141-165.	3.6	4
43	Performance Evaluation of Data-Intensive Computing Applications on a Public IaaS Cloud. Computer Journal, 2016, 59, 287-307.	2.4	4
44	Set Associative Cache Behavior Optimizationâ‹†. Lecture Notes in Computer Science, 1999, , 229-238.	1.3	4
45	Land consolidation through parcel exchange among landowners using a distributed Spark-based genetic algorithm. Journal of Supercomputing, 0, , .	3.6	4
46	Modeling set associative caches behavior for irregular computations. Performance Evaluation Review, 1998, 26, 192-201.	0.6	3
47	Multimethod optimization in the cloud: A caseâ€study in systems biology modelling. Concurrency Computation Practice and Experience, 2018, 30, e4488.	2.2	3
48	Hybrid parallel multimethod hyperheuristic for mixed-integer dynamic optimization problems in computational systems biology. Journal of Supercomputing, 2019, 75, 3471-3498.	3.6	3
49	A GIS web-based tool for the management of the PGI potato of Galicia. Computers and Electronics in Agriculture, 2004, 44, 161-171.	7.7	2
50	Efficient Java Communication Libraries over InfiniBand. , 2009, , .		2
51	Multimethod Optimization for Reverse Engineering of Complex Biological Networks. , 2018, , .		1
52	An automatic optimizer for heterogeneous devices. Future Generation Computer Systems, 2020, 106, 572-584.	7.5	1
53	Lowâ€latency Java communication devices on RDMAâ€enabled networks. Concurrency Computation Practice and Experience, 2015, 27, 4852-4879.	2.2	0
54	Air Pollution Modeling in the CrossGrid Project. Lecture Notes in Computer Science, 2004, , 132-139.	1.3	0

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55	Dynamic Load-Balancing for the STEM-II Air Quality Model. Lecture Notes in Computer Science, 2006, , 701-710.	1.3	0
56	Guiding the Optimization of Parallel Codes on Multicores Using an Analytical Cache Model. Lecture Notes in Computer Science, 2018, , 387-394.	1.3	0