

# Ester Martin Garzon

## List of Publications by Year in descending order

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66  
papers

930  
citations

623734

14  
h-index

526287

27  
g-index

68  
all docs

68  
docs citations

68  
times ranked

742  
citing authors

#	ARTICLE	IF	CITATIONS
1	Studying the Cost of n-qubit Toffoli Gates. Lecture Notes in Computer Science, 2022, , 122-128.	1.3	2
2	HPC enables efficient 3D membrane segmentation in electron tomography. Journal of Supercomputing, 2022, 78, 19097-19113.	3.6	2
3	Parallel radiation dose computations with GENOCOP III on GPUs. Journal of Supercomputing, 2021, 77, 66-76.	3.6	3
4	Optimal fault-tolerant quantum comparators for image binarization. Journal of Supercomputing, 2021, 77, 8433-8444.	3.6	18
5	Powers of Large Matrices on GPU Platforms to Compute the Roman Domination Number of Cylindrical Graphs. IEEE Access, 2021, 9, 29346-29355.	4.2	2
6	On solving the unrelated parallel machine scheduling problem: active microrheology as a case study. Journal of Supercomputing, 2020, 76, 8494-8509.	3.6	9
7	A review on reversible quantum adders. Journal of Network and Computer Applications, 2020, 170, 102810.	9.1	20
8	Dynamics and friction of a large colloidal particle in a bath of hard spheres: Langevin dynamics simulations and hydrodynamic description. Physical Review E, 2020, 101, 052607.	2.1	4
9	An optimized quantum circuit for converting from sign-magnitude to two's complement. Quantum Information Processing, 2019, 18, 1.	2.2	8
10	Finite size effects in active microrheology in colloids. Computer Physics Communications, 2019, 236, 8-14.	7.5	7
11	Improving the energy efficiency of SMACOF for multidimensional scaling on modern architectures. Journal of Supercomputing, 2019, 75, 1038-1050.	3.6	7
12	TomoEED: fast edge-enhancing denoising of tomographic volumes. Bioinformatics, 2018, 34, 3776-3778.	4.1	15
13	Improving the performance and energy of Non-Dominated Sorting for evolutionary multiobjective optimization on GPU/CPU platforms. Journal of Global Optimization, 2018, 71, 631-649.	1.8	10
14	An approach to optimise the energy efficiency of iterative computation on integrated GPU-CPU systems. Journal of Supercomputing, 2017, 73, 114-125.	3.6	10
15	Using low-power platforms for Evolutionary Multi-Objective Optimization algorithms. Journal of Supercomputing, 2017, 73, 302-315.	3.6	8
16	Accelerating the problem of microrheology in colloidal systems on a GPU. Journal of Supercomputing, 2017, 73, 370-383.	3.6	5
17	Non-dominated sorting procedure for Pareto dominance ranking on multicore CPU and/or GPU. Journal of Global Optimization, 2017, 69, 607-627.	1.8	22
18	A Data Partitioning Model for Highly Heterogeneous Systems. Lecture Notes in Computer Science, 2017, , 468-479.	1.3	1

#	ARTICLE	IF	CITATIONS
19	EDUCATIONAL STRATEGIES BASED ON LOW-COST PLATFORMS IN THE AREA OF COMPUTER ENGINEERING. , 2017, , .		0
20	GPU Computing to Speed-Up the Resolution of Microrheology Models. Lecture Notes in Computer Science, 2016, , 457-466.	1.3	3
21	Improving the Energy Efficiency of Evolutionary Multi-objective Algorithms. Lecture Notes in Computer Science, 2016, , 62-75.	1.3	0
22	Parallel resolution of the 3D Helmholtz equation based on multi-graphics processing unit clusters. Concurrency Computation Practice and Experience, 2015, 27, 3205-3219.	2.2	5
23	Exploring the performanceâ€“powerâ€“energy balance of low-power multicore and manycore architectures for anomaly detection in remote sensing. Journal of Supercomputing, 2015, 71, 1893-1906.	3.6	6
24	An efficient approach for solving the HP protein folding problem based on UEGO. Journal of Mathematical Chemistry, 2015, 53, 794-806.	1.5	8
25	High performance computing for a 3-D optical diffraction tomographic application in fluid velocimetry. Optics Express, 2015, 23, 4021.	3.4	3
26	High performance computing: an essential tool for science and engineering breakthroughs. Journal of Supercomputing, 2014, 70, 511-513.	3.6	2
27	FastSpMM: An Efficient Library for Sparse Matrix Matrix Product on GPUs. Computer Journal, 2014, 57, 968-979.	2.4	30
28	Efficient Implementation of Hyperspectral Anomaly Detection Techniques on GPUs and Multicore Processors. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2256-2266.	4.9	26
29	Performance evaluation of kernel fusion BLAS routines on the GPU: iterative solvers as case study. Journal of Supercomputing, 2014, 70, 577-587.	3.6	15
30	A GPU implementation of a hybrid evolutionary algorithm: GPuEGO. Journal of Supercomputing, 2014, 70, 684-695.	3.6	5
31	The BiConjugate gradient method on GPUs. Journal of Supercomputing, 2013, 64, 49-58.	3.6	12
32	Analysis and Optimizations of Global and Local Versions of the RX Algorithm for Anomaly Detection in Hyperspectral Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 801-814.	4.9	206
33	Anomaly detection based on a parallel kernel RX algorithm for multicore platforms. Journal of Applied Remote Sensing, 2012, 6, 061503.	1.3	21
34	Dynamic Load Scheduling on CPU-GPU for Iterative Tomographic Reconstruction. , 2012, , .		5
35	High performance computing for Optical Diffraction Tomography. , 2012, , .		2
36	Fast Sparse Matrix Matrix Product Based on ELLR-T and GPU Computing. , 2012, , .		6

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37	Automatic tuning of the sparse matrix vector product on GPUs based on the ELLR-T approach. <i>Parallel Computing</i> , 2012, 38, 408-420.	2.1	35
38	Hybrid computing: CPU+GPU co-processing and its application to tomographic reconstruction. <i>Ultramicroscopy</i> , 2012, 115, 109-114.	1.9	31
39	Real-Time Electron Tomography Based on GPU Computing. <i>Lecture Notes in Computer Science</i> , 2011, , 201-208.	1.3	1
40	Parallel implementation of RX anomaly detection on multi-core processors: impact of data partitioning strategies. <i>Proceedings of SPIE</i> , 2011, , .	0.8	0
41	Automatic tuning of iterative computation on heterogeneous multiprocessors with ADITHE. <i>Journal of Supercomputing</i> , 2011, 58, 151-159.	3.6	28
42	Adaptive load balancing of iterative computation on heterogeneous nondedicated systems. <i>Journal of Supercomputing</i> , 2011, 58, 385-393.	3.6	14
43	Fast anomaly detection in hyperspectral images with RX method on heterogeneous clusters. <i>Journal of Supercomputing</i> , 2011, 58, 411-419.	3.6	19
44	A new approach for sparse matrix vector product on NVIDIA GPUs. <i>Concurrency Computation Practice and Experience</i> , 2011, 23, 815-826.	2.2	96
45	Multi-core Desktop Processors Make Possible Real-Time Electron Tomography. , 2011, , .		0
46	Matrix Implementation of Simultaneous Iterative Reconstruction Technique (SIRT) on GPUs. <i>Computer Journal</i> , 2011, 54, 1861-1868.	2.4	12
47	Vectorization with SIMD extensions speeds up reconstruction in electron tomography. <i>Journal of Structural Biology</i> , 2010, 170, 570-575.	2.8	22
48	A matrix approach to tomographic reconstruction and its implementation on GPUs. <i>Journal of Structural Biology</i> , 2010, 170, 146-151.	2.8	37
49	Improving the Performance of the Sparse Matrix Vector Product with GPUs. , 2010, , .		86
50	Ultra-fast Tomographic Reconstruction with a Highly Optimized Weighted Back-Projection Algorithm. , 2010, , .		1
51	On a model of three-dimensional bursting and its parallel implementation. <i>Computer Physics Communications</i> , 2008, 178, 471-485.	7.5	2
52	Matrix Weighted Back-Projection Accelerates Tomographic Reconstruction. , 2008, , .		0
53	Fast Tomographic Reconstruction with Vectorized Backprojection. , 2008, , .		1
54	High performance noise reduction for biomedical multidimensional data. , 2007, 17, 724-736.		14

#	ARTICLE	IF	CITATIONS
55	Three-dimensional Bursting and Parallel Computing. International Journal for Multiscale Computational Engineering, 2007, 5, 39-46.	1.2	0
56	Multiprocessing of anisotropic nonlinear diffusion for filtering 3D images. , 2006, , .		2
57	Evaluation of Parallel Paradigms on Anisotropic Nonlinear Diffusion. Lecture Notes in Computer Science, 2006, , 1159-1168.	1.3	2
58	Parallel Simulation of Three-dimensional Bursting with MPI and OpenMP. Lecture Notes in Computer Science, 2006, , 106-113.	1.3	0
59	Analysis of the Interaction of Electromagnetic Signals with Thin-Wires Structures. Multiprocessing Issues for an Iterative Method. Lecture Notes in Computer Science, 2005, , 78-89.	1.3	0
60	Approaches Based on Permutations for Partitioning Sparse Matrices on Multiprocessors. Journal of Supercomputing, 2005, 34, 41-61.	3.6	1
61	Multiprocessing of the time domain analysis of thin-wire antennas and scatterers. , 2004, , .		1
62	Solving Eigenproblems on Multicomputers: Two Different Approaches. International Journal of Computers and Applications, 2004, 26, 1-10.	1.3	0
63	Floating point arithmetic teaching for computational science. Future Generation Computer Systems, 2003, 19, 1321-1334.	7.5	6
64	Educational issues on number representation and arithmetic in computers: an undergraduate laboratory. IEEE Transactions on Education, 2003, 46, 477-485.	2.4	6
65	A VHDL Library to Analyse Fault Tolerant Techniques. Lecture Notes in Computer Science, 2003, , 1036-1039.	1.3	0
66	A Parallel Implementation of the Eigenproblem for Large, Symmetric and Sparse Matrices. Lecture Notes in Computer Science, 1999, , 380-387.	1.3	3