Juan A Acebron

List of Publications by Year in descending order

41 papers	3,198 citations	687363 13 h-index	377865 34 g-index
42 all docs	42 docs citations	42 times ranked	2334 citing authors

#	Article	IF	Citations
1	A distributed Monte Carlo based linear algebra solver applied to the analysis of large complex networks. Future Generation Computer Systems, 2022, 127, 320-330.	7.5	4
2	The PDD Method for Solving Linear, Nonlinear, and Fractional PDEs Problems. SEMA SIMAI Springer Series, 2021, , 239-273.	0.7	0
3	A highly parallel algorithm for computing the action of a matrix exponential on a vector based on a multilevel Monte Carlo method. Computers and Mathematics With Applications, 2020, 79, 3495-3515.	2.7	6
4	A Probabilistic Linear Solver Based on a Multilevel Monte Carlo Method. Journal of Scientific Computing, 2020, 82, 1.	2.3	1
5	A Monte Carlo method for computing the action of a matrix exponential on a vector. Applied Mathematics and Computation, 2019, 362, 124545.	2.2	5
6	A multigrid-like algorithm for probabilistic domain decomposition. Computers and Mathematics With Applications, 2016, 72, 1790-1810.	2.7	4
7	A Comparison of Higher-Order Weak Numerical Schemes for Stopped Stochastic Differential Equations. Communications in Computational Physics, 2016, 20, 703-732.	1.7	10
8	A Monte Carlo method for solving the one-dimensional telegraph equations with boundary conditions. Journal of Computational Physics, 2016, 305, 29-43.	3.8	15
9	An Efficient Algorithm for Accelerating Monte Carlo Approximations of the Solution to Boundary Value Problems. Journal of Scientific Computing, 2016, 66, 577-597.	2.3	7
10	Uniform spectral partition method for the propagation of Gaussian pulses on lossy transmission lines using the Monte Carlo method. , 2015, , .		0
11	A Stochastic Algorithm Based on Fast Marching for Automatic Capacitance Extraction in Non-Manhattan Geometries. SIAM Journal on Imaging Sciences, 2014, 7, 2657-2674.	2.2	9
12	Highly efficient numerical algorithm based on random trees for accelerating parallel Vlasovâ€"Poisson simulations. Journal of Computational Physics, 2013, 250, 224-245.	3.8	9
13	A new parallel solver suited for arbitrary semilinear parabolic partial differential equations based on generalized random trees. Journal of Computational Physics, 2011, 230, 7891-7909.	3.8	10
14	A fully scalable algorithm suited for petascale computing andÂbeyond. Computer Science - Research and Development, 2010, 25, 115-121.	2.7	1
15	Efficient Parallel Solution of Nonlinear Parabolic Partial Differential Equations by a Probabilistic Domain Decomposition. Journal of Scientific Computing, 2010, 43, 135-157.	2.3	16
16	Parallelizing a hybrid finite element-boundary integral method for the analysis of scattering and radiation of electromagnetic waves. Finite Elements in Analysis and Design, 2010, 46, 645-657.	3.2	1
17	On the Performance of a New Parallel Algorithm for Large-Scale Simulations of Nonlinear Partial Differential Equations. Lecture Notes in Computer Science, 2010, , 41-50.	1.3	0
18	Domain decomposition solution of nonlinear two-dimensional parabolic problems by random trees. Journal of Computational Physics, 2009, 228, 5574-5591.	3.8	22

#	ARTICLE	IF	CITATIONS
19	Amplified Signal Response in Scale-Free Networks by Collaborative Signaling. Physical Review Letters, 2007, 99, 128701.	7.8	67
20	Supercomputing applications to the numerical modeling of industrial and applied mathematics problems. Journal of Supercomputing, 2007, 40, 67-80.	3.6	6
21	A New Probabilistic Approach to the Domain Decomposition Method. , 2007, , 473-480.		3
22	A Fully Scalable Parallel Algorithm for Solving Elliptic Partial Differential Equations. Lecture Notes in Computer Science, 2007, , 727-736.	1.3	1
23	Scalability and Performance Analysis of a Probabilistic Domain Decomposition Method. , 2007, , 1257-1264.		0
24	A New Domain Decomposition Approach Suited for Grid Computing. , 2007, , 744-753.		0
25	Probabilistically induced domain decomposition methods for elliptic boundary-value problems. Journal of Computational Physics, 2005, 210, 421-438.	3.8	16
26	Fast simulations of stochastic dynamical systems. Journal of Computational Physics, 2005, 208, 106-115.	3.8	9
27	The Fractional Fourier Transform in the Analysis and Synthesis of Fiber Bragg Gratings. Optical and Quantum Electronics, 2005, 37, 755-787.	3.3	9
28	Domain Decomposition Solution of Elliptic Boundary-Value Problems via Monte Carlo and Quasi-Monte Carlo Methods. SIAM Journal of Scientific Computing, 2005, 27, 440-457.	2.8	36
29	Second Harmonics Effects in Random Duffing Oscillators. SIAM Journal on Applied Mathematics, 2005, 66, 266-285.	1.8	2
30	The Kuramoto model: A simple paradigm for synchronization phenomena. Reviews of Modern Physics, 2005, 77, 137-185.	45.6	2,547
31	Emergent oscillations in unidirectionally coupled overdamped bistable systems. Physical Review E, 2004, 70, 036103.	2.1	58
32	Noisy FitzHugh-Nagumo model: From single elements to globally coupled networks. Physical Review E, 2004, 69, 026202.	2.1	57
33	Self-Induced Oscillations in Electronically-Coupled Fluxgate Magnetometers. AIP Conference Proceedings, 2004, , .	0.4	0
34	Injection locking near a stochastic bifurcation: the dc SQUID as a case study. Physica A: Statistical Mechanics and Its Applications, 2003, 325, 220-229.	2.6	8
35	Spectral analysis and computation for the Kuramoto-Sakaguchi integroparabolic equation. IMA Journal of Numerical Analysis, 2001, 21, 239-263.	2.9	7
36	Noise-mediated dynamics in a two-dimensional oscillator: Exact solutions and numerical results. Europhysics Letters, 2001, 56, 354-360.	2.0	11

#	Article	IF	Citations
37	Uncertainty in phase-frequency synchronization of large populations of globally coupled nonlinear oscillators. Physica D: Nonlinear Phenomena, 2000, 141, 65-79.	2.8	10
38	Synchronization in populations of globally coupled oscillators with inertial effects. Physical Review E, 2000, 62, 3437-3454.	2.1	78
39	Asymptotic description of transients and synchronized states of globally coupled oscillators. Physica D: Nonlinear Phenomena, 1998, 114, 296-314.	2.8	27
40	Adaptive Frequency Model for Phase-Frequency Synchronization in Large Populations of Globally Coupled Nonlinear Oscillators. Physical Review Letters, 1998, 81, 2229-2232.	7.8	90
41	Breaking the symmetry in bimodal frequency distributions of globally coupled oscillators. Physical Review E, 1998, 57, 5287-5290.	2.1	36