Jaijeet Roychowdhury

List of Publications by Year
in descending order

24 papers	561 citations	1478505 6 h-index	1199594 12 g-index
24 all docs	24 docs citations	24 times ranked	459 citing authors

#	Article	IF	Citations
1	A global Lyapunov function for the coherent Ising machine. Nonlinear Theory and Its Applications IEICE, 2022, 13, 227-232.	0.6	1
2	Solving combinatorial optimisation problems using oscillator based Ising machines. Natural Computing, 2021, 20, 287-306.	3.0	29
3	Bistable Latch Ising Machines. Lecture Notes in Computer Science, 2021, , 131-148.	1.3	5
4	OIM: Oscillator-Based Ising Machines for Solving Combinatorial Optimisation Problems. Lecture Notes in Computer Science, 2019, , 232-256.	1.3	68
5	Multiphysics modelling and simulation in Berkeley MAPP. , 2016, , .		2
6	Hierarchical abstraction of weakly coupled synchronized oscillator networks. International Journal for Numerical Methods in Engineering, 2015, 102, 1041-1076.	2.8	4
7	Boolean Computation Using Self-Sustaining Nonlinear Oscillators. Proceedings of the IEEE, 2015, 103, 1958-1969.	21.3	27
8	ABCD-NL: Approximating Continuous non-linear dynamical systems using purely Boolean models for analog/mixed-signal verification. , 2014, , .		25
9	PHLOGON: PHase-based LOGic using Oscillatory Nano-systems. Lecture Notes in Computer Science, 2014, , 353-366.	1.3	10
10	Analysis and design of sub-harmonically injection locked oscillators. , 2012, , .		22
11	Telescopic timeâ€scale bridging for modeling dispersion in rapidly oscillating flows. AICHE Journal, 2012, 58, 1987-1997.	3.6	0
12	SAMURAI: An accurate method for modelling and simulating non-stationary Random Telegraph Noise in SRAMs. , 2011, , .		19
13	Phase equations for quasi-periodic oscillators. , 2010, , .		6
14	Gen-Adler: The generalized Adler's equation for injection locking analysis in oscillators. , 2009, , .		45
15	A Time-Domain Oscillator Envelope Tracking Algorithm Employing Dual Phase Conditions. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 59-69.	2.7	6
16	General-Purpose Nonlinear Model-Order Reduction Using Piecewise-Polynomial Representations. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 249-264.	2.7	63
17	Comprehensive procedure for fast and accurate coupled oscillator network simulation. , 2008, , .		4
18	Rapid and Accurate Latch Characterization via Direct Newton Solution of Setup/Hold Times. , 2007, , .		5

#	Article	IF	Citations
19	Hierarchical Modeling, Optimization, and Synthesis for System-Level Analog and RF Designs. Proceedings of the IEEE, 2007, 95, 640-669.	21.3	198
20	Advanced tools for simulation and design of oscillators/PLLs. , 2007, , .		1
21	Small-Signal Analysis of Oscillators Using Generalized Multitime Partial Differential Equations. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2007, 26, 1054-1069.	2.7	3
22	TP-PPV: Piecewise Nonlinear, Time-Shifted Oscillator Macromodel Extraction For Fast, Accurate PLL Simulation. IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, 2006, , .	0.0	3
23	Nonlinear Phase Macromodel Based Simulation/Design of PLLs with Superharmonically Locked Dividers. , 2006, , .		3
24	Fast simulation of large networks of nanotechnological and biochemical oscillators for investigating self-organization phenomena. , 2006, , .		12