Alper DemÄºr

List of Publications by Year
in descending order

54	2,097	566801 15	377514 34
papers	citations	h-index	g-index

57	57	57	1135
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Understanding fundamental trade-offs in nanomechanical resonant sensors. Journal of Applied Physics, 2021, 129, .	1.1	13
2	Adaptive Time-Resolved Mass Spectrometry With Nanomechanical Resonant Sensors. IEEE Sensors Journal, 2021, 21, 27582-27589.	2.4	3
3	Fundamental Sensitivity Limitations of Nanomechanical Resonant Sensors Due to Thermomechanical Noise. IEEE Sensors Journal, 2020, 20, 1947-1961.	2.4	22
4	Frequency fluctuations in nanomechanical silicon nitride string resonators. Physical Review B, 2020, 102, .	1.1	22
5	Nonlinear Nanomechanical Mass Spectrometry at the Single-Nanoparticle Level. Nano Letters, 2019, 19, 3583-3589.	4.5	31
6	Spike timing precision of neuronal circuits. Journal of Computational Neuroscience, 2018, 44, 341-362.	0.6	8
7	ProteinAC: a frequency domain technique for analyzing protein dynamics. Physical Biology, 2018, 15, 026009.	0.8	5
8	Numerical Analysis of Multidomain Systems: Coupled Nonlinear PDEs and DAEs With Noise. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 1445-1458.	1.9	4
9	Noise in Neuronal and Electronic Circuits: A General Modeling Framework and Non-Monte Carlo Simulation Techniques. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 958-974.	2.7	2
10	Non-Monte Carlo Analysis of Low-Frequency Noise: Exposition of Intricate Nonstationary Behavior and Comparison With Legacy Models. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 1825-1835.	1.9	4
11	Unified modeling of Familial Mediterranean Fever and Cryopyrin Associated Periodic Syndromes. Pediatric Rheumatology, 2015, 13, .	0.9	0
12	Unified Modeling of Familial Mediterranean Fever and Cryopyrin Associated Periodic Syndromes. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-18.	0.7	11
13	Simulation of noise in neurons and neuronal circuits. , 2015, , .		2
14	Modeling and Simulation of Low-Frequency Noise in Nano Devices: Stochastically Correct and Carefully Crafted Numerical Techniques. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2015, 34, 794-807.	1.9	7
15	MATHEMATICAL MODELING OF BEHÃ‡ET'S DISEASE: A DYNAMICAL SYSTEMS APPROACH. Journal of Biological Systems, 2015, 23, 231-257.	0.5	0
16	Analysis of Low-Frequency Noise in Switched MOSFET Circuits: Revisited and Clarified. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, , 1-9.	3.5	7
17	The Krylov-proportionate normalized least mean fourth approach: Formulation and performance analysis. Signal Processing, 2015, 109, 1-13.	2.1	15
18	Modeling and analysis of nonstationary low-frequency noise in circuit simulators: Enabling non Monte Carlo techniques. , 2014, , .		8

#	Article	IF	Citations
19	Simulation of temporal stochastic phenomena in electronic and biological systems: A comparative review, examples and synergies. , 2013, , .		0
20	CIRSIUM: A circuit simulator in MATLAB® with object oriented design. , 2013, , .		6
21	Modeling and analysis of (nonstationary) low frequency noise in nano devices: A synergistic approach based on stochastic chemical kinetics. , 2013, , .		8
22	Accurate Prediction of Random Telegraph Noise Effects in SRAMs and DRAMs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2013, 32, 73-86.	1.9	17
23	Phase computations and phase models for discrete molecular oscillators. Eurasip Journal on Bioinformatics and Systems Biology, 2012, 2012, 6.	1.4	2
24	On Phase Models for Oscillators. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2011, 30, 972-985.	1.9	18
25	SAMURAI: An accurate method for modelling and simulating non-stationary Random Telegraph Noise in SRAMs. , 2011, , .		19
26	Phase equations for quasi-periodic oscillators. , 2010, , .		6
27	Adaptive Receiver Structures for Fiber Communication Systems Employing Polarization Division Multiplexing: High Symbol Rate Case. Journal of Lightwave Technology, 2010, 28, 1536-1546.	2.7	9
28	Fast Monte Carlo Estimation of Timing Yield With Importance Sampling and Transistor-Level Circuit Simulation. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2010, 29, 1328-1341.	1.9	15
29	Quadratic Approximations for the Isochrons of Oscillators: A General Theory, Advanced Numerical Methods, and Accurate Phase Computations. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2010, 29, 1215-1228.	1.9	26
30	Adaptive Receiver Structures for Fiber Communication Systems Employing Polarization-Division Multiplexing. Journal of Lightwave Technology, 2009, 27, 5394-5404.	2.7	8
31	Computing quadratic approximations for the isochrons of oscillators. , 2009, , .		1
32	Behavioral Simulation Techniques for PhaselDelayLocked Systems. , 2009, , .		0
33	Automatic PMD Compensation by Unsupervised Polarization Diversity Combining Coherent Receivers. Journal of Lightwave Technology, 2008, 26, 1823-1834.	2.7	11
34	Emulation and Inversion of Polarization Mode Dispersion: A Lumped System and Pade Approximation Perspective. Journal of Lightwave Technology, 2008, 26, 3071-3089.	2.7	2
35	Stochastic Modeling and Optimization for Energy Management in Multicore Systems: A Video Decoding Case Study. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 1264-1277.	1.9	9
36	Nonlinear Phase Noise in Optical-Fiber-Communication Systems. Journal of Lightwave Technology, 2007, 25, 2002-2032.	2.7	57

#	Article	IF	Citations
37	Noise Analysis Problems and Techniques for RF Electronic Circuits and Optical Fiber Communication Systems. , 2007, , .		5
38	Fully nonlinear oscillator noise analysis: an oscillator with no asymptotic phase. International Journal of Circuit Theory and Applications, 2007, 35, 175-203.	1.3	35
39	Computing Timing Jitter From Phase Noise Spectra for Oscillators and Phase-Locked Loops With White and<tex>$1/f$</tex>Noise. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2006, 53, 1869-1884.	0.1	136
40	Oscillator Noise Analysis. AIP Conference Proceedings, 2005, , .	0.3	3
41	Characterizing and exploiting task load variability and correlation for energy management in multi core systems. , 2005, , .		5
42	Non-Monte Carlo formulations and computational techniques for the stochastic non-linear SchrÃ¶dinger equation. Journal of Computational Physics, 2004, 201, 148-171.	1.9	4
43	Phase noise in oscillators as differential-algebraic systems with colored noise sources. , 2004, , .		1
44	A reliable and efficient procedure for oscillator PPV computation, with phase noise macromodeling applications. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2003, 22, 188-197.	1.9	136
45	Phase noise and timing jitter in oscillators with colored-noise sources. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2002, 49, 1782-1791.	0.1	158
46	Floquet theory and non-linear perturbation analysis for oscillators with differential-algebraic equations. International Journal of Circuit Theory and Applications, 2000, 28, 163-185.	1.3	72
47	Phase noise in oscillators: a unifying theory and numerical methods for characterization. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2000, 47, 655-674.	0.1	944
48	Time-domain non-Monte Carlo noise simulation for nonlinear dynamic circuits with arbitrary excitations. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 1996, 15, 493-505.	1.9	99
49	Stochastic modeling and performance evaluation for digital clock and data recovery circuits. , 0, , .		1
50	Optimal coarse quantization of finite-length signals using integer programming. , 0, , .		0
51	Modeling and analysis of communication circuit performance using Markov chains and efficient graph representations. , 0, , .		0
52	Computing phase noise eigenfunctions directly from steady-state Jacobian matrices. , 0, , .		20
53	CAD for RF circuits. , 0, , .		10
54	A stochastic integral equation method for modeling the rough surface effect on interconnect capacitance. , 0, , .		10