

Ngai Wong

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/3844636/ngai-wong-publications-by-year.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

85
papers

544
citations

13
h-index

17
g-index

126
ext. papers

715
ext. citations

2.5
avg, IF

3.93
L-index

#	Paper	IF	Citations
85	A Space-Time Neural Network for Analysis of Stress Evolution under DC Current Stressing. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2022 , 1-1	2.5	1
84	A Data-Mining-Assisted Design of Structural Colors on Diamond Metasurfaces. <i>Advanced Photonics Research</i> , 2022 , 3, 2270008	1.9	
83	Fast Classification and Action Recognition with Event-based Imaging. <i>IEEE Access</i> , 2022 , 1-1	3.5	0
82	Multilayer Perceptron Based Stress Evolution Analysis under DC Current Stressing for Multi-segment Wires. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2022 , 1-1	2.5	0
81	MERACLE: Constructive Layer-Wise Conversion of a Tensor Train into a MERA. <i>Communications on Applied Mathematics and Computation</i> , 2021 , 3, 257-279	0.9	
80	Overfitting Avoidance in Tensor Train Factorization and Completion: Prior Analysis and Inference 2021 ,		3
79	Fast and Accurate Tensor Completion With Total Variation Regularized Tensor Trains. <i>IEEE Transactions on Image Processing</i> , 2020 , 29, 6918-6931	8.7	10
78	Extended Kalman Filtering with Low-Rank Tensor Networks for MIMO Volterra System Identification 2019 ,		2
77	Matrix Product Operator Restricted Boltzmann Machines 2019 ,		1
76	An efficient homotopy-based Poincaré-Lindstedt method for the periodic steady-state analysis of nonlinear autonomous oscillators 2017 ,		5
75	A constructive arbitrary-degree Kronecker product decomposition of tensors. <i>Numerical Linear Algebra With Applications</i> , 2017 , 24, e2097	1.6	13
74	Tensor Network alternating linear scheme for MIMO Volterra system identification. <i>Automatica</i> , 2017 , 84, 26-35	5.7	28
73	Compact model order reduction of weakly nonlinear systems by associated transform. <i>International Journal of Circuit Theory and Applications</i> , 2016 , 44, 1367-1384	2	6
72	Model Reduction and Simulation of Nonlinear Circuits via Tensor Decomposition. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2015 , 34, 1059-1069	2.5	18
71	STAVES: Speedy tensor-aided Volterra-based electronic simulator 2015 ,		1
70	Volterra series approximation for rational nonlinear system. <i>Journal of Applied Mathematics and Computing</i> , 2014 , 45, 411-432	1.8	
69	A novel linear algebra method for the determination of periodic steady states of nonlinear oscillators 2014 ,		6

68	Gramian-based model order reduction of parameterized time-delay systems. <i>International Journal of Circuit Theory and Applications</i> , 2014 , 42, 687-706	2	3
67	Efficient matrix exponential method based on extended Krylov subspace for transient simulation of large-scale linear circuits 2014 ,		2
66	Design space exploration for sparse matrix-matrix multiplication on FPGAs. <i>International Journal of Circuit Theory and Applications</i> , 2013 , 41, 205-219	2	11
65	Autonomous Volterra Algorithm for Steady-State Analysis of Nonlinear Circuits. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2013 , 32, 858-868	2.5	6
64	Model Order Reduction for Neutral Systems by Moment Matching. <i>Circuits, Systems, and Signal Processing</i> , 2013 , 32, 1039-1063	2.2	14
63	Frequency-domain multiscale quantum mechanics/electromagnetics simulation method. <i>Journal of Chemical Physics</i> , 2013 , 139, 244111	3.9	15
62	A multi-scale modeling of junctionless field-effect transistors. <i>Applied Physics Letters</i> , 2013 , 103, 062109	3.4	12
61	A hybrid MPPT method for Photovoltaic systems via estimation and revision method 2013 ,		1
60	Fast transistor-level circuit simulation and variational analysis via the ultra-compact virtual source model 2013 ,		1
59	A Numerically Efficient Formulation for Time-Domain Electromagnetic-Semiconductor Cosimulation for Fast-Transient Systems. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2013 , 32, 802-806	2.5	4
58	A Realistic Early-Stage Power Grid Verification Algorithm Based on Hierarchical Constraints. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2012 , 31, 109-120	2.5	12
57	Passivity Enforcement for Descriptor Systems Via Matrix Pencil Perturbation. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2012 , 31, 532-545	2.5	15
56	WISE: Warped Impulse Structure Estimation for Time-Domain Linear Macromodeling. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2012 , 2, 131-139	1.7	2
55	Dynamic Multiscale Quantum Mechanics/Electromagnetics Simulation Method. <i>Journal of Chemical Theory and Computation</i> , 2012 , 8, 1190-9	6.4	25
54	Weakly nonlinear circuit analysis based on fast multidimensional inverse Laplace transform 2012 ,		1
53	A Sub-1 V, 26 μ W, Low-Output-Impedance CMOS Bandgap Reference With a Low Dropout or Source Follower Mode. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , 2011 , 19, 1305-1309	2.6	14
52	Hilbert-Schmidt-Hankel norm model reduction for matrix second-order linear systems. <i>Journal of Control Theory and Applications</i> , 2011 , 9, 571-578		0
51	On IIR-based bit-stream multipliers. <i>International Journal of Circuit Theory and Applications</i> , 2011 , 39, 149-158	2	2

50	Finite difference schemes for heat conduction analysis in integrated circuit design and manufacturing. <i>International Journal of Circuit Theory and Applications</i> , 2011 , 39, 905-921	2	2
49	EM-TCAD solving from 0 to 100 THz: A new implementation of an electromagnetic solver 2011 ,		1
48	Balanced truncation for time-delay systems via approximate Gramians 2011 ,		9
47	PEDS: Passivity enforcement for descriptor systems via Hamiltonian-symplectic matrix pencil perturbation 2010 ,		6
46	Discussion of a Half-Size Singularity Test Matrix for Fast and Reliable Passivity Assessment of Rational Models <i>IEEE Transactions on Power Delivery</i> , 2010 , 25, 1212-1213	4-3	2
45	Passivity Test of Immittance Descriptor Systems Based on Generalized Hamiltonian Methods. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2010 , 57, 61-65	3-5	15
44	An Efficient Projector-Based Passivity Test for Descriptor Systems. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2010 , 29, 1203-1214	2-5	21
43	An extension of the generalized Hamiltonian method to S-parameter descriptor systems 2010 ,		2
42	Design space exploration for sparse matrix-matrix multiplication on FPGAs 2010 ,		10
41	Analog circuit design by nonconvex polynomial optimization: Two design examples. <i>International Journal of Circuit Theory and Applications</i> , 2010 , 38, 25-43	2	13
40	New simulation methodology of 3D surface roughness loss for interconnects modeling 2009 ,		1
39	Designing globally optimal delta-sigma modulator topologies via signomial programming. <i>International Journal of Circuit Theory and Applications</i> , 2009 , 37, 453-472	2	6
38	Efficient numerical modeling of random rough surface effects in interconnect resistance extraction. <i>International Journal of Circuit Theory and Applications</i> , 2009 , 37, 751-763	2	4
37	Operation scheduling for FPGA-based reconfigurable computers 2009 ,		2
36	IIR Approximation of FIR Filters Via Discrete-Time Hybrid-Domain Vector Fitting. <i>IEEE Signal Processing Letters</i> , 2009 , 16, 533-537	3-2	4
35	Automatic system architecture synthesis for FPGA-based reconfigurable computers 2009 ,		1
34	Robust Simulation Methodology for Surface-Roughness Loss in Interconnect and Package Modelings. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2009 , 28, 1654-1665 ¹²	2-5	12
33	37.2: Fiber-Coupled Emissive Micro-Light-Emitting Diode Arrays. <i>Digest of Technical Papers SID International Symposium</i> , 2009 , 40, 526	0-5	

32	IIR Approximation of FIR Filters Via Discrete-Time Vector Fitting. <i>IEEE Transactions on Signal Processing</i> , 2008 , 56, 1296-1302	4.8	26
31	Efficient Positive-Real Balanced Truncation of Symmetric Systems Via Cross-Riccati Equations. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2008 , 27, 470-480	2.5	6
30	Efficient Linear Macromodeling via Discrete-Time Time-Domain Vector Fitting 2008 ,		7
29	Global optimization of common subexpressions for multiplierless synthesis of multiple constant multiplications 2008 ,		4
28	A Fast Passivity Test for Stable Descriptor Systems via Skew-Hamiltonian/Hamiltonian Matrix Pencil Transformations. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2008 , 55, 635-643	3.9	15
27	A Signomial Programming Approach for Binary Image Restoration by Penalized Least Squares. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2008 , 55, 41-45	3.5	6
26	Efficient linear macromodeling via least-squares response approximation 2008 ,		1
25	Design of hybrid continuous-time discrete-time delta-sigma modulators 2008 ,		2
24	Gain bandwidth optimization in two-pump fiber optical parametric amplifiers under bounded zero-dispersion wavelength fluctuations. <i>Optics Communications</i> , 2007 , 272, 514-520	2	6
23	An Efficient Transfer-Function-Based Approach for the Fast Tuning and Design of DC-DC Converters 2007 ,		1
22	Bit-Stream Adders and Multipliers for Tri-Level SigmaDelta Modulators. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2007 , 54, 1082-1086	3.5	12
21	Design of 2D Linear-Phase IIR Filters Via Schur Decomposition and Discrete-Time Vector Fitting 2007 ,		1
20	FIR Filter Approximation by IIR Filters Based on Discrete-Time Vector Fitting 2007 ,		2
19	Designing Globally Optimal Delta-Sigma Modulator Topologies via Signomial Programming 2007 ,		3
18	Fast Positive-Real Balanced Truncation of Symmetric Systems Using Cross Riccati Equations 2007 ,		2
17	Fast Positive-Real Balanced Truncation Via Quadratic Alternating Direction Implicit Iteration. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2007 , 26, 1725-1731	2.5	13
16	Binary Image Restoration by Signomial Programming 2007 ,		2
15	Design of Nested Transconductance-Capacitance Compensation Amplifier Via Nonconvex Polynomial Optimization 2006 ,		1

14	Multiplierless Polynomial-Operator-Based IR Filters for Efficient VLSI Implementation 2006,		1
13	Systematic Power Minimization in Multibit Delta-Sigma Analog-to-Digital Converters 2006,		1
12	A Stochastic Integral Equation Method for Resistance Extraction of Conductors with Random Rough Surfaces 2006,		1
11	Optimized RF CMOS Low Noise Amplifier Design Via Geometric Programming 2006,		6
10	Quadratic alternating direction implicit iteration for the fast solution of algebraic Riccati equations 2005,		1
9	A Second-Order Cone Bounding Algorithm for Robust Minimum Variance Beamforming. <i>Lecture Notes in Computer Science, 2005, 223-247</i>	0.9	3
8	Fast detection of instability in sigma-delta modulators based on unstable embedded limit cycles. <i>IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2004, 51, 442-449</i>		4
7	DC stability analysis of high-order, lowpass $\Sigma\Delta$ modulators with distinct unit circle NTF zeros. <i>IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2003, 50, 12-30</i>		10
6	A generalized direct-form delta operator-based IIR filter with minimum noise gain and sensitivity. <i>IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2001, 48, 425-431</i>		29
5	Roundoff noise minimization in a modified direct-form delta operator IIR structure. <i>IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2000, 47, 1533-1536</i>		11
4	Fast balanced stochastic truncation via a quadratic extension of the alternating direction implicit iteration		3
3	A geometrical approach to robust minimum variance beamforming		2
2	An efficient algorithm for downconverting multiple bandpass signals using bandpass sampling		10
1	A Data-Mining-Assisted Design of Structural Colors on Diamond Metasurfaces. <i>Advanced Photonics Research, 2100292</i>	1.9	3