Dan Jiao

List of Publications by Year
in descending order

218 papers	1,484 citations	331259 21 h-index	414034 32 g-index
218 all docs	218 docs citations	218 times ranked	519 citing authors

#	Article	IF	Citations
1	Explicit Time-Domain Finite-Element Method Stabilized for an Arbitrarily Large Time Step. IEEE Transactions on Antennas and Propagation, 2012, 60, 5240-5250.	3.1	98
2	An ${cal H}^{2}$-Matrix-Based Integral-Equation Solver of Reduced Complexity and Controlled Accuracy for Solving Electrodynamic Problems. IEEE Transactions on Antennas and Propagation, 2009, 57, 3147-3159.	3.1	72
3	An Explicit and Unconditionally Stable FDTD Method for Electromagnetic Analysis. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 2538-2550.	2.9	66
4	Fast Explicit and Unconditionally Stable FDTD Method for Electromagnetic Analysis. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 2698-2710.	2.9	50
5	A Layered Finite Element Method for Electromagnetic Analysis of Large-Scale High-Frequency Integrated Circuits. IEEE Transactions on Antennas and Propagation, 2007, 55, 422-432.	3.1	46
6	Dense Matrix Inversion of Linear Complexity for Integral-Equation-Based Large-Scale 3-D Capacitance Extraction. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 2404-2421.	2.9	44
7	Three-dimensional orthogonal vector basis functions for time-domain finite element solution of vector wave equations. IEEE Transactions on Antennas and Propagation, 2003, 51, 59-66.	3.1	39
8	Theoretical Study on the Rank of Integral Operators for Broadband Electromagnetic Modeling From Static to Electrodynamic Frequencies. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2013, 3, 2113-2126.	1.4	38
9	A direct integral-equation solver of linear complexity for large-scale 3D capacitance and impedance extraction. , 2009, , .		37
10	A Theoretically Rigorous Full-Wave Finite-Element-Based Solution of Maxwell's Equations From dc to High Frequencies. IEEE Transactions on Advanced Packaging, 2010, 33, 1043-1050.	1.7	36
11	Direct Matrix Solution of Linear Complexity for Surface Integral-Equation-Based Impedance Extraction of Complicated 3-D Structures. Proceedings of the IEEE, 2013, 101, 372-388.	16.4	35
12	Alternative Method for Making Explicit FDTD Unconditionally Stable. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 4215-4224.	2.9	33
13	A Time-Domain Layered Finite Element Reduction Recovery (LAFE-RR) Method for High-Frequency VLSI Design. IEEE Transactions on Antennas and Propagation, 2007, 55, 3620-3629.	3.1	32
14	A Rigorous Solution to the Low-Frequency Breakdown in Full-Wave Finite-Element-Based Analysis of General Problems Involving Inhomogeneous Lossless/Lossy Dielectrics and Nonideal Conductors. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 3294-3306.	2.9	31
15	Accuracy Directly Controlled Fast Direct Solution of General ${mathcal{ H}}^{2}$ -Matrices and Its Application to Solving Electrodynamic Volume Integral Equations. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 35-48.	2.9	30
16	Fast ${cal H}$-Matrix-Based Direct Integral Equation Solver With Reduced Computational Cost for Large-Scale Interconnect Extraction. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2013, 3, 289-298.	1.4	29
17	A New Volume Integral Formulation for Broadband 3-D Circuit Extraction in Inhomogeneous Materials With and Without External Electromagnetic Fields. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 4302-4312.	2.9	29
18	Solution of the Electric Field Integral Equation When It Breaks Down. IEEE Transactions on Antennas and Propagation, 2014, 62, 4122-4134.	3.1	27

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19	Accurate and Stable Matrix-Free Time-Domain Method in 3-D Unstructured Meshes for General Electromagnetic Analysis. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 4201-4214.	2.9	26
20	A Linear Complexity Direct Volume Integral Equation Solver for Full-Wave 3-D Circuit Extraction in Inhomogeneous Materials. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 897-912.	2.9	23
21	Symmetric Positive Semidefinite FDTD Subgridding Algorithms for Arbitrary Grid Ratios Without Compromising Accuracy. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 5084-5095.	2.9	23
22	Time-Domain Orthogonal Finite-Element Reduction-Recovery Method for Electromagnetics-Based Analysis of Large-Scale Integrated Circuit and Package Problems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2009, 28, 1138-1149.	1.9	22
23	An LU Decomposition Based Direct Integral Equation Solver of Linear Complexity and Higher-Order Accuracy for Large-Scale Interconnect Extraction. IEEE Transactions on Advanced Packaging, 2010, 33, 794-803.	1.7	20
24	Linear-Complexity Direct and Iterative Integral Equation Solvers Accelerated by a New Rank-Minimized ${cal H}^{2}$-Representation for Large-Scale 3-D Interconnect Extraction. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2792-2805.	2.9	20
25	An Unsymmetric FDTD Subgridding Algorithm With Unconditional Stability. IEEE Transactions on Antennas and Propagation, 2018, 66, 4137-4150.	3.1	20
26	A Unified Finite-Element Solution From Zero Frequency to Microwave Frequencies for Full-Wave Modeling of Large-Scale Three-Dimensional On-Chip Interconnect Structures. IEEE Transactions on Advanced Packaging, 2008, 31, 873-881.	1.7	18
27	Direct Finite-Element Solver of Linear Complexity for Large-Scale 3-D Electromagnetic Analysis and Circuit Extraction. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 3066-3080.	2.9	18
28	From Layout Directly to Simulation: A First-Principle-Guided Circuit Simulator of Linear Complexity and Its Efficient Parallelization. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2012, 2, 687-699.	1.4	17
29	Fast Full-Wave Solution That Eliminates the Low-Frequency Breakdown Problem in a Reduced System of Order One. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2012, 2, 1871-1881.	1.4	16
30	An Explicit and Unconditionally Stable FDTD Method for the Analysis of General 3-D Lossy Problems. IEEE Transactions on Antennas and Propagation, 2015, 63, 4003-4015.	3.1	15
31	Layered ${cal H}$-Matrix Based Inverse and LU Algorithms for Fast Direct Finite-Element-Based Computation of Electromagnetic Problems. IEEE Transactions on Antennas and Propagation, 2013, 61, 1273-1284.	3.1	13
32	An explicit and unconditionally stable FDTD method for 3-D electromagnetic analysis. , 2013, , .		13
33	Explicit and Unconditionally Stable Time-Domain Finite-Element Method with a More Than â€œOptimalâ€• Speedup. Electromagnetics, 2014, 34, 199-209.	0.3	13
34	Symmetric Positive Semi-Definite FDTD Subgridding Algorithms in Both Space and Time for Accurate Analysis of Inhomogeneous Problems. IEEE Transactions on Antennas and Propagation, 2020, 68, 3047-3059.	3.1	13
35	Existence of ${cal H}$-Matrix Representations of the Inverse Finite-Element Matrix of Electrodynamic Problems and ${cal H}$-Based Fast Direct Finite-Element Solvers. IEEE Transactions on Microwave Theory and Techniques, 2010, , .	2.9	12
36	O(N) iterative and O(NlogN) direct volume integral equation solvers for large-scale electrodynamic analysis. , 2014, , .		12

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37	An Alternative Explicit and Unconditionally Stable Time-Domain Finite-Element Method for Electromagnetic Analysis. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2018, 3, 16-28.	1.4	12
38	A Fast Frequency-Domain Eigenvalue-Based Approach to Full-Wave Modeling of Large-Scale Three-Dimensional On-Chip Interconnect Structures. IEEE Transactions on Advanced Packaging, 2008, 31, 890-899.	1.7	11
39	A Quadratic Eigenvalue Solver of Linear Complexity for 3-D Electromagnetics-Based Analysis of Large-Scale Integrated Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2012, 31, 380-390.	1.9	11
40	Low-Complexity Direct and Iterative Volume Integral Equation Solvers With a Minimal-Rank ${mathcal H}^2$-Representation for Large-Scale Three-Dimensional Electrodynamic Analysis. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2017, 2, 210-223.	1.4	11
41	Rapid Modeling and Simulation of Integrated Circuit Layout in Both Frequency and Time Domains From the Perspective of Inverse. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1270-1283.	2.9	11
42	A Fast-Marching Time-Domain Layered Finite-Element Reduction-Recovery Method for High-Frequency VLSI Design. IEEE Transactions on Antennas and Propagation, 2009, 57, 577-581.	3.1	10
43	Fast Nested Cross Approximation Algorithm for Solving Large-Scale Electromagnetic Problems. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 3271-3283.	2.9	10
44	Hierarchical Finite-Element Reduction-Recovery Method for Large-Scale Transient Analysis of High-Speed Integrated Circuits. IEEE Transactions on Advanced Packaging, 2010, 33, 276-284.	1.7	8
45	A theoretical study on the rank's dependence with electric size of the inverse finite element matrix for large-scale electrodynamic analysis. , 2012, , .		8
46	Fast Method for an Accurate and Efficient Nonlinear Signaling Analysis. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 1312-1319.	1.4	8
47	A Recovery Algorithm of Linear Complexity in the Time-Domain Layered Finite Element Reduction Recovery (LAFE-RR) Method for Large-Scale Electromagnetic Analysis of High-Speed ICs. IEEE Transactions on Advanced Packaging, 2008, 31, 612-618.	1.7	7
48	Performance analysis of the H-matrix-based Fast Direct Solver for finite-element-based analysis of electromagnetic problems. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	7
49	A direct finite-element-based solver of significantly reduced complexity for solving large-scale electromagnetic problems. , 2009, , .		7
50	Eliminating the Low-Frequency Breakdown Problem in 3-D Full-Wave Finite-Element-Based Analysis of Integrated Circuits. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 2633-2645.	2.9	7
51	An explicit and unconditionally stable time-domain finite-element method of linear complexity for electromagnetics-based simulation of 3-D global interconnect network. , 2011, , .		7
52	Minimal-order circuit model based fast electromagnetic simulation. , 2013, , .		7
53	Direct Solution of General ${mathcal{H}}^2$ -Matrices With Controlled Accuracy and Concurrent Change of Cluster Bases for Electromagnetic Analysis. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 2114-2127.	2.9	7
54	Matrix-Free Method for Transient Maxwell-Thermal Cosimulation in Arbitrary Unstructured Meshes. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 5439-5448.	2.9	6

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55	Method for Analytically Finding the Nullspace of Stiffness Matrix for Both Zeroth-Order and Higher Order Curl-Conforming Vector Bases in Unstructured Meshes. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 456-468.	2.9	6
56	An Efficient 3D-to-2D Reduction Technique for Frequency-Domain Layered Finite Element Analysis of Large-Scale High-Frequency Integrated Circuits. , 2007, , .		5
57	An H-matrix-based method for reducing the complexity of integral-equation-based solutions of electromagnetic problems. , 2008, , .		5
58	An H^2-matrix-based integral-equation solver of linear-complexity for large-scale full-wave modeling of 3D circuits. , 2008, , .		5
59	A Linear-Time Complex-Valued Eigenvalue Solver for Full-Wave Analysis of Large-Scale On-Chip Interconnect Structures. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 2021-2029.	2.9	5
60	An unconditionally stable time-domain finite element method of significantly reduced computational complexity for large-scale simulation of IC and package problems. , 2009, , .		5
61	A complexity-reduced H-matrix based direct integral equation solver with prescribed accuracy for large-scale electrodynamic analysis. , 2010, , .		5
62	â„‹ ² â€matrixâ€based fast volume integral equation solver for electrodynamic analysis. IET Microwaves, Antennas and Propagation, 2013, 7, 1145-1153.	0.7	5
63	Linear-complexity direct finite element solver accelerated for many right hand sides. , 2014, , .		5
64	A simple implicit and unconditionally stable FDTD method by changing only one time instant. , 2014, , .		5
65	An explicit and unconditionally stable FDTD method for the analysis of general 3-D lossy problems. , 2014, , .		5
66	New HSS-factorization and inversion algorithms with exact arithmetic for efficient direct solution of large-scale volume integral equations. , 2016, , .		5
67	Explicit and unconditionally stable FDTD method without eigenvalue solutions. , 2016, , .		5
68	Time-Domain Method Having a Naturally Diagonal Mass Matrix Independent of Element Shape for General Electromagnetic Analysisâ€"2-D Formulations. IEEE Transactions on Antennas and Propagation, 2017, 65, 1202-1214.	3.1	5
69	Hybrid cross approximation for electric field integral equation based scattering analysis. , 2017, , .		5
70	A Layered Finite Element Method for High-Frequency Modeling of Large-Scale Three-Dimensional On-Chip Interconnect Structures. , 2006, , .		4
71	An explicit time-domain finite-element method that is unconditionally stable. , 2011, , .		4
72	A linear complexity direct finite element solver for large-scale 3-D electromagnetic analysis. , 2013, , .		4

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73	Fast Structure-Aware Direct Time-Domain Finite-Element Solver for the Analysis of Large-Scale On-Chip Circuits. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 1477-1487.	1.4	4
74	An alternative method for making an explicit FDTD unconditionally stable. , 2015, , .		4
75	Matrix-Free Time-Domain Method for General Electromagnetic Analysis in 3-D Unstructured Meshesâ€"Modified-Basis Formulation. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 2371-2382.	2.9	4
76	Method for Accurate and Efficient Eye Diagram Prediction of Nonlinear High-Speed Links. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 1574-1583.	1.4	4
77	Nested Reduction Algorithms for Generating a Rank-Minimized $\mathcal{H}^2$-Matrix From FMM for Electrically Large Analysis. IEEE Transactions on Antennas and Propagation, 2021, 69, 3945-3956.	3.1	4
78	Fast O(N log N) Algorithm for Generating Rank-Minimized H^2-Representation of Electrically Large Volume Integral Equations. IEEE Transactions on Antennas and Propagation, 2022, 70, 6944-6956.	3.1	4
79	Efficient Full-Wave Characterization of Discrete High-Density Multiterminal Decoupling Capacitors for High-Speed Digital Systems. IEEE Transactions on Advanced Packaging, 2008, 31, 154-162.	1.7	3
80	Co-simulation of linear electromagnetic structures and non-linear devices in the time-domain finite-element reduction-recovery method. , 2009, , .		3
81	A theoretically rigorous solution for fundamentally eliminating the low-frequency breakdown problem in finite-element-based full-wave analysis. , 2010, , .		3
82	A rigorous solution to the low-frequency breakdown in the electric field integral equation. , 2011, , .		3
83	An analytical approach to the low-frequency breakdown of the right hand side and scattered field computation in EFIE. , 2013, , .		3
84	A rigorous divide-and-conquer algorithm for fast DC-mode extraction. , 2013, , .		3
85	A matrix-free time-domain method independent of element shape for electromagnetic analysis. , 2014, , .		3
86	Accurate matrix-free time-domain method in unstructured meshes. , 2015, , .		3
87	An alternative explicit and unconditionally stable time-domain finite-element method for analyzing general lossy electromagnetic problems. , 2016, , .		3
88	First-Principles-Based Multiphysics Modeling and Simulation of On-Chip Cu-Graphene Hybrid Nanointerconnects in Comparison With Simplified Model-Based Analysis. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2019, 4, 374-382.	1.4	3
89	Accuracy Controlled Structure-Preserving ${\mathcal{ H}}^{2}$ -Matrix-Matrix Product in Linear Complexity With Change of Cluster Bases. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 441-455.	2.9	3
90	Multiphysics Modeling and Simulation of 3-D Cuâ€"Graphene Hybrid Nanointerconnects. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 490-500.	2.9	3

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91	Fast Method for Accelerating Convergence in Iterative Solution of Frequency-Domain Partial Differential Equation Methods. , 2020, , .		3
92	A Recovery Algorithm of Linear Complexity in the Time-Domain Layered Finite Element Reduction Recovery (LAFE-RR) Method for Large Scale Electromagnetic Analysis of High-Speed ICs. , 2007, , .		2
93	Time-domain orthogonal finite-element reduction-recovery (OrFE-RR) method for fast and accurate broadband simulation of die-package interaction. , 2008, , .		2
94	A linear-time eigenvalue solver for finite-element-based analysis of large-scale wave propagation problems in on-chip interconnect structures. , 2008, , .		2
95	Hierarchical and adaptive finite-element reduction-recovery method for large-scale power and signal integrity analysis of high-speed IC and packaging structures. , 2008, , .		2
96	An H²-matrix-based direct integral-equation solver of linear complexity for solving electrodynamic problems. , 2009, , .		2
97	Fast Iterative Solution Algorithms in the Frequency-Domain Layered Finite Element Method for Analyzing Integrated Circuits. IEEE Transactions on Advanced Packaging, 2010, 33, 524-533.	1.7	2
98	A rigorous method for fundamentally eliminating the low-frequency breakdown in full-wave finite-element-based analysis: Combined dielectric-conductor case. , 2010, , .		2
99	A novel volume integral formulation for wideband impedance extraction of arbitrarily-shaped 3-D lossy conductors in multiple dielectrics. , 2012, , .		2
100	A minimal order model from zero to high frequencies and its fast generation for finite-element based 3-d electromagnetic analysis. , 2012, , .		2
101	A Deterministic-Solution Based Fast Eigenvalue Solver With Guaranteed Convergence for Finite-Element Based 3-D Electromagnetic Analysis. IEEE Transactions on Antennas and Propagation, 2013, 61, 3701-3711.	3.1	2
102	A new volume integral equation formulation for analyzing 3-D circuits in inhomogeneous dielectrics exposed to external fields. , 2013, , .		2
103	Fast algorithm for generating a minimal-order model of a general lossy electromagnetic problem. , 2014, , .		2
104	Structure-aware time-domain finite-element method for efficient simulation of VLSI circuits. , 2014, , .		2
105	Accurate matrix-free time-domain method with traditional vector bases in unstructured meshes. , 2015, , .		2
106	Minimal-rank ℋ²-matrix-based iterative and direct volume integral equation solvers for large-scale scattering analysis. , 2015, , .		2
107	On the low-frequency breakdown of FDTD. , 2015, , .		2
108	Accurate matrix-free time-domain method in three-dimensional unstructured meshes. , 2015, , .		2

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109	Fast algorithm for nonlinear signaling analysis. , 2016, , .		2
110	Analytical method for finding the nullspace of stiffness matrix in the finite element method. , 2017, , .		2
111	Multiphysics Simulation of High-Speed Graphene-Based Interconnects in Time Domain. , 2018, , .		2
112	Symmetric Positive Semi-Definite FDTD Subgridding Algorithm in Both Space and Time. , 2018, , .		2
113	Explicit and Unconditionally Stable FDTD with Analytical Method for Identifying Unstable Modes. , 2018, , .		2
114	Fast and rigorous method for solving low-frequency breakdown in full-wave finite-element-based solution of general lossy problems. , 2018, , .		2
115	Rapid Inverse Modeling of Integrated Circuit Layout in Both Frequency and Time Domain. , 2019, , .		2
116	Truncating Matrx-free Time-Domain Method with PML for Solving 3-D Open Region Problems. , 2019, , .		2
117	A Father Has Two Sons or a Parent Has Two Children? [Women in Engineering]. IEEE Antennas and Propagation Magazine, 2019, 61, 52-56.	1.2	2
118	Multiphysics Modeling and Simulation of 3-D Cu-Graphene Hybrid Nano-Interconnects. , 2019, , .		2
119	Fast Algorithms for Converting an FMM-Based Representation of Electrically Large Integral Operators to a Minimal-Rank $\mathcal{H}^2$-Matrix. , 2019, , .		2
120	A Simple and Effective Method for Compressing Electrically Large Integral Operators. , 2021, , .		2
121	A time-domain layered finite element reduction recovery method (LAFE-RR) for high-frequency VLSI design. , 2007, , .		1
122	An H^2-matrix-based integral-equation solver of linear complexity for large-scale electromagnetic analysis. , 2008, , .		1
123	From O(N) to O(M): Time-domain layered finite-element reduction-recovery methods for large scale electromagnetics-based analysis and design of on-chip circuits. , 2008, , .		1
124	From O(k^2N) to O(N): A fast complex-valued eigenvalue solver for large-scale on-chip interconnect analysis. , 2009, , .		1
125	A fast 3-D eigenvalue solver for finite-element-based analysis of multilayered integrated circuits. , 2010, , .		1
126	An electromagnetics-based parallel transient simulator of linear complexity for the analysis of very large-scale integrated circuits and packages. , 2010, , .		1

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127	Parallel Time-Domain Finite-Element Simulator of Linear Speedup and Electromagnetic Accuracy for the Simulation of Dieâ€"Package Interaction. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2011, 1, 752-760.	1.4	1
128	A fast direct finite element solver for large-scale 3-D electromagnetic analysis. , 2012, , .		1
129	A theoretical proof on the error-bounded low-rank representation of integral operators for large-scale 3-D electrodynamic analysis. , 2012, , .		1
130	Explicit and unconditionally stable time-domain finite-element method with a more than “optimal” speedup. , 2013, , .		1
131	A new volume integral formulation for fullwave extraction of 3-D circuits in inhomogeneous dielectrics exposed to external fields. , 2013, , .		1
132	A Linear-Complexity Finite-Element-Based Eigenvalue Solver for Efficient Analysis of 3-D On-Chip Integrated Circuits. IEEE Microwave and Wireless Components Letters, 2014, 24, 833-835.	2.0	1
133	Diagonal-preserving explicit and unconditionally stable FDTD method for analyzing general lossy electromagnetic problems. , 2014, , .		1
134	Formulations of an accurate and stable matrix-free time-domain method in 2-D unstructured meshes. , 2015, , .		1
135	Linear-complexity direct finite element solver for irregular meshes and matrices without mesh. , 2015, , .		1
136	A new explicit and unconditionally stable FDTD method for analyzing general lossy problems. , 2015, , .		1
137	Accurate and stable matrix-free time-domain method independent of element shape for general electromagnetic analysis. , 2015, , .		1
138	A new explicit and unconditionally stable time-domain finite-element method. , 2015, , .		1
139	Solution to the low-frequency breakdown in full-wave finite-element based analysis of general lossy problems. , 2016, , .		1
140	Linear-complexity direct finite-element solver based shape design of electromagnetic structures. , 2016, , .		1
141	Direct synthesis algorithms for time-domain inverse design of electromagnetic structures with nonlinear circuits. , 2016, , .		1
142	A general approach to ensuring the stability of unsymmetrical FDTD subgridding schemes. , 2017, , .		1
143	Accuracy directly controlled fast direct solutions of general H2-matrices and its application to electrically large electromagnetic analysis. , 2017, , .		1
144	A symmetric positive semi-definite FDTD subgridding algorithm for arbitrary grid ratios with uncompromised accuracy". , 2017, , .		1

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145	Broadband and Sparse Finite-Element Formulation Free of Low-Frequency Breakdown. , 2018, , .		1
146	Accuracy-Controlled and Structure-Preserved H2-Matrix-Matrix Product in Linear Complexity. , 2018, , .		1
147	Accuracy Controlled Direct Integral Equation Solver of Linear Complexity with Change of Basis for Large-Scale Interconnect Extraction. , 2018, , .		1
148	Matrix-Free Method for Maxwell-Thermal Co-Simulation in Unstructured Meshes. , 2018, , .		1
149	Linear-complexity direct integral equation solver with explicit accuracy control for large-scale interconnect extraction. , 2018, , .		1
150	Explicit Matrix-Free Time-Domain Method in Unstructured Meshes and Its Application to Stable Simulation of General Unsymmetrical Systems. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 4821-4832.	2.9	1
151	Fast Method for Accelerating Time-Domain Solutions of Ill-Conditioned Electromagnetic Problems by Changing Curlâ€"Curl Operator to Laplacian. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 4613-4622.	2.9	1
152	IMS Fast Method for Large-Scale Signaling Analysis of Nonlinear Circuits Including Worst-Case Eye and Bit Error Rate Analysis. , 2021, , .		1
153	Method for Analyzing Bit Error Rates (BERs) of Nonlinear Circuits and Systems for High-Performance Signaling. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 732-743.	2.9	1
154	Split-Field Domain Decomposition Algorithm with Fast Convergence for Electromagnetic Analysis. , 2021, , .		1
155	A fast eigenvalue-based solution for full-wave analysis of large-scale three-dimensional on-chip interconnect structures. , 2007, , .		0
156	A reduction recovery algorithm for frequency-domain layered finite element analysis of large-scale high-frequency integrated circuits. , 2007, , .		0
157	A fast and high-capacity electromagnetic solution for high- speed IC design. IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, 2007, , .	0.0	0
158	A Recovery Algorithm for Frequency-Domain Layered Finite Element Analysis of Large-Scale High-Frequency Integrated Circuits. IEEE Microwave and Wireless Components Letters, 2007, 17, 553-555.	2.0	0
159	An alternative analytical reduction scheme in the timeâ€"domain layered finite element reduction recovery method for highâ€"frequency IC design. Microwave and Optical Technology Letters, 2008, 50, 2337-2341.	0.9	0
160	Fast iterative solution algorithms for the frequency-domain layered finite-element based analysis of large-scale on-chip interconnect structures. , 2008, , .		0
161	A unified finite-element solution from zero frequency to microwave frequencies for full-wave modeling of large-scale three-dimensional on-chip interconnect structures. , 2008, , .		0
162	A fast-marching time-domain layered finite-element reduction-recovery method for high-frequency VLSI design. , 2008, , .		0

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163	Layered H-matrix based direct matrix inversion of significantly reduced complexity for finite-element-based large-scale electromagnetic analysis. , 2010, , .		0
164	Electromagnetics-based co-simulation of linear network and nonlinear circuits accelerated by time-domain orthogonal finite-element reduction-recovery method. , 2010, , .		0
165	A mass-matrix solution based frequency-domain finite-element method. , 2010, , .		0
166	A new H^2-matrix-based representation of electrodynamic systems with minimized rank and prescribed accuracy. , 2010, , .		0
167	Multiscale Orthogonal Finite-Element Reduction-Recovery method for transient analysis of integrated circuits and package problems. , 2010, , .		0
168	Foreword Special Section on Recent Progress in Electrical Modeling and Simulation of High-Speed ICs and Packages. IEEE Transactions on Advanced Packaging, 2010, 33, 758-759.	1.7	0
169	Dense Matrix Factorization of Linear Complexity for Impedance Extraction of Large-Scale 3-D Integrated Circuits. , 2010, , .		0
170	An ℋ^2-based direct integral equation solver of linear complexity for full-wave extraction of 3-D structures in multiple dielectrics. , 2011, , .		0
171	A fast frequency sweep algorithm with controlled error and bandwidth for finite-element-based analysis of integrated circuits. , 2011, , .		0
172	An explicit inverse based fast direct volume integral equation solver for electromagnetic analysis. , 2011, , .		0
173	An &#x210B;<sup>2</sup>-based linear-complexity solution of surface integral equations for 3-D impedance extraction. , 2011, , .		0
174	A rigorous solution to the low-frequency breakdown in full-wave finite-element-based analysis of general problems involving inhomogeneous lossy dielectrics and non-ideal conductors. , 2011, , .		0
175	An extraction-free circuit simulator of linear complexity guided by electromagnetics-based first principles. , 2011, , .		0
176	A direct domain-decomposition of linear complexity for time-domain finite-element based analysis of multiscale structures and materials in integrated circuits. , 2011, , .		0
177	An ℋ-matrix parametric cascading based fast direct finite-element solver for large-scale circuit extraction. , 2011, , .		0
178	A fast O(1) solution for eliminating the low-frequency breakdown problem of fullwave solvers. , 2012, , .		0
179	A deterministic-solution based fast quadratic eigenvalue solver for 3-D finite element analysis. , 2012, , .		0
180	Fast H<sup>2</sup>-based integral equation solvers with an optimal H<sup>2</sup>-representation for large-scale electromagnetic analysis. , 2012, , .		0

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181	A linear-complexity direct integral equation solver accelerated by a new rank-minimized H^2-representation for large-scale 3-D interconnect extraction. , 2012, , .		0
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