Weng Cho Chew

List of Publications by Year
in descending order

288 papers	8,632 citations	66343 42 h-index	49909 87 g-index
290 all docs	290 docs citations	290 times ranked	3056 citing authors

#	Article	IF	Citations
1	A 3D perfectly matched medium from modified maxwell's equations with stretched coordinates. Microwave and Optical Technology Letters, 1994, 7, 599-604.	1.4	1,348
2	Multilevel fast multipole algorithm for electromagnetic scattering by large complex objects. IEEE Transactions on Antennas and Propagation, 1997, 45, 1488-1493.	5.1	1,322
3	Integral equation solution of Maxwell's equations from zero frequency to microwave frequencies. IEEE Transactions on Antennas and Propagation, 2000, 48, 1635-1645.	5.1	396
4	Fast solution methods in electromagnetics. IEEE Transactions on Antennas and Propagation, 1997, 45, 533-543.	5.1	243
5	Fast Full-Wave Surface Integral Equation Solver for Multiscale Structure Modeling. IEEE Transactions on Antennas and Propagation, 2009, 57, 3594-3601.	5.1	241
6	Integral Equation Methods for Electromagnetic and Elastic Waves. Synthesis Lectures on Computational Electromagnetics, 2008, 3, 1-241.	0.2	205
7	Numerical simulation methods for rough surface scattering. Waves in Random and Complex Media, 2001, 11, R1-R30.	1.5	199
8	Wave-Field Interaction With Complex Structures Using Equivalence Principle Algorithm. IEEE Transactions on Antennas and Propagation, 2007, 55, 130-138.	5.1	165
9	10 million unknowns: is it that big? [computational electromagnetics]. IEEE Antennas and Propagation Magazine, 2003, 45, 43-58.	1.4	160
10	Inverse scattering of two-dimensional dielectric objects buried in a lossy earth using the distorted Born iterative method. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 339-346.	6.3	159
11	Finite-difference time-domain simulation of ground penetrating radar on dispersive, inhomogeneous, and conductive soils. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 1928-1937.	6.3	153
12	Analysis and performance of a distributed memory multilevel fast multipole algorithm. IEEE Transactions on Antennas and Propagation, 2005, 53, 2719-2727.	5.1	123
13	VECTOR POTENTIAL ELECTROMAGNETICS WITH GENERALIZED GAUGE FOR INHOMOGENEOUS MEDIA: FORMULATION (Invited Paper). Progress in Electromagnetics Research, 2014, 149, 69-84.	4.4	118
14	Fast evaluation of Sommerfeld integrals for EM scattering and radiation by three-dimensional buried objects. IEEE Transactions on Geoscience and Remote Sensing, 1999, 37, 887-900.	6.3	107
15	Super-hyper singularity treatment for solving 3D electric field integral equations. Microwave and Optical Technology Letters, 2007, 49, 1383-1388.	1.4	107
16	A quantitative study on the low frequency breakdown of EFIE. Microwave and Optical Technology Letters, 2008, 50, 1159-1162.	1.4	106
17	A FAFFA-MLFMA algorithm for electromagnetic scattering. IEEE Transactions on Antennas and Propagation, 2002, 50, 1641-1649.	5.1	96
18	CalderÃ³n Multiplicative Preconditioned EFIE With Perturbation Method. IEEE Transactions on Antennas and Propagation, 2013, 61, 247-255.	5.1	90

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19	A combined steepest descent-fast multipole algorithm for the fast analysis of three-dimensional scattering by rough surfaces. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 738-748.	6.3	87
20	A New Green's Function Formulation for Modeling Homogeneous Objects in Layered Medium. IEEE Transactions on Antennas and Propagation, 2012, 60, 4766-4776.	5.1	84
21	Thin-stratified medium fast-multipole algorithm for solving microstrip structures. IEEE Transactions on Microwave Theory and Techniques, 1998, 46, 395-403.	4.6	81
22	Experimental verification of super resolution in nonlinear inverse scattering. Applied Physics Letters, 1998, 72, 3080-3082.	3.3	80
23	A domain decomposition scheme based on equivalence theorem. Microwave and Optical Technology Letters, 2006, 48, 1853-1857.	1.4	78
24	Finite-difference computation of transient electromagnetic waves for cylindrical geometries in complex media. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 1530-1543.	6.3	76
25	An augmented electric field integral equation for highâ€speed interconnect analysis. Microwave and Optical Technology Letters, 2008, 50, 2658-2662.	1.4	76
26	Novel diffraction tomographic algorithm for imaging two-dimensional targets buried under a lossy Earth. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 2033-2041.	6.3	75
27	A novel grid-robust higher order vector basis function for the method of moments. IEEE Transactions on Antennas and Propagation, 2001, 49, 908-915.	5.1	69
28	A surface integral equation formulation for low-frequency scattering from a composite object. IEEE Transactions on Antennas and Propagation, 2003, 51, 2837-2844.	5.1	66
29	Three-dimensional multilevel fast multipole algorithm from static to electrodynamic. Microwave and Optical Technology Letters, 2000, 26, 43-48.	1.4	64
30	A higher order parallelized multilevel fast multipole algorithm for 3-D scattering. IEEE Transactions on Antennas and Propagation, 2001, 49, 1069-1078.	5.1	64
31	Analysis of low frequency scattering from penetrable scatterers. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 726-735.	6.3	63
32	Error analysis for the truncation of multipole expansion of vector Green's functions [EM scattering]. IEEE Microwave and Wireless Components Letters, 2001, 11, 311-313.	3.2	57
33	Thin dielectric sheet simulation by surface integral equation using modified RWG and pulse bases. IEEE Transactions on Antennas and Propagation, 2006, 54, 1927-1934.	5.1	57
34	Response of a Point Source in a Multicylindrcally Layered Medium. IEEE Transactions on Geoscience and Remote Sensing, 1987, GE-25, 850-858.	6.3	56
35	Local shape function combined with genetic algorithm applied to inverse scattering for strips. Microwave and Optical Technology Letters, 1997, 16, 337-341.	1.4	47
36	Combined Field Integral Equation-Based Theory of Characteristic Mode. IEEE Transactions on Antennas and Propagation, 2015, 63, 3973-3981.	5.1	47

#	Article	IF	Citations
37	Error analysis of the moment method. IEEE Antennas and Propagation Magazine, 2004, 46, 38-53.	1.4	44
38	A General Design Rule to Manipulate Photocarrier Transport Path in Solar Cells and Its Realization by the Plasmonic-Electrical Effect. Scientific Reports, 2015, 5, 8525.	3.3	44
39	A higher-order Nystro/spl uml/m scheme for electromagnetic scattering by arbitrarily shaped surfaces. IEEE Antennas and Wireless Propagation Letters, 2005, 4, 277-280.	4.0	43
40	Study on spontaneous emission in complex multilayered plasmonic system via surface integral equation approach with layered medium Greenâ€™s function. Optics Express, 2012, 20, 20210.	3.4	43
41	A Potential-Based Integral Equation Method for Low-Frequency Electromagnetic Problems. IEEE Transactions on Antennas and Propagation, 2018, 66, 1413-1426.	5.1	43
42	An Enhanced Augmented Electric-Field Integral Equation Formulation for Dielectric Objects. IEEE Transactions on Antennas and Propagation, 2016, 64, 2339-2347.	5.1	42
43	Inverse scattering ofHz waves using local shape-function imaging: AT-matrix formulation. International Journal of Imaging Systems and Technology, 1994, 5, 22-27.	4.1	40
44	Large-Scale Characteristic Mode Analysis With Fast Multipole Algorithms. IEEE Transactions on Antennas and Propagation, 2016, 64, 2608-2616.	5.1	38
45	Error control of the translation operator in 3D MLFMA. Microwave and Optical Technology Letters, 2003, 37, 184-188.	1.4	37
46	Combining PML and ABC for the finite-element analysis of scattering problems. Microwave and Optical Technology Letters, 1996, 12, 192-197.	1.4	36
47	Accuracy of the method of moments for scattering by a cylinder. IEEE Transactions on Microwave Theory and Techniques, 2000, 48, 1652-1660.	4.6	36
48	Finite-Difference Time-Domain Simulation of the Maxwellâ€“SchrÃ¶dinger System. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2016, 1, 40-47.	2.2	36
49	Image reconstruction from TE scattering data using equation of strong permittivity fluctuation. IEEE Transactions on Antennas and Propagation, 2000, 48, 860-867.	5.1	35
50	An Augmented Electric Field Integral Equation for Layered Medium Green's Function. IEEE Transactions on Antennas and Propagation, 2011, 59, 960-968.	5.1	35
51	Response of a point source embedded in a layered medium. IEEE Antennas and Wireless Propagation Letters, 2003, 2, 254-258.	4.0	33
52	Compact Nonlinear Yagi-Uda Nanoantennas. Scientific Reports, 2016, 6, 18872.	3.3	33
53	Accurate model of arbitrary wire antennas in free space, above or inside ground. IEEE Transactions on Antennas and Propagation, 2000, 48, 482-493.	5.1	32
54	Efficient time-domain and frequency-domain finite-element solution of Maxwell's equations using spectral Lanczos decomposition method. IEEE Transactions on Microwave Theory and Techniques, 1998, 46, 1141-1149.	4.6	31

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55	Analyzing low-frequency electromagnetic scattering from a composite object. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 426-433.	6.3	31
56	A hybrid SBR/MoM technique for analysis of scattering from small protrusions on a large conducting body. IEEE Transactions on Antennas and Propagation, 1998, 46, 1349-1357.	5.1	27
57	Systematic study of spontaneous emission in a two-dimensional arbitrary inhomogeneous environment. Physical Review A, 2011, 83, .	2.5	27
58	An Integral Equation Modeling of Lossy Conductors With the Enhanced Augmented Electric Field Integral Equation. IEEE Transactions on Antennas and Propagation, 2017, 65, 4181-4190.	5.1	27
59	A Novel Meshless Scheme for Solving Surface Integral Equations With Flat Integral Domains. IEEE Transactions on Antennas and Propagation, 2012, 60, 3285-3293.	5.1	26
60	Interpolation of translation matrix in MLFMA. Microwave and Optical Technology Letters, 2001, 30, 109-114.	1.4	25
61	Accurate analysis of wire structures from very-low frequency to microwave frequency. IEEE Transactions on Antennas and Propagation, 2002, 50, 301-307.	5.1	24
62	Generalized Modal Expansion and Reduced Modal Representation of 3-D Electromagnetic Fields. IEEE Transactions on Antennas and Propagation, 2014, 62, 783-793.	5.1	24
63	Overview of Large-Scale Computing: The Past, the Present, and the Future. Proceedings of the IEEE, 2013, 101, 227-241.	21.3	23
64	Quantum information preserving computational electromagnetics. Physical Review A, 2020, 102, .	2.5	22
65	A robust surface-integral-equation formulation for conductive media. Microwave and Optical Technology Letters, 2005, 46, 109-114.	1.4	21
66	Dissipative Quantum Electromagnetics. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2018, 3, 198-213.	2.2	21
67	A spectral Lanczos decomposition method for solving 3-D low-frequency electromagnetic diffusion by the finite-element method. IEEE Transactions on Antennas and Propagation, 1999, 47, 242-248.	5.1	20
68	Transient response of some borehole mandrel tools. Geophysics, 1989, 54, 216-224.	2.6	19
69	Modeling of arbitrary wire antennas above ground. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 357-365.	6.3	19
70	A multilevel fast multipole algorithm for electrically small composite structures. Microwave and Optical Technology Letters, 2004, 43, 202-207.	1.4	19
71	Large-scale computation for electrically small structures using surface-integral equation method. Microwave and Optical Technology Letters, 2005, 47, 525-530.	1.4	19
72	On Preconditioning and the Eigensystems of Electromagnetic Radiation Problems. IEEE Transactions on Antennas and Propagation, 2008, 56, 2413-2420.	5.1	19

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73	A near-resonance decoupling approach (NRDA) for scattering solution of near-resonant structures. IEEE Transactions on Antennas and Propagation, 1997, 45, 1857-1862.	5.1	18
74	Efficient evaluation of Casimir force in arbitrary three-dimensional geometries by integral equation methods. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 2517-2520.	2.1	18
75	A Mixed-Form Thin-Stratified Medium Fast-Multipole Algorithm for Both Low and Mid-Frequency Problems. IEEE Transactions on Antennas and Propagation, 2011, 59, 2341-2349.	5.1	18
76	Finite-Width Feed and Load Models. IEEE Transactions on Antennas and Propagation, 2013, 61, 281-289.	5.1	18
77	Applying matrix rotation to the three-dimensional low-frequency multilevel fast multipole algorithm. Microwave and Optical Technology Letters, 2000, 26, 105-110.	1.4	17
78	A CalderÃ³n Preconditioner for the Electric Field Integral Equation With Layered Medium Green's Function. IEEE Transactions on Antennas and Propagation, 2014, 62, 2022-2030.	5.1	17
79	Finite Element Implementation of the Generalized-Lorenz Gauged A-<inline-formula> <tex-math notation="LaTeX">$Phi $ </tex-math> </inline-formula> Formulation for Low-Frequency Circuit Modeling. IEEE Transactions on Antennas and Propagation, 2016, 64, 4355-4364.	5.1	17
80	Quantum Maxwell's Equations Made Simple: Employing Scalar and Vector Potential Formulation. IEEE Antennas and Propagation Magazine, 2021, 63, 14-26.	1.4	17
81	A frequency extrapolation algorithm for FISC. IEEE Transactions on Antennas and Propagation, 1997, 45, 1891-1893.	5.1	16
82	MLFMA for solving integral equations of 2-D electromagnetic problems from static to electrodynamic. Microwave and Optical Technology Letters, 1999, 20, 306-311.	1.4	16
83	Fast real-time convolution algorithm for microwave multiport networks with nonlinear terminations. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2005, 52, 370-375.	2.2	16
84	A novel broadband patch antenna for universal UHF RFID tags. Microwave and Optical Technology Letters, 2010, 52, 2653-2657.	1.4	16
85	A Novel Implementation of Discrete Complex Image Method for Layered Medium Green's Function. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 419-422.	4.0	16
86	Multilevel Fast Multipole Acceleration in the NystrÃ¶m Discretization of Surface Electromagnetic Integral Equations for Composite Objects. IEEE Transactions on Antennas and Propagation, 2010, 58, 3411-3416.	5.1	15
87	The roles of metallic rectangular-grating and planar anodes in the photocarrier generation and transport of organic solar cells. Applied Physics Letters, 2012, 101, .	3.3	15
88	Nepalâ€"an algorithm for solving the volume integral equation. Microwave and Optical Technology Letters, 1993, 6, 185-188.	1.4	14
89	Numerical modeling of an enhanced very early time electromagnetic (VETEM) prototype system. IEEE Antennas and Propagation Magazine, 2000, 42, 17-27.	1.4	14
90	Toward a more robust and accurate CEM fast Integral equation solver for IC applications. IEEE Transactions on Advanced Packaging, 2005, 28, 449-464.	1.6	14

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91	A frequency-domain formulation of the FrÃ©chet derivative to exploit the inherent parallelism of the distorted Born iterative method. Waves in Random and Complex Media, 2006, 16, 495-508.	2.7	14
92	Differential-Forms-Motivated Discretizations of Electromagnetic Differential and Integral Equations. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1223-1226.	4.0	14
93	Development of Stable A-<inline-formula> <tex-math notation="LaTeX">Phi</tex-math> </inline-formula> Time-Domain Integral Equations for Multiscale Electromagnetics. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2018, 3, 255-265.	2.2	14
94	Detection of buried targets using a new enhanced very early time electromagnetic (VETEM) prototype system. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 2702-2712.	6.3	13
95	Frequency-Independent Scattering From a Flat Strip With ${m TE}_{z}$-Polarized Fields. IEEE Transactions on Antennas and Propagation, 2008, 56, 1008-1016.	5.1	13
96	A multi-scale modeling of junctionless field-effect transistors. Applied Physics Letters, 2013, 103, 062109.	3.3	13
97	A Low-Frequency Stable Broadband Multilevel Fast Multipole Algorithm Using Plane Wave Multipole Hybridization. IEEE Transactions on Antennas and Propagation, 2018, 66, 6137-6145.	5.1	13
98	Ultrasonic imaging by local shape function method with CGFFT. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 1996, 43, 956-969.	3.0	12
99	On the parallelization of electrodynamic multilevel fast multipole method on distributed memory computers. , 0, , .		12
100	Fast real-time convolution algorithm for transients of nonlinearly-terminated microwave multiport circuits. Microwave and Optical Technology Letters, 2003, 39, 280-282.	1.4	12
101	The Contour Deformation Method for Calculating the High-Frequency Scattered Field by the Fock Current on the Surface of the 3-D Convex Cylinder. IEEE Transactions on Antennas and Propagation, 2015, 63, 2180-2190.	5.1	12
102	Augmented Electric-Field Integral Equation for Inhomogeneous Media. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 2967-2970.	4.0	12
103	Convergence of moment-method solutions of the electric field integral equation for a 2-D open cavity. Microwave and Optical Technology Letters, 1999, 23, 212-218.	1.4	11
104	On the Near-Interaction Elements in Integral Equation Solvers for Electromagnetic Scattering by Three-Dimensional Thin Objects. IEEE Transactions on Antennas and Propagation, 2009, 57, 2500-2506.	5.1	11
105	CASIMIR FORCE FOR ARBITRARY OBJECTS USING THE ARGUMENT PRINCIPLE AND BOUNDARY ELEMENT METHODS. Progress in Electromagnetics Research, 2013, 142, 615-624.	4.4	11
106	Macroscopic Circuit Quantum Electrodynamics: A New Look Toward Developing Full-Wave Numerical Models. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2021, 6, 109-124.	2.2	11
107	Regulated kernel for the electric field integral equation. , 0, , .		10
108	Scalable electromagnetic scattering computations. , 0, , .		10

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109	Methods for fast evaluation of self-energy matrices in tight-binding modeling of electron transport systems. Journal of Applied Physics, 2012, 112, .	2.5	10
110	Model Order Reduction for Quantum Transport Simulation of Band-To-Band Tunneling Devices. IEEE Transactions on Electron Devices, 2014, 61, 561-568.	3.0	10
111	Diagonalization of the Hamiltonian for finite-sized dispersive media: Canonical quantization with numerical mode decomposition. Physical Review A, 2021, 103, .	2.5	10
112	A fast polynomial representation for the translation operators of an MLFMA. Microwave and Optical Technology Letters, 2001, 28, 298-303.	1.4	9
113	Single-Source Equivalence Principle Algorithm for the Analysis of Complex Structures. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1255-1258.	4.0	9
114	Dressed Atom Fields and Dressed States in Waveguide Quantum Electrodynamics. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2017, 2, 58-65.	2.2	9
115	Hybridization numerical Greenes function of anisotropic inhomogeneous media with surface integral equation. Microwave and Optical Technology Letters, 2017, 59, 1781-1786.	1.4	9
116	Recursive mode matching method for multiple waveguide junction modeling. IEEE Transactions on Microwave Theory and Techniques, 1996, 44, 87-92.	4.6	8
117	Cancellations of surface loop basis functions. , 0, , .		8
118	Full-wave analysis of complicated transmission-line circuits using wire models. IEEE Transactions on Antennas and Propagation, 2002, 50, 1350-1360.	5.1	8
119	FDTD modeling and analysis of a broadband antenna suitable for oil-field imaging while drilling. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 434-442.	6.3	8
120	Error analysis of the fast inhomogeneous plane wave algorithm for 2D free-space cases. Microwave and Optical Technology Letters, 2003, 38, 300-304.	1.4	8
121	Loopâ€Tree Free Augmented Equivalence Principle Algorithm for Lowâ€Frequency Problems. Microwave and Optical Technology Letters, 2013, 55, 2475-2479.	1.4	8
122	Acceleration of Perturbation-Based Electric Field Integral Equations Using Fast Fourier Transform. IEEE Transactions on Antennas and Propagation, 2016, 64, 4559-4564.	5.1	8
123	Characteristic Mode and Reduced Order Modeling at Low Frequencies. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 669-677.	2.5	8
124	Reduced-Order Model With Equivalence Surface for Scattering Problems. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 308-312.	4.0	8
125	Quantum Electromagnetic Finite-Difference Time-Domain Solver. Quantum Reports, 2020, 2, 253-265.	1.3	8
126	A fast algorithm for the analysis of radiation and scattering from microstrip arrays on finite substrates. Microwave and Optical Technology Letters, 1999, 23, 306-310.	1.4	7

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127	Numerical modeling of dielectric-resonator antennas in a complex environment using the method of moments. IEEE Transactions on Antennas and Propagation, 2002, 50, 79-82.	5.1	7
128	Numerical analysis of local interpolation error for 2D-MLFMA. Microwave and Optical Technology Letters, 2003, 36, 8-12.	1.4	7
129	A new Sommerfeld-Watson transformation in 3-D. IEEE Antennas and Wireless Propagation Letters, 2004, 3, 75-78.	4.0	7
130	Using tap basis to implement the equivalence principle algorithm for domain decomposition in integral equations. Microwave and Optical Technology Letters, 2006, 48, 2218-2222.	1.4	7
131	Packaging modeling using fast broadband surface integral equation method. , 2008, , .		7
132	Finite-width gap excitation and impedance models. , 2011, , .		7
133	Vectorial Solution to Double Curl Equation With Generalized Coulomb Gauge for Magnetostatic Problems. IEEE Transactions on Magnetics, 2015, 51, 1-6.	2.1	7
134	Stability analysis and discretization of A-Î¦ time domain integral equations for multiscale electromagnetics. Journal of Computational Physics, 2020, 408, 109102.	3.8	7
135	The Transmon Qubit for Electromagnetics Engineers: An introduction. IEEE Antennas and Propagation Magazine, 2023, 65, 8-20.	1.4	7
136	Fast inhomogeneous plane wave algorithm for 3D buried object problems. , 0, , .		6
137	Formal solution to the electromagnetic scattering by buried dielectric and metallic spheres. Radio Science, 2004, 39, n/a-n/a.	1.6	6
138	E-Field, H-Field, and Combined-Field Based NystrÃ¶m Method Analysis for Electromagnetic Scattering by Complex-Material Bodies. IEEE Transactions on Electromagnetic Compatibility, 2010, 52, 620-628.	2.2	6
139	An efficient method for highly oscillatory physical optics integrals. , 2012, , .		6
140	An Efficiently Preconditioned Eigenanalysis of Inhomogeneously Loaded Rectangular Cavities. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 58-61.	4.0	6
141	A Frequency-Independent Method for Computing the Physical Optics-Based Electromagnetic Fields Scattered From a Hyperbolic Surface. IEEE Transactions on Antennas and Propagation, 2016, 64, 1546-1552.	5.1	6
142	Hamilton Equations, Commutator, and Energy Conservation. Quantum Reports, 2019, 1, 295-303.	1.3	6
143	RADIATION GAUGE POTENTIAL-BASED TIME DOMAIN INTEGRAL EQUATIONS FOR PENETRABLE REGIONS. Progress in Electromagnetics Research, 2020, 168, 73-86.	4.4	6
144	Lorenz Gauge Potential-Based Time Domain Integral Equations for Analyzing Subwavelength Penetrable Regions. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2021, 6, 24-34.	2.2	6

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145	Complementary perfectly matched layers to reduce reflection errors. Microwave and Optical Technology Letters, 1997, 14, 284-287.	1.4	5
146	High-order inversion formulas for low-frequency imaging of 2D buried targets. , 2004, , .		5
147	Solving array structures using single-source equivalence principle algorithm. , 2013, , .		5
148	Fast solution of lowâ€frequency complex problems over a frequency band using enhanced Aâ€EFIE and FMM. Microwave and Optical Technology Letters, 2014, 56, 2153-2158.	1.4	5
149	Large inverse-scattering solutions with DBIM on GPU-enabled supercomputers. , 2017, , .		5
150	A Fast and Massively-Parallel Inverse Solver for Multiple-Scattering Tomographic Image Reconstruction. , 2018, , .		5
151	CLASSICAL AND QUANTUM ELECTROMAGNETIC INTERFERENCES: WHAT IS THE DIFFERENCE?. Progress in Electromagnetics Research, 2020, 168, 1-13.	4.4	5
152	The application of far-field approximation to accelerate the fast multipole method. , 0, , .		4
153	Fast algorithm for scattering from planar arrays of conducting patches. , 1998, 8, 155-157.		4
154	Time-domain ultra-wideband microwave imaging radar system. , 0, , .		4
155	Fast field calculation by a multilevel fast multipole algorithm for large complex radiators and scatterers. , 0, , .		4
156	Unified boundary integral equation for the scattering of elastic and acoustic waves: solution by the method of moments. Waves in Random and Complex Media, 2008, 18, 303-324.	2.7	4
157	A pancake-shaped nano-aggregate for focusing surface plasmons. Journal of Applied Physics, 2012, 111, .	2.5	4
158	Enhanced A-EFIE with Calderón multiplicative preconditioner. , 2013, , .		4
159	Blackbox macro-modeling of the nonlinearity based on Volterra series representation of X-parameters. , 2014, , .		4
160	Role of Classical Time Domain CEM Methods for Quantum Electromagnetics. , 2019, , .		4
161	Second-harmonic generation of structured light by transition-metal dichalcogenide metasurfaces. Physical Review A, 2020, 102, .	2.5	4
162	Potential-Based Time Domain Integral Equations Free From Interior Resonances. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2021, 6, 81-91.	2.2	4

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163	Impedance calculation of complex surfaces-wire structures with multilevel fast multipole algorithm and variational formulation. , 0, , .		3
164	Complex Structures Modeling Using Equivalence Principle Algorithm. , 2006, , .		3
165	A Linear-Time Algorithm for Extracting Tree and Loop Bases in Computational Electromagnetics. , 2006, , .		3
166	A study for sound wave scattering by corrugated ground with complex trench structures. Waves in Random and Complex Media, 2009, 19, 392-408.	2.7	3
167	Numerical analysis of electrically small structures embedded in a layered medium. Microwave and Optical Technology Letters, 2009, 51, 1304-1308.	1.4	3
168	Coupled Integral Equations for Microwave Induced Elastic Wave in Elastic Media. IEEE Transactions on Antennas and Propagation, 2010, 58, 2309-2317.	5.1	3
169	Reducing computational workload of electromagnetic scattered fields from electrically large quadratic surface at high frequency. , 2013, , .		3
170	Second-harmonic generation in metal nanoparticles modeling by surface integral equation. , 2014, , .		3
171	Characteristic mode theory based on combined field integral equation. , 2015, , .		3
172	An augmented electric field integral equation formulation for dielectrics and conductors at low frequencies. , 2015, , .		3
173	On computational complexity of the multilevel fast multipole algorithm in various dimensions. , 2016, , .		3
174	A Groundwave Propagation Model Using a Fast Far-Field Approximation. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 1369-1372.	4.0	3
175	A Broadband ML-FMA for 3-D Periodic Greenâ€™s Function in 2-D Lattice Using Ewald Summation. IEEE Transactions on Antennas and Propagation, 2017, 65, 3134-3145.	5.1	3
176	Efficient Implicit Mode Matching Method for Complicated Periodic Waveguiding Structures. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 2651-2654.	4.0	3
177	Transient Analysis Method for Plasmonic Devices by PMCHWT With Fast Inverse Laplace Transform. IEEE Antennas and Wireless Propagation Letters, 2022, 21, 973-977.	4.0	3
178	A 2.5D scalar helmholtz wave solution employing the spectral lanczos decomposition method (sldm). Microwave and Optical Technology Letters, 1993, 6, 587-592.	1.4	2
179	A recursive aggregation method for the computation of electromagnetic scattering by randomly distributed particles. Microwave and Optical Technology Letters, 1993, 6, 774-777.	1.4	2
180	An efficient iterative solver for the modes in a dielectric waveguide. , 0, , .		2

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181	Generalized PMCHWT formulation for low-frequency multi-region problems. , 0, , .		2
182	Quasi-static analysis of fringe capacitances for horizontal and vertical annular frills. Microwave and Optical Technology Letters, 2002, 33, 61-64.	1.4	2
183	Super resolution phenomenon in the detection of buried objects. , 0, , .		2
184	A multi-level fast multipole algorithm for low-frequency scattering from a composite object. , 0, , .		2
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