

# Weng Cho Chew

## List of Publications by Year in Descending Order

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

203  
papers

5,960  
citations

37  
h-index

73  
g-index

290  
ext. papers

7,609  
ext. citations

3.2  
avg, IF

5.92  
L-index

#	Paper	IF	Citations
203	Fourier Transform, Dirac Commutator, Energy Conservation, and Correspondence Principle for Electrical Engineers. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2022</b> , 1-1	1.5	1
202	Transient Analysis Method for Plasmonic Devices by PMCHWT with Fast Inverse Laplace Transform. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2022</b> , 1-1	3.8	1
201	Full-Wave Methodology to Compute the Spontaneous Emission Rate of a Transmon Qubit. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2022</b> , 7, 92-101	1.5	
200	Modeling Electromagnetic Wave Phenomena in Large Quantum Systems [Special Series: Guest Editorial]. <i>IEEE Antennas and Propagation Magazine</i> , <b>2021</b> , 63, 28-28	1.7	
199	Diagonalization of the Hamiltonian for finite-sized dispersive media: Canonical quantization with numerical mode decomposition. <i>Physical Review A</i> , <b>2021</b> , 103,	2.6	1
198	Potential-Based Time Domain Integral Equations Free From Interior Resonances. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2021</b> , 6, 81-91	1.5	2
197	Lorenz Gauge Potential-Based Time Domain Integral Equations for Analyzing Subwavelength Penetrable Regions. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2021</b> , 6, 24-34	1.5	4
196	Casimir Force: Vacuum fluctuation, zero-point energy, and computational electromagnetics. <i>IEEE Antennas and Propagation Magazine</i> , <b>2021</b> , 2-12	1.7	
195	Quantum Maxwell's Equations Made Simple: Employing Scalar and Vector Potential Formulation. <i>IEEE Antennas and Propagation Magazine</i> , <b>2021</b> , 63, 14-26	1.7	5
194	Comparing Classical and Quantum Electromagnetics: Part 2 [Special Series: Guest Editorial]. <i>IEEE Antennas and Propagation Magazine</i> , <b>2021</b> , 63, 13-13	1.7	
193	Macroscopic Circuit Quantum Electrodynamics: A New Look Toward Developing Full-Wave Numerical Models. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2021</b> , 1-1	1.5	2
192	Full-Wave Computation of the Spontaneous Emission Rate of a Transmon Qubit <b>2021</b> ,		1
191	Broadband Spectral Numerical Green's Function for Electromagnetic Analysis of Inhomogeneous Objects. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2020</b> , 19, 1063-1067	3.8	1
190	Quantum Electromagnetic Finite-Difference Time-Domain Solver. <i>Quantum Reports</i> , <b>2020</b> , 2, 253-265	2.1	4
189	Generalized Solver Hybridization Using Equivalence Principle Algorithm. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2020</b> , 68, 2206-2212	4.9	1
188	Stability analysis and discretization of A- $\Gamma$ time domain integral equations for multiscale electromagnetics. <i>Journal of Computational Physics</i> , <b>2020</b> , 408, 109102	4.1	4
187	Second-harmonic generation of structured light by transition-metal dichalcogenide metasurfaces. <i>Physical Review A</i> , <b>2020</b> , 102,	2.6	2

186	Quantum information preserving computational electromagnetics. <i>Physical Review A</i> , <b>2020</b> , 102,	2.6	6
185	RADIATION GAUGE POTENTIAL-BASED TIME DOMAIN INTEGRAL EQUATIONS FOR PENETRABLE REGIONS. <i>Progress in Electromagnetics Research</i> , <b>2020</b> , 168, 73-86	3.8	4
184	CLASSICAL AND QUANTUM ELECTROMAGNETIC INTERFERENCES: WHAT IS THE DIFFERENCE?. <i>Progress in Electromagnetics Research</i> , <b>2020</b> , 168, 1-13	3.8	3
183	Reduced-Order Model With Equivalence Surface for Scattering Problems. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2019</b> , 18, 308-312	3.8	3
182	Hamilton Equations, Commutator, and Energy Conservation. <i>Quantum Reports</i> , <b>2019</b> , 1, 295-303	2.1	5
181	Polynomial Finite-Size Shape Functions for Electromagnetic Particle-in-Cell Algorithms Based on Unstructured Meshes. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2019</b> , 4, 317-328	1.5	2
180	Role of Classical Time Domain CEM Methods for Quantum Electromagnetics <b>2019</b> ,		1
179	A Potential-Based Integral Equation Method for Low-Frequency Electromagnetic Problems. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2018</b> , 66, 1413-1426	4.9	23
178	A Low-Frequency Stable Broadband Multilevel Fast Multipole Algorithm Using Plane Wave Multipole Hybridization. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2018</b> , 66, 6137-6145	4.9	9
177	A Fast and Massively-Parallel Inverse Solver for Multiple-Scattering Tomographic Image Reconstruction <b>2018</b> ,		4
176	Sincere Thanks for a Wonderful Year [President's Message]. <i>IEEE Antennas and Propagation Magazine</i> , <b>2018</b> , 60, 6-6	1.7	
175	Dissipative Quantum Electromagnetics. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2018</b> , 3, 198-213	1.5	15
174	Development of Stable A- $\Phi$ Time-Domain Integral Equations for Multiscale Electromagnetics. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2018</b> , 3, 255-265	1.5	9
173	A Wideband 2-D Fast Multipole Algorithm With a Novel Diagonalization Form. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2018</b> , 66, 7477-7482	4.9	1
172	Characteristic Mode and Reduced Order Modeling at Low Frequencies. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2017</b> , 7, 669-677	1.7	5
171	Large inverse-scattering solutions with DBIM on GPU-enabled supercomputers <b>2017</b> ,		2
170	Dressed Atom Fields and Dressed States in Waveguide Quantum Electrodynamics. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2017</b> , 2, 58-65	1.5	6
169	Hybridization numerical Greenes function of anisotropic inhomogeneous media with surface integral equation. <i>Microwave and Optical Technology Letters</i> , <b>2017</b> , 59, 1781-1786	1.2	4

168	An Integral Equation Modeling of Lossy Conductors With the Enhanced Augmented Electric Field Integral Equation. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2017</b> , 65, 4181-4190	4.9	14
167	A Groundwave Propagation Model Using a Fast Far-Field Approximation. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2017</b> , 16, 1369-1372	3.8	3
166	A Broadband ML-FMA for 3-D Periodic Green's Function in 2-D Lattice Using Ewald Summation. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2017</b> , 65, 3134-3145	4.9	0
165	Augmented Electric-Field Integral Equation for Inhomogeneous Media. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2017</b> , 16, 2967-2970	3.8	6
164	Efficient Implicit Mode Matching Method for Complicated Periodic Waveguiding Structures. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2017</b> , 16, 2651-2654	3.8	2
163	Sum-frequency and second-harmonic generation from plasmonic nonlinear nanoantennas. <i>URSI Radio Science Bulletin</i> , <b>2017</b> , 2017, 43-49	0.1	2
162	Acceleration of Perturbation-Based Electric Field Integral Equations Using Fast Fourier Transform. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2016</b> , 64, 4559-4564	4.9	4
161	On computational complexity of the multilevel fast multipole algorithm in various dimensions <b>2016</b>		1
160	A Novel Efficient Numerical Solution of Poisson's Equation for Arbitrary Shapes in Two Dimensions. <i>Communications in Computational Physics</i> , <b>2016</b> , 20, 1381-1404	2.4	1
159	An Enhanced Augmented Electric-Field Integral Equation Formulation for Dielectric Objects. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2016</b> , 64, 2339-2347	4.9	23
158	Large-Scale Characteristic Mode Analysis With Fast Multipole Algorithms. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2016</b> , 64, 2608-2616	4.9	26
157	A Frequency-Independent Method for Computing the Physical Optics-Based Electromagnetic Fields Scattered From a Hyperbolic Surface. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2016</b> , 64, 1546-1552	4.9	5
156	Compact Nonlinear Yagi-Uda Nanoantennas. <i>Scientific Reports</i> , <b>2016</b> , 6, 18872	4.9	26
155	Finite Element Implementation of the Generalized-Lorenz Gauged A- $\Phi$ Formulation for Low-Frequency Circuit Modeling. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2016</b> , 64, 4355-4364	4.9	12
154	Finite-Difference Time-Domain Simulation of the Maxwell-Dirac System. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2016</b> , 1, 40-47	1.5	20
153	A novel beam-steering nonlinear nanoantenna with surface plasmon resonance <b>2016</b> ,		1
152	The Contour Deformation Method for Calculating the High-Frequency Scattered Field by the Fock Current on the Surface of the 3-D Convex Cylinder. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2015</b> , 63, 2180-2190	4.9	8
151	Combined Field Integral Equation-Based Theory of Characteristic Mode. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2015</b> , 63, 3973-3981	4.9	37

150	A general design rule to manipulate photocarrier transport path in solar cells and its realization by the plasmonic-electrical effect. <i>Scientific Reports</i> , <b>2015</b> , 5, 8525	4.9	38
149	Plots of modal field distribution in circular dielectric waveguide. <i>Microwave and Optical Technology Letters</i> , <b>2015</b> , 57, 2599-2601	1.2	1
148	Vectorial Solution to Double Curl Equation With Generalized Coulomb Gauge for Magnetostatic Problems. <i>IEEE Transactions on Magnetics</i> , <b>2015</b> , 51, 1-6	2	1
147	A Calderón Preconditioner for the Electric Field Integral Equation With Layered Medium Green's Function. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2014</b> , 62, 2022-2030	4.9	11
146	Electromagnetic Cell With Three-Dimensional Polarization Dynamic Control. <i>IEEE Transactions on Electromagnetic Compatibility</i> , <b>2014</b> , 56, 15-22	2	
145	Generalized Modal Expansion and Reduced Modal Representation of 3-D Electromagnetic Fields. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2014</b> , 62, 783-793	4.9	20
144	Differential-Forms-Motivated Discretizations of Electromagnetic Differential and Integral Equations. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2014</b> , 13, 1223-1226	3.8	9
143	VECTOR POTENTIAL ELECTROMAGNETICS WITH GENERALIZED GAUGE FOR INHOMOGENEOUS MEDIA: FORMULATION (Invited Paper). <i>Progress in Electromagnetics Research</i> , <b>2014</b> , 149, 69-84	3.8	66
142	Single-Source Equivalence Principle Algorithm for the Analysis of Complex Structures. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2014</b> , 13, 1255-1258	3.8	7
141	Fast solution of low-frequency complex problems over a frequency band using enhanced A-EFIE and FMM. <i>Microwave and Optical Technology Letters</i> , <b>2014</b> , 56, 2153-2158	1.2	4
140	Model Order Reduction for Quantum Transport Simulation of Band-To-Band Tunneling Devices. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 561-568	2.9	6
139	Second-harmonic generation in metal nanoparticles modeling by surface integral equation <b>2014</b> ,		3
138	Finite-Width Feed and Load Models. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2013</b> , 61, 281-289	4.9	12
137	Loop-Tree Free Augmented Equivalence Principle Algorithm for Low-Frequency Problems. <i>Microwave and Optical Technology Letters</i> , <b>2013</b> , 55, 2475-2479	1.2	5
136	A multi-scale modeling of junctionless field-effect transistors. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 062109	3.4	12
135	Enhanced A-EFIE with Calderón multiplicative preconditioner <b>2013</b> ,		4
134	Overview of Large-Scale Computing: The Past, the Present, and the Future. <i>Proceedings of the IEEE</i> , <b>2013</b> , 101, 227-241	14.3	13
133	CASIMIR FORCE FOR ARBITRARY OBJECTS USING THE ARGUMENT PRINCIPLE AND BOUNDARY ELEMENT METHODS. <i>Progress in Electromagnetics Research</i> , <b>2013</b> , 142, 615-624	3.8	6

132	An Efficiently Preconditioned Eigenanalysis of Inhomogeneously Loaded Rectangular Cavities. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2013</b> , 12, 58-61	3.8	5
131	Calderón Multiplicative Preconditioned EFIE With Perturbation Method. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2013</b> , 61, 247-255	4.9	46
130	Reducing computational workload of electromagnetic scattered fields from electrically large quadratic surface at high frequency <b>2013</b> ,		3
129	Solving array structures using single-source equivalence principle algorithm <b>2013</b> ,		4
128	A Novel Meshless Scheme for Solving Surface Integral Equations With Flat Integral Domains. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2012</b> , 60, 3285-3293	4.9	20
127	Unsolved Problems in EM and CEM: A Personal Perspective [Open Problems in CEM]. <i>IEEE Antennas and Propagation Magazine</i> , <b>2012</b> , 54, 270-274	1.7	
126	A New Green's Function Formulation for Modeling Homogeneous Objects in Layered Medium. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2012</b> , 60, 4766-4776	4.9	50
125	An efficient method for highly oscillatory physical optics integrals <b>2012</b> ,		6
124	Methods for fast evaluation of self-energy matrices in tight-binding modeling of electron transport systems. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 013711	2.5	7
123	The roles of metallic rectangular-grating and planar anodes in the photocarrier generation and transport of organic solar cells. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 223302	3.4	13
122	A pancake-shaped nano-aggregate for focusing surface plasmons. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 034308	2.5	2
121	Study on spontaneous emission in complex multilayered plasmonic system via surface integral equation approach with layered medium Green's function. <i>Optics Express</i> , <b>2012</b> , 20, 20210-21	3.3	33
120	A Novel Implementation of Discrete Complex Image Method for Layered Medium Green's Function. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2011</b> , 10, 419-422	3.8	12
119	Finite-width gap excitation and impedance models <b>2011</b> ,		1
118	Systematic study of spontaneous emission in a two-dimensional arbitrary inhomogeneous environment. <i>Physical Review A</i> , <b>2011</b> , 83,	2.6	20
117	An Augmented Electric Field Integral Equation for Layered Medium Green's Function. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2011</b> , 59, 960-968	4.9	25
116	A Mixed-Form Thin-Stratified Medium Fast-Multipole Algorithm for Both Low and Mid-Frequency Problems. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2011</b> , 59, 2341-2349	4.9	14
115	Multilevel Fast Multipole Acceleration in the Nyström Discretization of Surface Electromagnetic Integral Equations for Composite Objects. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2010</b> , 58, 3411-3416 <sup>11</sup>	4.9	11

114	Coupled Integral Equations for Microwave Induced Elastic Wave in Elastic Media. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2010</b> , 58, 2309-2317	4.9	1
113	E-Field, H-Field, and Combined-Field Based Nyström Method Analysis for Electromagnetic Scattering by Complex-Material Bodies. <i>IEEE Transactions on Electromagnetic Compatibility</i> , <b>2010</b> , 52, 620-628	2	4
112	A novel broadband patch antenna for universal UHF RFID tags. <i>Microwave and Optical Technology Letters</i> , <b>2010</b> , 52, 2653-2657	1.2	9
111	Efficient evaluation of Casimir force in arbitrary three-dimensional geometries by integral equation methods. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2010</b> , 374, 2517-2520	2.3	17
110	A study for sound wave scattering by corrugated ground with complex trench structures. <i>Waves in Random and Complex Media</i> , <b>2009</b> , 19, 392-408	1.9	2
109	Numerical analysis of electrically small structures embedded in a layered medium. <i>Microwave and Optical Technology Letters</i> , <b>2009</b> , 51, 1304-1308	1.2	3
108	Fast Full-Wave Surface Integral Equation Solver for Multiscale Structure Modeling. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2009</b> , 57, 3594-3601	4.9	132
107	On the Near-Interaction Elements in Integral Equation Solvers for Electromagnetic Scattering by Three-Dimensional Thin Objects. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2009</b> , 57, 2500-2506	4.9	10
106	Integral Equation Methods for Electromagnetic and Elastic Waves. <i>Synthesis Lectures on Computational Electromagnetics</i> , <b>2008</b> , 3, 1-241		72
105	On Preconditioning and the Eigensystems of Electromagnetic Radiation Problems. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2008</b> , 56, 2413-2420	4.9	9
104	Frequency-Independent Scattering From a Flat Strip With $\text{TE}_z$ -Polarized Fields. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2008</b> , 56, 1008-1016	4.9	11
103	Surface impedance design with ground corrugation for mitigation of large-calibre gun blast noise. <i>Waves in Random and Complex Media</i> , <b>2008</b> , 18, 461-477	1.9	1
102	Packaging modeling using fast broadband surface integral equation method <b>2008</b> ,		4
101	Unified boundary integral equation for the scattering of elastic and acoustic waves: solution by the method of moments. <i>Waves in Random and Complex Media</i> , <b>2008</b> , 18, 303-324	1.9	4
100	A quantitative study on the low frequency breakdown of EFIE. <i>Microwave and Optical Technology Letters</i> , <b>2008</b> , 50, 1159-1162	1.2	56
99	An augmented electric field integral equation for high-speed interconnect analysis. <i>Microwave and Optical Technology Letters</i> , <b>2008</b> , 50, 2658-2662	1.2	46
98	Super-hyper singularity treatment for solving 3D electric field integral equations. <i>Microwave and Optical Technology Letters</i> , <b>2007</b> , 49, 1383-1388	1.2	71
97	Wave-Field Interaction With Complex Structures Using Equivalence Principle Algorithm. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2007</b> , 55, 130-138	4.9	103



96	A domain decomposition scheme based on equivalence theorem. <i>Microwave and Optical Technology Letters</i> , <b>2006</b> , 48, 1853-1857	1.2	47
95	Using tap basis to implement the equivalence principle algorithm for domain decomposition in integral equations. <i>Microwave and Optical Technology Letters</i> , <b>2006</b> , 48, 2218-2222	1.2	6
94	Thin dielectric sheet simulation by surface integral equation using modified RWG and pulse bases. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2006</b> , 54, 1927-1934	4.9	41
93	A frequency-domain formulation of the Fröhert derivative to exploit the inherent parallelism of the distorted Born iterative method. <i>Waves in Random and Complex Media</i> , <b>2006</b> , 16, 495-508	1.9	11
92	Toward a more robust and accurate CEM fast Integral equation solver for IC applications. <i>IEEE Transactions on Advanced Packaging</i> , <b>2005</b> , 28, 449-464		10
91	Analysis and performance of a distributed memory multilevel fast multipole algorithm. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2005</b> , 53, 2719-2727	4.9	77
90	A robust surface-integral-equation formulation for conductive media. <i>Microwave and Optical Technology Letters</i> , <b>2005</b> , 46, 109-114	1.2	14
89	The unstructured support operator method and its application in waveguide problems. <i>Microwave and Optical Technology Letters</i> , <b>2005</b> , 46, 495-500	1.2	1
88	Large-scale computation for electrically small structures using surface-integral equation method. <i>Microwave and Optical Technology Letters</i> , <b>2005</b> , 47, 525-530	1.2	13
87	A higher-order Nystro/spl uml/m scheme for electromagnetic scattering by arbitrarily shaped surfaces. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2005</b> , 4, 277-280	3.8	30
86	Fast real-time convolution algorithm for microwave multiport networks with nonlinear terminations. <i>IEEE Transactions on Circuits and Systems Part 2: Express Briefs</i> , <b>2005</b> , 52, 370-375		13
85	A multilevel fast multipole algorithm for electrically small composite structures. <i>Microwave and Optical Technology Letters</i> , <b>2004</b> , 43, 202-207	1.2	10
84	A new Sommerfeld-Watson transformation in 3-D. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2004</b> , 3, 75-78	3.8	4
83	Error analysis of the moment method. <i>IEEE Antennas and Propagation Magazine</i> , <b>2004</b> , 46, 38-53	1.7	36
82	Formal solution to the electromagnetic scattering by buried dielectric and metallic spheres. <i>Radio Science</i> , <b>2004</b> , 39, n/a-n/a	1.4	4
81	Response of a point source embedded in a layered medium. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2003</b> , 2, 254-258	3.8	0
80	Numerical analysis of local interpolation error for 2D-MLFMA. <i>Microwave and Optical Technology Letters</i> , <b>2003</b> , 36, 8-12	1.2	6
79	Error control of the translation operator in 3D MLFMA. <i>Microwave and Optical Technology Letters</i> , <b>2003</b> , 37, 184-188	1.2	32



78	Error analysis of the fast inhomogeneous plane wave algorithm for 2D free-space cases. <i>Microwave and Optical Technology Letters</i> , <b>2003</b> , 38, 300-304	1.2	6
77	Fast real-time convolution algorithm for transients of nonlinearly-terminated microwave multiport circuits. <i>Microwave and Optical Technology Letters</i> , <b>2003</b> , 39, 280-282	1.2	9
76	10 million unknowns: is it that big? [computational electromagnetics]. <i>IEEE Antennas and Propagation Magazine</i> , <b>2003</b> , 45, 43-58	1.7	97
75	Response of a point source embedded in a layered medium. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2003</b> , 2, 254-258	3.8	29
74	A surface integral equation formulation for low-frequency scattering from a composite object. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2003</b> , 51, 2837-2844	4.9	45
73	Quasi-static analysis of fringe capacitances for horizontal and vertical annular frills. <i>Microwave and Optical Technology Letters</i> , <b>2002</b> , 33, 61-64	1.2	2
72	Accurate analysis of wire structures from very-low frequency to microwave frequency. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2002</b> , 50, 301-307	4.9	15
71	Numerical modeling of dielectric-resonator antennas in a complex environment using the method of moments. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2002</b> , 50, 79-82	4.9	5
70	Full-wave analysis of complicated transmission-line circuits using wire models. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2002</b> , 50, 1350-1360	4.9	6
69	A FAFFA-MLFMA algorithm for electromagnetic scattering. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2002</b> , 50, 1641-1649	4.9	66
68	Analyzing low-frequency electromagnetic scattering from a composite object. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2002</b> , 40, 426-433	8.1	23
67	FDTD modeling and analysis of a broadband antenna suitable for oil-field imaging while drilling. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2002</b> , 40, 434-442	8.1	8
66	Interpolation of translation matrix in MLFMA. <i>Microwave and Optical Technology Letters</i> , <b>2001</b> , 30, 109-114	1.2	17
65	A fast polynomial representation for the translation operators of an MLFMA. <i>Microwave and Optical Technology Letters</i> , <b>2001</b> , 28, 298-303	1.2	7
64	A novel grid-robust higher order vector basis function for the method of moments. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2001</b> , 49, 908-915	4.9	45
63	Inverse scattering of two-dimensional dielectric objects buried in a lossy earth using the distorted Born iterative method. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2001</b> , 39, 339-346	8.1	115
62	Correction to: "Novel diffraction tomographic algorithm for imaging two-dimensional targets buried under a lossy earth". <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2001</b> , 39, 461	8.1	1
61	Analysis of low frequency scattering from penetrable scatterers. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2001</b> , 39, 726-735	8.1	45

60	Detection of buried targets using a new enhanced very early time electromagnetic (VETEM) prototype system. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2001</b> , 39, 2702-2712	8.1	8
59	A higher order parallelized multilevel fast multipole algorithm for 3-D scattering. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2001</b> , 49, 1069-1078	4.9	41
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57	Error analysis for the truncation of multipole expansion of vector Green's functions [EM scattering]. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2001</b> , 11, 311-313	2.6	43
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55	Applying matrix rotation to the three-dimensional low-frequency multilevel fast multipole algorithm. <i>Microwave and Optical Technology Letters</i> , <b>2000</b> , 26, 105-110	1.2	12
54	Accuracy of the method of moments for scattering by a cylinder. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2000</b> , 48, 1652-1660	4.1	29
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52	Finite-difference computation of transient electromagnetic waves for cylindrical geometries in complex media. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2000</b> , 38, 1530-1543	8.1	65
51	Novel diffraction tomographic algorithm for imaging two-dimensional targets buried under a lossy Earth. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2000</b> , 38, 2033-2041	8.1	54
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49	Image reconstruction from TE scattering data using equation of strong permittivity fluctuation. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2000</b> , 48, 860-867	4.9	29
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44	Convergence of moment-method solutions of the electric field integral equation for a 2-D open cavity. <i>Microwave and Optical Technology Letters</i> , <b>1999</b> , 23, 212-218	1.2	7
43	A fast algorithm for the analysis of radiation and scattering from microstrip arrays on finite substrates. <i>Microwave and Optical Technology Letters</i> , <b>1999</b> , 23, 306-310	1.2	6

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41	A spectral Lanczos decomposition method for solving 3-D low-frequency electromagnetic diffusion by the finite-element method. <i>IEEE Transactions on Antennas and Propagation</i> , <b>1999</b> , 47, 242-248	4.9	18
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36	A hybrid SBR/MoM technique for analysis of scattering from small protrusions on a large conducting body. <i>IEEE Transactions on Antennas and Propagation</i> , <b>1998</b> , 46, 1349-1357	4.9	19
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17	Solving some surface integral equations by using MoM with curved triangular patches		1
16	Super resolution phenomenon in the detection of buried objects		1
15	Error analysis of scattering amplitudes and RCS		1
14	Cancellations of surface loop basis functions		6
13	A new approach for controlling truncation error of the multipole expansion		1
12	Scalable electromagnetic scattering computations		8
11	Fast inhomogeneous plane wave algorithm for 3D buried object problems		5
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