

Amir Boag

List of Publications by Year in descending order

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261
papers

3,599
citations

136885

32
h-index

175177

52
g-index

262
all docs

262
docs citations

262
times ranked

2068
citing authors

#	ARTICLE	IF	CITATIONS
1	A multilevel matrix decomposition algorithm for analyzing scattering from large structures. IEEE Transactions on Antennas and Propagation, 1996, 44, 1086-1093.	3.1	288
2	Analysis of electromagnetic scattering from dielectric cylinders using a multifilament current model. IEEE Transactions on Antennas and Propagation, 1987, 35, 1119-1127.	0.8	147
3	Highly Efficient and Broadband Wide-Angle Holography Using Patch-Dipole Nanoantenna Reflectarrays. Nano Letters, 2014, 14, 2485-2490.	4.5	134
4	Design of electrically loaded wire antennas using genetic algorithms. IEEE Transactions on Antennas and Propagation, 1996, 44, 687.	3.1	121
5	Generalized formulations for electromagnetic scattering from perfectly conducting and homogeneous material bodies-theory and numerical solution. IEEE Transactions on Antennas and Propagation, 1988, 36, 1722-1734.	3.1	110
6	A Phase-Space Beam Summation Formulation for Ultrawide-Band Radiation. IEEE Transactions on Antennas and Propagation, 2004, 52, 2042-2056.	3.1	100
7	Reconstruction of electrostatic force microscopy images. Review of Scientific Instruments, 2005, 76, 083705.	0.6	91
8	Multilevel evaluation of electromagnetic fields for the rapid solution of scattering problems. Microwave and Optical Technology Letters, 1994, 7, 790-795.	0.9	76
9	Complex multipole beam approach to electromagnetic scattering problems. IEEE Transactions on Antennas and Propagation, 1994, 42, 366-372.	3.1	71
10	The role of the cantilever in Kelvin probe force microscopy measurements. Beilstein Journal of Nanotechnology, 2011, 2, 252-260.	1.5	69
11	Rotation-induced superstructure in slow-light waveguides with mode-degeneracy: optical gyroscopes with exponential sensitivity. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 1216.	0.9	67
12	Reconstruction of surface potential from Kelvin probe force microscopy images. Nanotechnology, 2013, 24, 295702.	1.3	61
13	Multilevel nonuniform grid algorithm for acceleration of integral equation-based solvers for acoustic scattering. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 262-273.	1.7	54
14	Scattering from elongated objects: direct solution in $O(N \log^2 N)$ operations. IET Microwaves Antennas and Propagation, 1996, 143, 277.	1.2	52
15	Nonuniform polar grid algorithm for fast field evaluation. IEEE Antennas and Wireless Propagation Letters, 2002, 1, 142-145.	2.4	49
16	Frame-based Gaussian beam summation method: Theory and applications. Radio Science, 2003, 38, n/a-n/a.	0.8	48
17	A Fast Physical Optics (FPO) Algorithm for Double-Bounce Scattering. IEEE Transactions on Antennas and Propagation, 2004, 52, 205-212.	3.1	48
18	Fast Direct Solver for Essentially Convex Scatterers Using Multilevel Non-Uniform Grids. IEEE Transactions on Antennas and Propagation, 2014, 62, 4314-4324.	3.1	47

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19	Analysis of TE scattering from dielectric cylinders using a multifilament magnetic current model. IEEE Transactions on Antennas and Propagation, 1988, 36, 1026-1031.	3.1	46
20	New designs of ultra wide-band communication antennas using a genetic algorithm. IEEE Transactions on Antennas and Propagation, 1997, 45, 1494-1501.	3.1	46
21	A Fast Physical Optics (FPO) Algorithm for High Frequency Scattering. IEEE Transactions on Antennas and Propagation, 2004, 52, 197-204.	3.1	44
22	A fast iterative physical optics (FIPO) algorithm based on non-uniform polar grid interpolation. Microwave and Optical Technology Letters, 2002, 35, 240-244.	0.9	40
23	Ultrasensitive displacement sensing using photonic crystal waveguides. Applied Physics Letters, 2005, 86, 104102.	1.5	40
24	Splitting of microcavity degenerate modes in rotating photonic crystals—the miniature optical gyroscopes. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 142.	0.9	40
25	Degeneracy Breaking of Wood's Anomaly for Enhanced Refractive Index Sensing. ACS Photonics, 2015, 2, 615-621.	3.2	40
26	A pulsed beam summation formulation for short pulse radiation based on windowed Radon transform (WRT) frames. IEEE Transactions on Antennas and Propagation, 2005, 53, 3030-3048.	3.1	39
27	Direct Measurement of Individual Deep Traps in Single Silicon Nanowires. Nano Letters, 2011, 11, 2499-2502.	4.5	39
28	A multilevel domain decomposition algorithm for fast $O(N/\log N)$ reprojection of tomographic images. IEEE Transactions on Image Processing, 2000, 9, 1573-1582.	6.0	38
29	Nanoscale piezoelectric coefficient measurements in ionic conducting ferroelectrics. Journal of Applied Physics, 2005, 97, 084312.	1.1	37
30	Quantum Nonreciprocity of Nanoscale Antenna Arrays in Timed Dicke States. Physical Review Letters, 2013, 111, 023602.	2.9	36
31	Analysis of electromagnetic scattering from dielectrically coated conducting cylinders using a multifilament current model. IEEE Transactions on Antennas and Propagation, 1988, 36, 1602-1607.	3.1	35
32	Analysis of two-dimensional electromagnetic scattering from nonplanar periodic surfaces using a strip current model. IEEE Transactions on Antennas and Propagation, 1989, 37, 1437-1446.	3.1	35
33	Fast radiation pattern evaluation for lens and reflector antennas. IEEE Transactions on Antennas and Propagation, 2003, 51, 1063-1068.	3.1	34
34	Analysis and optimization of waveguide multiapplicator hyperthermia systems. IEEE Transactions on Biomedical Engineering, 1993, 40, 946-952.	2.5	33
35	A fast multilevel domain decomposition algorithm for radar imaging. IEEE Transactions on Antennas and Propagation, 2001, 49, 666-671.	3.1	33
36	Analysis of electromagnetic scattering using a current model method. Computer Physics Communications, 1991, 68, 331-345.	3.0	32

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37	Multilevel fast physical optics algorithm for radiation from non-planar apertures. IEEE Transactions on Antennas and Propagation, 2005, 53, 2064-2072.	3.1	32
38	Analysis of two-dimensional electromagnetic scattering from a periodic grating of cylinders using a hybrid current model. Radio Science, 1988, 23, 612-624.	0.8	31
39	Complex multipole-beam approach to three-dimensional electromagnetic scattering problems. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1994, 11, 1505.	0.8	30
40	Analysis of acoustic scattering from fluid cylinders using a multifilament source model. Journal of the Acoustical Society of America, 1988, 83, 1-8.	0.5	29
41	A phase-space beam summation formulation for ultrawide-band radiation. II: a multiband scheme. IEEE Transactions on Antennas and Propagation, 2005, 53, 948-957.	3.1	29
42	Nonuniform grid time domain (NGTD) algorithm for fast evaluation of transient wave fields. IEEE Transactions on Antennas and Propagation, 2006, 54, 1943-1951.	3.1	29
43	Sensitivity analysis of narrowband photonic crystal filters and waveguides to structure variations and inaccuracy. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 138.	0.8	28
44	Fast Electromagnetic Integral-Equation Solvers on Graphics Processing Units. IEEE Antennas and Propagation Magazine, 2012, 54, 71-87.	1.2	28
45	Two-dimensional Green's function theory for the electrodynamics of a rotating medium. Physical Review E, 2006, 74, 016608.	0.8	26
46	Quantifying the radiation efficiency of nano antennas. Applied Physics Letters, 2012, 100, 111113.	1.5	24
47	Nanoscale Electromagnetic Compatibility: Quantum Coupling and Matching in Nanocircuits. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1645-1654.	1.4	24
48	Nonuniform grid algorithm for fast calculation of magnetostatic interactions in micromagnetics. Journal of Applied Physics, 2009, 105, .	1.1	23
49	Direct measurement of nanowire Schottky junction depletion region. Applied Physics Letters, 2011, 99, 223511.	1.5	23
50	Adaptive Nonuniform-Grid (NG) Algorithm for Fast Capacitance Extraction. IEEE Transactions on Microwave Theory and Techniques, 2006, 54, 3565-3570.	2.9	22
51	Generalized Equivalence Integral Equations. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 1568-1571.	2.4	22
52	A numerical absorbing boundary condition for finite-difference and finite-element analysis of open structures. Microwave and Optical Technology Letters, 1994, 7, 395-398.	0.9	21
53	Dual-Vivaldi wideband nanoantenna with high radiation efficiency over the infrared frequency band. Optics Letters, 2011, 36, 2773.	1.7	21
54	Shadow Radiation Iterative Physical Optics Method for High-Frequency Scattering. IEEE Transactions on Antennas and Propagation, 2018, 66, 871-883.	3.1	21

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55	Artificial localized magnon resonances in subwavelength meta-particles. Applied Physics Letters, 2018, 113, .	1.5	21
56	Narrow-band microcavity waveguides in photonic crystals. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2001, 18, 2799.	0.8	20
57	A multilevel fast direct solver for EM scattering from quasi-planar objects. , 2009, , .		20
58	On the use of SVD-improved point matching in the current-model method (EM scattering). IEEE Transactions on Antennas and Propagation, 1993, 41, 926-933.	3.1	19
59	Multilevel Physical Optics Algorithm for Near Field Scattering. IEEE Transactions on Antennas and Propagation, 2014, 62, 4325-4335.	3.1	19
60	Volumetric 3D-Printed Antennas, Manufactured via Selective Polymer Metallization. Physica Status Solidi - Rapid Research Letters, 2019, 13, .	1.2	19
61	Analysis of diffraction from echelette gratings, using a strip-current model. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1989, 6, 543.	0.8	18
62	Nanoscale potential distribution across multiquantum well structures: Kelvin probe force microscopy and secondary electron imaging. Journal of Applied Physics, 2005, 98, 084310.	1.1	18
63	Synthesis of Quantum Antennas for Shaping Field Correlations. Physical Review Applied, 2018, 9, .	1.5	18
64	Meta-hologram-based authentication scheme employing a speckle pattern fingerprint. Optics Express, 2020, 28, 8924.	1.7	18
65	High load sensitivity in wideband infrared dual-Vivaldi nanoantennas. Optics Letters, 2013, 38, 205.	1.7	17
66	Analysis of diffraction from doubly periodic arrays of perfectly conducting bodies by using a patch-current model. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1990, 7, 1712.	0.8	16
67	Optimal excitation of multiapplicator systems for deep regional hyperthermia. IEEE Transactions on Biomedical Engineering, 1990, 37, 987-995.	2.5	15
68	Analysis of electromagnetic scattering from linear periodic arrays of perfectly conducting bodies using a cylindrical-current model. IEEE Transactions on Antennas and Propagation, 1991, 39, 1332-1337.	3.1	15
69	Hybrid absorbing boundary conditions based on fast nonuniform grid integration for nonconvex scatterers. Microwave and Optical Technology Letters, 2004, 43, 102-106.	0.9	15
70	A multilevel Cartesian non-uniform grid time domain algorithm. Journal of Computational Physics, 2010, 229, 8430-8444.	1.9	15
71	Fast direct solution of 3-D scattering problems via nonuniform grid-based matrix compression. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 2405-2417.	1.7	14
72	Fast Green's Function Evaluation for Sources and Observers Near Smooth Convex Bodies. IEEE Transactions on Antennas and Propagation, 2014, 62, 3374-3378.	3.1	14

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73	Gaussian beam tracking through a curved interface: comparison with a method of moments. IET Microwaves Antennas and Propagation, 2003, 150, 49.	1.2	13
74	Analysis of acoustic scattering from fluid bodies using a multipoint source model. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 1989, 36, 119-128.	1.7	12
75	Analysis of electromagnetic scattering from doubly periodic nonplanar surfaces using a patch-current model. IEEE Transactions on Antennas and Propagation, 1993, 41, 732-738.	3.1	12
76	Dielectric inserts for sensitivity and RF magnetic field enhancement in NMR volume coils. Journal of Magnetic Resonance, 2009, 200, 49-55.	1.2	12
77	Generalized Multilevel Physical Optics (MLPO) for Comprehensive Analysis of Reflector Antennas. IEEE Transactions on Antennas and Propagation, 2012, 60, 1182-1186.	3.1	12
78	An auxiliary grid method for the calculation of electrostatic terms in density functional theory on a real-space grid. Physical Chemistry Chemical Physics, 2015, 17, 31550-31557.	1.3	12
79	A fast and stable solver for acoustic scattering problems based on the nonuniform grid approach. Journal of the Acoustical Society of America, 2016, 139, 472-480.	0.5	12
80	Quantum Radars and Lidars: Concepts, realizations, and perspectives. IEEE Antennas and Propagation Magazine, 2022, 64, 16-26.	1.2	12
81	Analysis of three-dimensional acoustic scattering from doubly periodic structures using a source model. Journal of the Acoustical Society of America, 1992, 91, 572-580.	0.5	11
82	Two-dimensional imaging of III-V quantum dots confinement potential. Europhysics Letters, 2009, 88, 66003.	0.7	11
83	Anomalous electromagnetic coupling via entanglement at the nanoscale. New Journal of Physics, 2017, 19, 023014.	1.2	11
84	Direct Solution of Scattering Problems Using Generalized Source Integral Equations. IEEE Transactions on Antennas and Propagation, 2020, 68, 5512-5523.	3.1	11
85	Quantum noise radar: superresolution with quantum antennas by accessing spatiotemporal correlations. Optics Express, 2019, 27, 29217.	1.7	11
86	Method of Generalized Debye Sources for the Analysis of Electromagnetic Scattering by Perfectly Conducting Bodies With Piecewise Smooth Boundaries. IEEE Transactions on Antennas and Propagation, 2013, 61, 2108-2115.	3.1	10
87	Volumetric metamaterials versus impedance surfaces in scattering applications. Scientific Reports, 2021, 11, 9571.	1.6	10
88	Multilevel Physical Optics Algorithm for Near-Field Double-Bounce Scattering. IEEE Transactions on Antennas and Propagation, 2015, 63, 5015-5025.	3.1	9
89	Size dependent electronic properties of silicon quantum dots—An analysis with hybrid, screened hybrid and local density functional theory. Computer Physics Communications, 2017, 221, 95-101.	3.0	9
90	Scattering of electromagnetic waves by two crossing metallic single-walled carbon nanotubes of finite length. Physical Review B, 2021, 103, .	1.1	9

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91	Analysis of two-dimensional acoustic scattering from periodic structures using a hybrid source model. Journal of the Acoustical Society of America, 1989, 86, 387-394.	0.5	8
92	Complex multipole beam approach to electromagnetic scattering problems. , 0, , .		8
93	Integral equation technique for scatterers with mesoscopic insertions: Application to a carbon nanotube. Physical Review B, 2017, 96, .	1.1	8
94	THE MULTILEVEL FAST PHYSICAL OPTICS METHOD FOR CALCULATING HIGH FREQUENCY SCATTERED FIELDS. Progress in Electromagnetics Research, 2020, 169, 1-15.	1.6	8
95	Analysis of electromagnetic scattering from doubly periodic arrays of penetrable bodies using a patch-dipole current model. Radio Science, 1991, 26, 603-610.	0.8	7
96	A numerical absorbing boundary condition for finite difference and finite element analysis of open periodic structures. IEEE Transactions on Microwave Theory and Techniques, 1995, 43, 150-154.	2.9	7
97	A numerical absorbing boundary condition for 3D edge-based finite-element analysis of very low-frequency fields. Microwave and Optical Technology Letters, 1995, 9, 22-27.	0.9	7
98	Compression of the Method of Moments Matrices Using the Non-Uniform Grid Approach. , 2007, , .		7
99	Incremental unknowns preconditioning for solving the Helmholtz equation. Numerical Methods for Partial Differential Equations, 2007, 23, 1396-1410.	2.0	7
100	Mechanical tuning of two-dimensional photonic crystal cavity by micro Electro mechanical flexures. Sensors and Actuators A: Physical, 2007, 139, 47-52.	2.0	7
101	Multilevel Surface Decomposition Algorithm for Rapid Evaluation of Transient Near-Field to Far-Field Transforms. IEEE Transactions on Antennas and Propagation, 2009, 57, 188-195.	3.1	7
102	Fast Antenna Diagnosis Algorithm Using Oblate Spheroidal Nonuniform Grids. IEEE Transactions on Antennas and Propagation, 2016, 64, 4197-4207.	3.1	7
103	Optimizing kernel methods for Poisson integrals on a uniform grid. Computer Physics Communications, 2017, 215, 1-6.	3.0	7
104	Propagation in photonic crystal coupled-cavity waveguides with discontinuities in their optical properties. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 1442.	0.9	6
105	Analysis of scattering from cylinders with a periodically corrugated periphery using a current-model technique. IEEE Transactions on Antennas and Propagation, 1993, 41, 1265-1272.	3.1	5
106	Reduced representation of matrices generated by the method of moments. , 0, , .		5
107	A numerical absorbing boundary condition for edge-based finite-element analysis. Microwave and Optical Technology Letters, 1994, 7, 733-737.	0.9	5
108	Non-uniform grid time domain (NGTD) algorithm for fast evaluation of transient fields. , 2003, , .		5

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109	Fast iterative physical optics with shadowing. , 2016, , .		5
110	High efficiency coupling to metal-insulator-metal plasmonic waveguides. Optics Express, 2022, 30, 13757.	1.7	5
111	Non-uniform grid (NG) algorithm for fast capacitance extraction. , 0, , .		4
112	Non-uniform grid accelerated localâ€“global boundary condition (NG-LGBC) for acoustic scattering. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 3608-3621.	3.4	4
113	Analysis of Very Large Dual-Reflector Antennas Using Multilevel Physical Optics (MLPO) Algorithm. , 2007, , .		4
114	Gaussian beam summation algorithm for ultra wide band indoor channel characterization. , 2010, , .		4
115	Analysis of the RATAN-600 radiotelescope antenna with a multilevel Physical Optics algorithm. Comptes Rendus Physique, 2012, 13, 38-45.	0.3	4
116	Mono-detection spatially super resolved microwave imaging for RADAR applications. Optics Communications, 2012, 285, 2519-2524.	1.0	4
117	Compression of matrices representing directive source integral equation. , 2013, , .		4
118	Contact-less RF and optical measurement of antenna array active impedance using scattering data. , 2014, , .		4
119	Wide-angle scanning optical linear phased array. , 2015, , .		4
120	On small signal equivalent circuit models for quantum dots. International Journal of Circuit Theory and Applications, 2017, 45, 935-950.	1.3	4
121	Flexible metalized tubes for electromagnetic waveguiding. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 232, 152-155.	1.1	4
122	A Low-Profile Circularly Polarized Conical-Beam Antenna with Wide Overlap Bandwidth. Wireless Communications and Mobile Computing, 2021, 2021, 1-11.	0.8	4
123	No Significant Effects of Cellphone Electromagnetic Radiation on Mice Memory or Anxiety: Some Mixed Effects on Traumatic Brain Injured Mice. Neurotrauma Reports, 2021, 2, 381-390.	0.5	4
124	A fast multilevel domain decomposition algorithm for radar imaging. , 0, , .		3
125	Substructuring approach to optimization of matching for photonic crystal waveguides. Microwave and Optical Technology Letters, 2006, 48, 1866-1871.	0.9	3
126	3D Multilevel Non-Uniform Grid Algorithm for Fast Field Evaluation. , 2006, , .		3

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127	Adaptive multilevel non-uniform grid algorithm for fast field evaluation in multilayered media. , 2007, , .		3
128	Non-uniform grid based fast direct solver for quasi-planar scatterers. , 2007, , .		3
129	Fast Evaluation of the Radiation Patterns of True Time Delay Arrays With Beam Steering. IEEE Transactions on Antennas and Propagation, 2007, 55, 3421-3432.	3.1	3
130	Equation-based interpolation and incremental unknowns for solving the Helmholtz equation. Applied Numerical Mathematics, 2010, 60, 1148-1156.	1.2	3
131	Optical and diffraction simulation techniques for large multibeam reflector. , 2010, , .		3
132	Fast computation of modified Green's function for generalized source integral equation solvers. , 2016, , .		3
133	Grating Lobe Mitigation in Ultra-wideband Phased Arrays. , 2018, , .		3
134	Lorenz gauge formulation for time-dependent density functional theory. Physical Review B, 2020, 101, .	1.1	3
135	Adaptive Multilevel Nonuniform Grid Algorithm for the Accelerated Analysis of Composite Metallic-Dielectric Radomes. IEEE Transactions on Antennas and Propagation, 2021, 69, 8593-8602.	3.1	3
136	Backprojection Imaging of Moving Objects. IEEE Transactions on Antennas and Propagation, 2021, 69, 4944-4954.	3.1	3
137	Scattering by thin shells in fluids: Fast solver and experimental validation. JASA Express Letters, 2021, 1, 016002.	0.5	3
138	A Multi-Band Metal-Rimmed Antenna for 5G Smartphones. , 2020, , .		3
139	Optimal excitation of multiapplicator systems for deep regional hyperthermia. , 0, , .		2
140	Analysis of Electromagnetic Scattering from Linear Periodic Arrays of Penetrable Bodies Using a Cylindrical Current Model. Journal of Electromagnetic Waves and Applications, 1993, 7, 423-441.	1.0	2
141	Analysis of the 5:1 Dipole Benchmark Case Using the Current-Model Method with an SVD-Improved Point Matching Technique. Journal of Electromagnetic Waves and Applications, 1993, 7, 1577-1593.	1.0	2
142	Domain decomposition and non-uniform spherical grid interpolation (NSGI) algorithm for fast solution of potential problems. , 0, , .		2
143	Multigrid analysis of scattering by large planar structures. Microwave and Optical Technology Letters, 2002, 32, 454-458.	0.9	2
144	Gaussian beams representation based on periodic frames for radiation from cylindrical apertures. , 2004, , .		2

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145	Kelvin Probe Force Microscopy: Recent Advances and Applications. , 2008, , 351-376.		2
146	Reduction of mutual coupling by near-field coupled resonators. , 2009, , .		2
147	Optimization of focusing optics of RATAN-600 radio telescope. , 2009, , .		2
148	Software framework for integration of method of moments kernels with the Adaptive Cross Approximation (ACA) algorithm. , 2010, , .		2
149	Wideband dual Vivaldi nano-antenna with high radiation efficiency over the infrared frequency band. , 2011, , .		2
150	Directive source integral equation. , 2012, , .		2
151	Generalized equivalence integral equations. , 2012, , .		2
152	A Cartesian non-uniform grid interpolation method for fast field evaluation on elongated domains. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2012, 25, 645-655.	1.2	2
153	Equation-based interpolation and incremental unknowns for solving the three-dimensional Helmholtz equation. Applied Mathematics and Computation, 2014, 232, 1200-1208.	1.4	2
154	Electromagnetic compatibility in nano-electronics: Manifestation and suppression of quantum crosstalk. , 2015, , .		2
155	Equivalent electrical multiport for quantum systems in entangled states. , 2015, , .		2
156	Multilevel nonuniform-grid algorithm for electromagnetic scattering problems. , 2016, , .		2
157	Fast beam-based analysis of monostatic scattering. , 2017, , .		2
158	Quantum light rectification in nano-rectennas. , 2017, , .		2
159	Holographic anti-counterfeiting tags utilizing speckle pattern "fingerprint", 2018, , .		2
160	Selective Metallization of Graphene-based Polymers for Volumetric 3D-printed Antennas. , 2019, , .		2
161	Frame-Based Beam-Summation Algorithms for Ultra Wideband Radiation from Extended Apertures. , 2003, , 101-112.		2
162	Modeling of Multimodal Scattering by Conducting Bodies in Quantum Optics: The Method of Characteristic Modes. Physical Review Applied, 2022, 18, .	1.5	2

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163	Complex multipole beam approach to acoustic scattering problems. Journal of the Acoustical Society of America, 1997, 102, 1319-1325.	0.5	1
164	Hybrid non-uniform grid based fast global boundary conditions for concave scatterers. , 2004, , .		1
165	Matching pursuit algorithm for Gaussian beam decomposition. , 0, , .		1
166	Multilevel Evaluation of Radiation Patterns for Reflector Antennas. , 0, , .		1
167	Slow-Light Waveguides with Mode Degeneracy: Rotation-Induced Super Structures and Optical Gyroscopes. , 2006, , MB3.		1
168	Near and far field simulation of RATAN-600 radio telescope antenna using the MLPO algorithm. , 2011, , .		1
169	Fast field back-propagation using a multilevel non-uniform grid algorithm in oblate spheroidal coordinates. , 2013, , .		1
170	Fock Exchange: Optimization challenges on a real-space grid. , 2014, , .		1
171	Nano-antenna elements for controlling optical phase. , 2014, , .		1
172	A multilevel algorithm for fast evaluation of wave fields in the time domain. , 2014, , .		1
173	Fast surface integral equation solver based on NG-accelerated method of moments. , 2014, , .		1
174	Iterative physical optics (IPO) with integral evaluation of self-shadowing. , 2015, , .		1
175	GPU accelerated multilevel fast physical optics algorithm for radiation from non-planar apertures. , 2015, , .		1
176	Plasmonic holography: obtaining wide angle, broadband, and high efficiency. , 2015, , .		1
177	Nano slot-antenna array refractive index sensors: approaching the conventional theoretical limit of the figure of merit. , 2015, , .		1
178	A Schur-complement method for integral-equation analysis of antennas near anatomical human models. , 2016, , .		1
179	Physical Optics versus Gaussian Beam Shooting for shadow field analysis in high frequency regime. , 2016, , .		1
180	Generalized source integral equation. , 2017, , .		1

#	ARTICLE	IF	CITATIONS
181	Shaping field correlation with entangled quantum antennas. , 2017, , .		1
182	Convergence analysis for iterative physical optics algorithms. , 2017, , .		1
183	Moving Target Detection and Imaging Using a Single-Channel SAR. , 2019, , .		1
184	Conditioning of Generalized Source Integral Equation Formulations. , 2019, , .		1
185	Time-Dependent Response of Carbon Nano-Structures. , 2019, , .		1
186	Fast Evaluation of Retarded Electromagnetic Potentials for Quantum Calculations. , 2019, , .		1
187	Modeling Electromagnetic Wave Phenomena in Large Quantum Systems: Formulation and Computational Costs. IEEE Antennas and Propagation Magazine, 2021, 63, 29-39.	1.2	1
188	A low-profile ultra-wideband circularly polarized antenna array with metasurface. International Journal of RF and Microwave Computer-Aided Engineering, 2021, 31, e22874.	0.8	1
189	In situ real-time beam monitoring with dielectric meta-holograms. Optics Express, 2018, 26, 28469.	1.7	1
190	Fast Monostatic Scattering Computation Based on Gaussian Beam Shooting and Frame Decomposition. , 2021, , .		1
191	A Beam Summation Scheme for Ultra-wideband RCS Calculations in the High-frequency Regime. , 2021, , .		1
192	Three-Dimensional Generalized Sources for Integral Equation Solvers. , 2022, , .		1
193	Analysis of Two-Dimensional Electromagnetic Scattering from Periodic structures Using a Hybrid Current Model. , 1989, , .		0
194	Analysis and optimization of Multiapplicator Hyperthermia Systems. , 0, , .		0
195	Electromagnetic analysis of an antenna buried in a composite environment. , 0, , .		0
196	A multilevel domain decomposition algorithm for fast $O(N/\sup 2/\log N)$ reprojection of tomographic images. , 2000, , .		0
197	Electromagnetic analysis of an antenna embedded in a composite environment. IEEE Transactions on Antennas and Propagation, 2001, 49, 681-687.	3.1	0
198	Substructuring approach to optimization of matching structures for photonic crystal waveguides. , 0, , .		0

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199	A hierarchical aperture decomposition approach to fast analysis of lens and reflector antennas. , 2004, , .		0
200	Multilevel fast Physical Optics algorithm for reflector antennas. , 2005, , .		0
201	Propagation in Photonic Crystal Coupled Cavity Waveguides Possessing Discontinuities. , 0, , .		0
202	Numerical computation of 3D singular potential integrals. , 0, , .		0
203	Sagnac effect in rotating photonic crystal micro-cavities and miniature optical gyroscopes. , 2006, , .		0
204	Accuracy of a hybrid Fast Physical Optics scheme for the analysis of dual reflector antennas. , 2006, , .		0
205	A Fast Direct Solver for Scattering from Quasi-Planar Geometries Using the Non-Uniform Grid Approach. , 2007, , .		0
206	Enveloped sub-structuring approach to electromagnetic optimization. , 2007, , .		0
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