Yan Shi

List of Publications by Year
in descending order

133 papers	2,213 citations	293460 24 h-index	286692 43 g-index
133 all docs	133 docs citations	133 times ranked	1645 citing authors

#	Article	IF	Citations
1	Filtering Antenna Synthesis Based on Characteristic Mode Theory. IEEE Transactions on Antennas and Propagation, 2022, 70, 3308-3319.	3.1	14
2	Advanced Parallelism of DGTD Method With Local Time Stepping Based on Novel MPI + MPI Unified Parallel Algorithm. IEEE Transactions on Antennas and Propagation, 2022, 70, 3916-3921.	3.1	11
3	A Transparent SIW Cavity-Based Millimeter-Wave Slot Antenna for 5G Communication. IEEE Antennas and Wireless Propagation Letters, 2022, 21, 1105-1109.	2.4	6
4	An hp-Adaptive Scheme of Discontinuous Galerkin Time-Domain Method With Fast Error Estimation. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 3776-3788.	2.9	2
5	An Elementwise Stability Estimation Algorithm for Explicit Discontinuous Galerkin Time Domain Method. , 2022, , .		0
6	A Circuit-Based Wave Port Boundary Condition for the Nodal Discontinuous Galerkin Time-Domain Method. Electronics (Switzerland), 2022, 11, 1842.	1.8	2
7	Dual-Ridge Gap Waveguide-Based Antenna With Diverse Beam Capabilities. IEEE Open Journal of Antennas and Propagation, 2022, 3, 774-782.	2.5	2
8	An Archimedean Spiral Antenna for Generation of Tunable Angular Momentum Wave. IEEE Access, 2021, 9, 63122-63130.	2.6	8
9	Polarization conversion metasurface design based on characteristic mode rotation and its application into wideband and miniature antennas with a low radar cross section. Optics Express, 2021, 29, 6794.	1.7	35
10	Artificial neural network and convex optimization enable antenna array design. International Journal of RF and Microwave Computer-Aided Engineering, 2021, 31, e22593.	0.8	4
11	A <scp>pattern‐reconfigurable</scp> antenna design for body area networks communications. International Journal of RF and Microwave Computer-Aided Engineering, 2021, 31, e22820.	0.8	5
12	Improved Estimation of Time Step Bound for Discontinuous Galerkin Time-Domain Method. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 1731-1735.	2.4	3
13	Wideband composite planar spiral antenna for generation of tunable angular momentum wave. Optics Express, 2021, 29, 3754.	1.7	7
14	Multifunctional Array for Achieving Orbital Angular Momentum Vortex Wave and RCS Reduction. , 2021, , .		0
15	A Coaxial Lumped Port Model for the Nodal DGTD Method. , 2021, , .		0
16	Discontinuous Galerkin Time Domain Method With Nonconformal Meshes and Arbitrary Order Bases. , 2021, , .		1
17	Integration of discontinuous Galerkin time-domain method and SPICE for multiport networks. , 2021, , .		0
18	Wave Equation-Based Discontinuous Galerkin Time Domain Method for Co-Simulation of Electromagnetics-Circuit Systems. IEEE Transactions on Antennas and Propagation, 2020, 68, 3026-3036.	3.1	25

#	Article	IF	Citations
19	A Nodal Discontinuous Galerkin Time-Domain Method Based on Wave Equation. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1083-1087.	2.4	6
20	A wireless power transfer system based on impedance matching network. International Journal of RF and Microwave Computer-Aided Engineering, 2020, 30, e22437.	0.8	5
21	A Mode Reconfigurable Orbital Angular Momentum Water Antenna. IEEE Access, 2020, 8, 89152-89160.	2.6	14
22	Multifunctional Scattering Antenna Array Design for Orbital Angular Momentum Vortex Wave and RCS Reduction. IEEE Access, 2020, 8, 109289-109296.	2.6	24
23	Penalty Factor Threshold and Time Step Bound Estimations for Discontinuous Galerkin Time-Domain Method Based on Helmholtz Equation. IEEE Transactions on Antennas and Propagation, 2020, 68, 7494-7506.	3.1	10
24	Millimeter-Wave Imaging Using 1-Bit Programmable Metasurface: Simulation Model, Design, and Experiment. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2020, 10, 52-61.	2.7	33
25	GPU-Accelerated Hybrid Discontinuous Galerkin Time Domain Algorithm With Universal Matrices and Local Time Stepping Method. IEEE Transactions on Antennas and Propagation, 2020, 68, 4738-4752.	3.1	19
26	Frequency-Domain and Spatial-Domain Reconfigurable Metasurface. ACS Applied Materials & Interfaces, 2020, 12, 23554-23564.	4.0	44
27	Low-Memory Hybrid Discontinuous Galerkin Time Domain Algorithm. , 2020, , .		0
28	Antenna Array Based RCS Reduction Design. , 2020, , .		0
29	Design, Measurement and Analysis of Near-Field Focusing Reflective Metasurface for Dual-Polarization and Multi-Focus Wireless Power Transfer. IEEE Access, 2019, 7, 110387-110399.	2.6	44
30	Traveling-Wave Series-Fed Patch Array Antenna Using Novel Reflection-Canceling Elements for Flexible Beam. IEEE Access, 2019, 7, 111466-111476.	2.6	28
31	Characteristic Mode Cancellation Method and Its Application for Antenna RCS Reduction. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 1784-1788.	2.4	46
32	Electronic Beam-steering Using 1-Bit Digital Rflective Metasurface at Ka Band. , 2019, , .		0
33	Design of Low-RCS Antenna Using Antenna Array. IEEE Transactions on Antennas and Propagation, 2019, 67, 6484-6493.	3.1	20
34	Broadband Transparent Absorber Based on Indium Tin Oxide-Polyethylene Terephthalate Film. IEEE Access, 2019, 7, 137848-137855.	2.6	24
35	An Impedance Transmission Boundary Condition-Based Interior Penalty Discontinuous Galerkin Time Domain Method for Analysis of Graphene. , 2019, , .		1
36	A Wideband 1Âbit 12 Ã— 12 Reconfigurable Beam-Scanning Reflectarray: Design, Fabrication, and Measurement. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 1268-1272.	2.4	121

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37	A Magnetoelectric Dipole Antenna With Beamwidth Reconfiguration. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 621-625.	2.4	21
38	Wideband Substrate-Integrated-Waveguide-Fed Magneto-Electric Dipole Array Antenna. , 2019, , .		0
39	Application of Nodal Discontinuous Galerkin Time Domain Method Based on Wave Equation in Electromagnetic Simulations. , 2019, , .		0
40	Application of Hybridized Discontinuous Galerkin Time Domain Method into the Solution of Multiscale Electromagnetic Problems. , 2019, , .		0
41	GPU Parallelization of Wave Equation Based Discontinuous Galerkin Time Domain Method. , 2019, , .		1
42	Design of Polarization Reconfigurable Antenna Using Characteristic Mode. , 2019, , .		0
43	Graphene-based metamaterial transmitarray antenna design for the generation of tunable orbital angular momentum vortex electromagnetic waves. Optical Materials Express, 2019, 9, 3709.	1.6	25
44	High-selective band-reject FSS with dual-band near-zero refractive index based on complementary dual-layer symmetry resonator-ring. International Journal of Microwave and Wireless Technologies, 2018, 10, 243-251.	1.5	1
45	Generation of Wideband Tunable Orbital Angular Momentum Vortex Waves Using Graphene Metamaterial Reflectarray. IEEE Access, 2018, 6, 5341-5347.	2.6	53
46	A Simple Tri-Polarization Reconfigurable Magneto-Electric Dipole Antenna. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 291-294.	2.4	36
47	Design of broadbandâ€leakyâ€wave antenna based on permeabilityâ€negative transmission line. Microwave and Optical Technology Letters, 2018, 60, 699-704.	0.9	10
48	Wideband MIMO handset antenna design based on theory of characteristic modes. International Journal of RF and Microwave Computer-Aided Engineering, 2018, 28, e21217.	0.8	22
49	A Hybrid Vector Wave Equation- and Maxwellâ€™s Equation-Based Discontinuous Galerkin Time Domain Method. , 2018, , .		1
50	MIMO Antenna Array Design Based on Characteristic Mode Method. , 2018, , .		0
51	A Mode Reconfigurable MIMO Antenna Array Design. , 2018, , .		0
52	Discontinuous Galerkin Time Domain Method with A Local Time Stepping Algorithm. , 2018, , .		0
53	Analysis of Graphene-Based Devices Using Wave Equation Based Discontinuous Galerkin Time-Domain Method. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 2169-2173.	2.4	21
54	Analysis of electromagnetic interference emission in domestic induction cooker. Microwave and Optical Technology Letters, 2018, 60, 3059-3068.	0.9	0

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55	A Characteristic-Mode-Based Polarization-Reconfigurable Antenna and its Array. IEEE Access, 2018, 6, 64587-64595.	2.6	22
56	Construction of Arbitrarily Shaped Cloaks using Characteristic Mode Method. , 2018, , .		0
57	An Improved Vector Wave Equation-Based Discontinuous Galerkin Time Domain Method and Its Hybridization With Maxwellâ€™s Equation-Based Discontinuous Galerkin Time Domain Method. IEEE Transactions on Antennas and Propagation, 2018, 66, 6170-6178.	3.1	26
58	A Pattern Reconfigurable MIMO Antenna Design Using Characteristic Modes. IEEE Access, 2018, 6, 43526-43534.	2.6	27
59	Bifunctional arbitrarily-shaped cloak for thermal and electric manipulations. Optical Materials Express, 2018, 8, 2600.	1.6	17
60	1-bit digital orbital angular momentum vortex beam generator based on a coding reflective metasurface. Optical Materials Express, 2018, 8, 3470.	1.6	51
61	Design of broadband metamaterial-based ferromagnetic absorber. Materials Science Advanced Composite Materials, 2018, 2, .	0.3	6
62	Discontinuous Galerkin Time-Domain Method Based on Marching-on-in-Degree Scheme. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 250-253.	2.4	28
63	A Retrieval Method of Effective Electromagnetic Parameters for Inhomogeneous Metamaterials. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 1160-1178.	2.9	37
64	A Wideband Circularly Polarized Magnetoelectric Dipole Antenna. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 1647-1650.	2.4	44
65	A new <scp>L</scp>aguerreâ€based discontinuous <scp>G</scp>alerkin timeâ€domain method. Microwave and Optical Technology Letters, 2017, 59, 1499-1503.	0.9	14
66	A Low-Storage Discontinuous Galerkin Time-Domain Method. IEEE Microwave and Wireless Components Letters, 2017, 27, 1-3.	2.0	25
67	Interior Penalty Discontinuous Galerkin Time-Domain Method Based on Wave Equation for 3-D Electromagnetic Modeling. IEEE Transactions on Antennas and Propagation, 2017, 65, 7174-7184.	3.1	34
68	A design of ultra-broadband metamaterial absorber. Waves in Random and Complex Media, 2017, 27, 381-391.	1.6	38
69	Substrate Integrated Magnetoâ€"Electric Dipole for UWB Application. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 948-951.	2.4	22
70	Discontinuous galerkin time-domain method based on a new marching-on-in degree scheme. , 2017, , .		0
71	Helmholtz wave equation based discontinuous galerkin time domain method for 3d electromagnetic analysis. , 2017, , .		0
72	Design of wideband MIMO handset antennas using characteristic modes. , 2017, , .		0

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73	A wideband magneto-electric dipole antenna for circularly polarized radiation. , 2017, , .		0
74	Optimal cloak of anisotropic spheres. , 2017, , .		0
75	Cloaking design for arbitrarily shape objects based on characteristic mode method. Optics Express, 2017, 25, 32263.	1.7	18
76	Modeling hybrid EM-circuit system with wave equation-based discontinuous Galerkin time domain method. , 2017, , .		2
77	Optimal illusion and invisibility of multilayered anisotropic cylinders and spheres. Optics Express, 2016, 24, 23333.	1.7	21
78	An improved NRW method to extract electromagnetic parameters of metamaterials. Microwave and Optical Technology Letters, 2016, 58, 647-652.	0.9	22
79	Design, fabrication, and measurement of reflective metasurface for orbital angular momentum vortex wave in radio frequency domain. Applied Physics Letters, 2016, 108, .	1.5	258
80	Generating multiple orbital angular momentum vortex beams using a metasurface in radio frequency domain. Applied Physics Letters, 2016, 108, .	1.5	243
81	An electromagnetic parameters extraction method for metamaterials based on phase unwrapping technique. Waves in Random and Complex Media, 2016, 26, 417-433.	1.6	23
82	Broadband tunable graphene-based metamaterial absorber. Optical Materials Express, 2016, 6, 3036.	1.6	65
83	Quadâ€element multiâ€band antenna array in the smart mobile phone for LTE MIMO operations. Microwave and Optical Technology Letters, 2016, 58, 2619-2626.	0.9	12
84	A laguerreâ€based timeâ€domain discontinuous Galerkin finite elementâ€boundary integral method. Microwave and Optical Technology Letters, 2016, 58, 2774-2780.	0.9	17
85	Achieving illusion and invisibility of inhomogeneous cylinders and spheres. Journal of Optics (United) Tj ETQq1 1 0.784314 rgBT /Over	1.0	9
86	Hybridized discontinuous Galerkin time domain method with boundary integral equation method. , 2016, , .		1
87	Design of cloak for radially inhomogeneous spheres. , 2016, , .		0
88	Dual-pass band equivalent circuit analysis for frequency selective surfaces. , 2015, , .		0
89	A CalderÃ³nâ€preconditioned single source combined field integral equation for analysis of biâ€isotropic object. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2015, 28, 582-592.	1.2	2
90	Design of a Minimized Complementary Illusion Cloak with Arbitrary Position. International Journal of Antennas and Propagation, 2015, 2015, 1-7.	0.7	6

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91	Dual Zeroth-Order Resonant USB Dongle Antennas for 4G MIMO Wireless Communications. International Journal of Antennas and Propagation, 2015, 2015, 1-8.	0.7	7
92	Three dimensional electromagnetic invisibility cloak with arbitrary shapes. , 2015, , .		0
93	A miniaturized design of 2.45 GHz <scp>RFID</scp> tag antenna. Microwave and Optical Technology Letters, 2015, 57, 1905-1908.	0.9	5
94	An interior penalty <scp>G</scp>alerkin domain decomposition method based on high order basis function. Microwave and Optical Technology Letters, 2015, 57, 1961-1965.	0.9	3
95	An Efficient Single-Source Integral Equation Solution to EM Scattering From a Coated Conductor. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 547-550.	2.4	7
96	Three-Dimensional Complementary Invisibility Cloak With Arbitrary Shapes. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1550-1553.	2.4	20
97	Metamaterial-inspired wideband low-profile circularly polarized antenna. , 2015, , .		3
98	An Etched Planar Metasurface Half Maxwell Fish-Eye Lens Antenna. IEEE Transactions on Antennas and Propagation, 2015, 63, 3742-3747.	3.1	33
99	A novel design of dual broadband, single-layer circularly polarized reflectarray. International Journal of RF and Microwave Computer-Aided Engineering, 2015, 25, 364-369.	0.8	5
100	Equivalence principle algorithm using characteristic basis functions with application to finite periodic arrays including uniaxial dielectrics and conducting objects. Waves in Random and Complex Media, 2014, 24, 306-315.	1.6	2
101	Calderón preconditioner for a marching on in degree solution of time domain electric field integral equation. Microwave and Optical Technology Letters, 2014, 56, 1069-1072.	0.9	0
102	A time domain equivalence principle and its marching on in degree solution. Microwave and Optical Technology Letters, 2014, 56, 2415-2422.	0.9	4
103	A Minimized Invisibility Complementary Cloak With a Composite Shape. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1800-1803.	2.4	12
104	SAR study of antennas in wireless communication terminals. Microwave and Optical Technology Letters, 2014, 56, 2361-2365.	0.9	1
105	Analysis of Uniaxial Media Using Calderón-Preconditioned Single-Source Combined Field Integral Equation. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 491-494.	2.4	6
106	Compact multiband antenna employing CRLH-TL structure for USB dongle applications. , 2013, , .		2
107	Multiband MIMO antenna for wireless USB dongle in LTE operation. , 2013, , .		0
108	Improving multilevel Green's function interpolation method with a new interpolation grid. Journal of Electromagnetic Waves and Applications, 2013, 27, 1892-1901.	1.0	5

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109	An OpenMP Parallelized Multilevel Green's Function Interpolation Method Accelerated by Fast Fourier Transform Technique. IEEE Transactions on Antennas and Propagation, 2012, 60, 3305-3313.	3.1	10
110	OpenMP parallelized MOD solution of the timeâ€domain EFIE accelerated by the ACA algorithm. Microwave and Optical Technology Letters, 2012, 54, 1206-1212.	0.9	0
111	A Time-Domain Volume Integral Equation and Its Marching-On-in-Degree Solution for Analysis of Dispersive Dielectric Objects. IEEE Transactions on Antennas and Propagation, 2011, 59, 969-978.	3.1	101
112	Two-level IE-FFT algorithm for full wave electromangetic problems. , 2011, , .		0
113	A Marching-on-in-Degree Solution of Volume Integral Equations for Transient Electromagnetic Scattering by Bi-Isotropic Objects. Electromagnetics, 2011, 31, 159-172.	0.3	6
114	Marchingâ€onâ€inâ€degree solution of volume integral equations for analysis of transient electromagnetic scattering by inhomogeneous dielectric bodies with conduction loss. Microwave and Optical Technology Letters, 2011, 53, 1104-1109.	0.9	13
115	Timeâ€domain augmented EFIE and its marchingâ€onâ€inâ€degree solution. Microwave and Optical Technology Letters, 2011, 53, 1439-1444.	0.9	5
116	A Higher-Order NystrÃ¶m Scheme for a Marching-On-in-Degree Solution of the Magnetic Field Integral Equation. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 1059-1062.	2.4	14
117	Scattering analysis of mixed metallic/uniaxial objects using surface integral equations accelerated by adaptive cross approximation algorithm. , 2010, , .		0
118	Multilevel Green's function interpolation method for analysis of 3-D frequency selective structures using volume/surface integral equation. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 308.	0.8	18
119	Electromagnetic scattering from three-dimensional Bi-isotropic media using multilevel Green's function interpolation method. , 2010, , .		0
120	Comparison of Interpolating Functions and Interpolating Points in Full-Wave Multilevel Green's Function Interpolation Method. IEEE Transactions on Antennas and Propagation, 2010, 58, 2691-2699.	3.1	13
121	Corrections to â€œComparison of Interpolating Functions and Interpolating Points in Full-Wave Multilevel Green's Function Interpolation Methodâ€•[Aug 10 2691-2699. IEEE Transactions on Antennas and Propagation, 2010, 58, 3437-3437.	3.1	4
122	Analysis of scattering by an anisotropic uniaxial-coated conducting sphere using higher order hierarchical MoM. , 2010, , .		0
123	Patching Conditions of Multi-domain Pseudospectral Time-domain Method. , 2007, , .		0
124	The Finite-Volume Time-Domain Electromagnetic Solver. , 2007, , .		0
125	Multidomain Pseudospectral Time Domain Algorithm Using a Symplectic Integrator. IEEE Transactions on Antennas and Propagation, 2007, 55, 433-439.	3.1	9
126	Characteristic Variables Patching Conditions in Multidomain Pseudospectral Time Domain. IEEE Antennas and Wireless Propagation Letters, 2007, 6, 353-356.	2.4	5

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127	Application of the Spatial–Spectral CG-FFT Method for the Solution of Electromagnetic Scattering by Buried Flat Metallic Objects. IEEE Geoscience and Remote Sensing Letters, 2007, 4, 37-40.	1.4	6
128	Multidomain pseudospectral time–domain algorithm in curvilinear coordinates system. Microwave and Optical Technology Letters, 2007, 49, 2618-2624.	0.9	2
129	The finite-volume time-domain algorithm using least square method in solving Maxwell's equations. Journal of Computational Physics, 2007, 226, 1444-1457.	1.9	10
130	Two Dimensional Multidomain Pseudospectral Time-Domain Algorithm Based on Alternating-Direction Implicit Method. IEEE Transactions on Antennas and Propagation, 2006, 54, 1207-1214.	3.1	16
131	Perfectly matched layer absorbing boundary condition for truncating the boundary of the left-handed medium. Microwave and Optical Technology Letters, 2006, 48, 57-63.	0.9	14
132	Multidomain pseudospectral time-domain method for computation of electromagnetic scattering by bodies of revolution. Microwave and Optical Technology Letters, 2005, 47, 92-96.	0.9	4
133	Design of Graphene-Based Metamaterial Absorber and Antenna. , 0, , .		3