

# Douglas H Werner

## List of Publications by Year in descending order

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439  
papers

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citations

41627

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58552

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g-index

450  
all docs

450  
docs citations

450  
times ranked

8494  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Compact, Low-Profile Metasurface-Enabled Antenna for Wearable Medical Body-Area Network Devices. IEEE Transactions on Antennas and Propagation, 2014, 62, 4021-4030.	3.1	347
2	Conformal Dual-Band Near-Perfectly Absorbing Mid-Infrared Metamaterial Coating. ACS Nano, 2011, 5, 4641-4647.	7.3	306
3	The Wind Driven Optimization Technique and its Application in Electromagnetics. IEEE Transactions on Antennas and Propagation, 2013, 61, 2745-2757.	3.1	257
4	Optical planar chiral metamaterial designs for strong circular dichroism and polarization rotation. Optics Express, 2008, 16, 11802.	1.7	213
5	Review of numerical optimization techniques for meta-device design [Invited]. Optical Materials Express, 2019, 9, 1842.	1.6	213
6	A Compact, Wideband Circularly Polarized Co-designed Filtering Antenna and Its Application for Wearable Devices With Low SAR. IEEE Transactions on Antennas and Propagation, 2015, 63, 3808-3818.	3.1	199
7	Near-Ideal Optical Metamaterial Absorbers with Super-Octave Bandwidth. ACS Nano, 2014, 8, 1517-1524.	7.3	187
8	Transformation optical designs for wave collimators, flat lenses and right-angle bends. New Journal of Physics, 2008, 10, 115023.	1.2	184
9	Transformation Electromagnetics: An Overview of the Theory and Applications. IEEE Antennas and Propagation Magazine, 2010, 52, 24-46.	1.2	184
10	Hybrid metamaterials for electrically triggered multifunctional control. Nature Communications, 2016, 7, 13236.	5.8	183
11	Fast Optimization of Electromagnetic Design Problems Using the Covariance Matrix Adaptation Evolutionary Strategy. IEEE Transactions on Antennas and Propagation, 2011, 59, 1275-1285.	3.1	177
12	Hybrid Resonators and Highly Tunable Terahertz Metamaterials Enabled by Vanadium Dioxide (VO <sub>2</sub> ). Scientific Reports, 2017, 7, 4326.	1.6	176
13	Liquid crystal clad near-infrared metamaterials with tunable negative-zero-positive refractive indices. Optics Express, 2007, 15, 3342.	1.7	166
14	Reconfigurable and Tunable Metamaterials: A Review of the Theory and Applications. International Journal of Antennas and Propagation, 2014, 2014, 1-18.	0.7	163
15	Polarization splitter and polarization rotator designs based on transformation optics. Optics Express, 2008, 16, 18731.	1.7	157
16	Compact, Highly Efficient, and Fully Flexible Circularly Polarized Antenna Enabled by Silver Nanowires for Wireless Body-Area Networks. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 920-932.	2.7	139
17	Tunable optical negative-index metamaterials employing anisotropic liquid crystals. Applied Physics Letters, 2007, 91, .	1.5	125
18	Preserving Spin States upon Reflection: Linear and Nonlinear Responses of a Chiral Meta-Mirror. Nano Letters, 2017, 17, 7102-7109.	4.5	124

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19	Wind Driven Optimization (WDO): A novel nature-inspired optimization algorithm and its application to electromagnetics. , 2010, , .		117
20	Recent Progress in Active Optical Metasurfaces. Advanced Optical Materials, 2019, 7, 1801813.	3.6	117
21	An octave-bandwidth negligible-loss radiofrequency metamaterial. Nature Materials, 2011, 10, 216-222.	13.3	112
22	Design of Broadband Planar Arrays Based on the Optimization of Aperiodic Tilings. IEEE Transactions on Antennas and Propagation, 2008, 56, 76-86.	3.1	109
23	Wideband Dipoles on Electromagnetic Bandgap Ground Planes. IEEE Transactions on Antennas and Propagation, 2007, 55, 2426-2434.	3.1	108
24	Broadband and Wide Field-of-view Plasmonic Metasurface-enabled Waveplates. Scientific Reports, 2014, 4, 7511.	1.6	100
25	Surface-Enhanced Raman Scattering Study on Graphene-Coated Metallic Nanostructure Substrates. Journal of Physical Chemistry C, 2012, 116, 7249-7254.	1.5	97
26	Monolithic Full-Stokes Near-Infrared Polarimetry with Chiral Plasmonic Metasurface Integrated Graphene-Silicon Photodetector. ACS Nano, 2020, 14, 16634-16642.	7.3	94
27	Design and Optimization of 3-D Frequency-Selective Surfaces Based on a Multiobjective Lazy Ant Colony Optimization Algorithm. IEEE Transactions on Antennas and Propagation, 2017, 65, 7137-7149.	3.1	92
28	Efficient Multiobjective Antenna Optimization With Tolerance Analysis Through the Use of Surrogate Models. IEEE Transactions on Antennas and Propagation, 2018, 66, 6706-6715.	3.1	92
29	Restoring Intrinsic Properties of Electromagnetic Radiators Using Ultralightweight Integrated Metasurface Cloaks. Advanced Functional Materials, 2015, 25, 4708-4716.	7.8	89
30	Material parameter retrieval procedure for general bi-isotropic metamaterials and its application to optical chiral negative-index metamaterial design. Optics Express, 2008, 16, 11822.	1.7	87
31	Design for quality: reconfigurable flat optics based on active metasurfaces. Nanophotonics, 2020, 9, 3505-3534.	2.9	87
32	Conformal mappings to achieve simple material parameters for transformation optics devices. Optics Express, 2010, 18, 244.	1.7	86
33	Integrated photonic systems based on transformation optics enabled gradient index devices. Light: Science and Applications, 2012, 1, e38-e38.	7.7	81
34	A Compact Metasurface-Enabled Dual-Band Dual-Circularly Polarized Antenna Loaded With Complementary Split Ring Resonators. IEEE Transactions on Antennas and Propagation, 2019, 67, 794-803.	3.1	79
35	Compact, Wideband Antennas Enabled by Interdigitated Capacitor-Loaded Metasurfaces. IEEE Transactions on Antennas and Propagation, 2016, 64, 1595-1606.	3.1	76
36	Reconfigurable near-IR metasurface based on Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> phase-change material. Optical Materials Express, 2018, 8, 2264.	1.6	72

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37	A Novel Miniature Broadband/Multiband Antenna Based on an End-Loaded Planar Open-Sleeve Dipole. IEEE Transactions on Antennas and Propagation, 2006, 54, 3614-3620.	3.1	71
38	An Active Metamaterial Platform for Chiral Responsive Optoelectronics. Advanced Materials, 2015, 27, 4377-4383.	11.1	70
39	Low-Loss Impedance-Matched Optical Metamaterials with Zero-Phase Delay. ACS Nano, 2012, 6, 4475-4482.	7.3	69
40	Active Terahertz Chiral Metamaterials Based on Phase Transition of Vanadium Dioxide (VO <sub>2</sub> ). Scientific Reports, 2018, 8, 189.	1.6	69
41	A Single Noninterleaved Metasurface for High-Capacity and Flexible Mode Multiplexing of Higher-Order Poincaré Sphere Beams. Advanced Materials, 2020, 32, e1903983.	11.1	67
42	Dual-Polarized Embroidered Textile Armband Antenna Array With Omnidirectional Radiation for On-/Off-Body Wearable Applications. IEEE Transactions on Antennas and Propagation, 2020, 68, 2575-2584.	3.1	66
43	Near-infrared metamaterials with dual-band negative-index characteristics. Optics Express, 2007, 15, 1647.	1.7	64
44	Vanadium dioxide based broadband THz metamaterial absorbers with high tunability: simulation study. Optics Express, 2019, 27, 19436.	1.7	64
45	Flat focusing lens designs having minimized reflection based on coordinate transformation techniques. Optics Express, 2009, 17, 7807.	1.7	62
46	Wideband Elliptical Metasurface Cloaks in Printed Antenna Technology. IEEE Transactions on Antennas and Propagation, 2018, 66, 3512-3525.	3.1	57
47	The Characterization of Conductive Textile Materials Intended for Radio Frequency Applications. IEEE Antennas and Propagation Magazine, 2007, 49, 28-40.	1.2	56
48	Highly Efficient Broadband Multiplexed Millimeter-Wave Vortices from Metasurface-Enabled Transmit-Arrays of Subwavelength Thickness. Physical Review Applied, 2018, 9, .	1.5	56
49	Nonlinear Chiral Meta-Mirrors: Enabling Technology for Ultrafast Switching of Light Polarization. Nano Letters, 2020, 20, 2047-2055.	4.5	56
50	Synthesizing metamaterials with angularly independent effective medium properties based on an anisotropic parameter retrieval technique coupled with a genetic algorithm. Journal of Applied Physics, 2011, 109, .	1.1	55
51	Near-Zero-Index Metamaterial Lens Combined With AMC Metasurface for High-Directivity Low-Profile Antennas. IEEE Transactions on Antennas and Propagation, 2014, 62, 1928-1936.	3.1	55
52	Restoration of antenna parameters in scattering environments using electromagnetic cloaking. Applied Physics Letters, 2008, 92, .	1.5	53
53	Low Cost and Broadband Dual-Polarization Metamaterial Lens for Directivity Enhancement. IEEE Transactions on Antennas and Propagation, 2012, 60, 5717-5726.	3.1	53
54	Phase-modulation based transmitarray convergence lens for vortex wave carrying orbital angular momentum. Optics Express, 2018, 26, 22019.	1.7	53

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55	Compact Self-Diplexing Dual-Band Dual-Sense Circularly Polarized Array Antenna With Closely Spaced Operating Frequencies. IEEE Transactions on Antennas and Propagation, 2019, 67, 4617-4625.	3.1	53
56	Broadband High Directivity Multibeam Emission Through Transformation Optics-Enabled Metamaterial Lenses. IEEE Transactions on Antennas and Propagation, 2012, 60, 5063-5074.	3.1	51
57	A Low-Profile High-Gain Substrate-Integrated Waveguide Slot Antenna Enabled by an Ultrathin Anisotropic Zero-Index Metamaterial Coating. IEEE Transactions on Antennas and Propagation, 2014, 62, 1173-1184.	3.1	51
58	The Pareto Optimization of Ultrawideband Polyfractal Arrays. IEEE Transactions on Antennas and Propagation, 2008, 56, 97-107.	3.1	50
59	An infrared invisibility cloak composed of glass. Applied Physics Letters, 2010, 96, 233503.	1.5	49
60	Low-Profile Strip-Loaded Textile Antenna With Enhanced Bandwidth and Isolation for Full-Duplex Wearable Applications. IEEE Transactions on Antennas and Propagation, 2020, 68, 6527-6537.	3.1	49
61	A Broadband Monopole Antenna Enabled by an Ultrathin Anisotropic Metamaterial Coating. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 1543-1546.	2.4	47
62	Absorbing Ground Planes for Reducing Planar Antenna Radar Cross-Section Based on Frequency Selective Surfaces. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 1456-1459.	2.4	46
63	Quasi-Three-Dimensional Angle-Tolerant Electromagnetic Illusion Using Ultrathin Metasurface Coatings. Advanced Functional Materials, 2014, 24, 7728-7736.	7.8	45
64	1 Bit Dual-Linear Polarized Reconfigurable Transmitarray Antenna Using Asymmetric Dipole Elements With Parasitic Bypass Dipoles. IEEE Transactions on Antennas and Propagation, 2021, 69, 1188-1192.	3.1	44
65	Meta-atom library generation via an efficient multi-objective shape optimization method. Optics Express, 2020, 28, 24229.	1.7	44
66	Efficient second-harmonic generation in high Q-factor asymmetric lithium niobate metasurfaces. Optics Letters, 2021, 46, 633.	1.7	42
67	Two-dimensional electromagnetic cloak having a uniform thickness for elliptic cylindrical regions. Applied Physics Letters, 2008, 92, .	1.5	39
68	Design Synthesis of Metasurfaces for Broadband Hybrid-Mode Horn Antennas With Enhanced Radiation Pattern and Polarization Characteristics. IEEE Transactions on Antennas and Propagation, 2012, 60, 3594-3604.	3.1	39
69	A $K_u$ -Band Dual Polarization Hybrid-Mode Horn Antenna Enabled by Printed-Circuit-Board Metasurfaces. IEEE Transactions on Antennas and Propagation, 2013, 61, 1089-1098.	3.1	39
70	Pareto Optimization of Thinned Planar Arrays With Elliptical Mainbeams and Low Sidelobe Levels. IEEE Transactions on Antennas and Propagation, 2011, 59, 1748-1751.	3.1	37
71	Exploiting metasurface anisotropy for achieving near-perfect low-profile cloaks beyond the quasi-static limit. Journal Physics D: Applied Physics, 2013, 46, 505306.	1.3	37
72	Improved Electromagnetics Optimization: The covariance matrix adaptation evolutionary strategy. IEEE Antennas and Propagation Magazine, 2015, 57, 48-59.	1.2	37

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73	Nature-Inspired Optimization of High-Impedance Metasurfaces With Ultrasmall Interwoven Unit Cells. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 1563-1566.	2.4	36
74	Optimal High Efficiency 3D Plasmonic Metasurface Elements Revealed by Lazy Ants. ACS Photonics, 2019, 6, 2741-2748.	3.2	36
75	Deep-subwavelength light transmission in hybrid nanowire-loaded silicon nano-rib waveguides. Photonics Research, 2018, 6, 37.	3.4	35
76	Fabrication and Characterization of Multiband Polarization Independent 3-D-Printed Frequency Selective Structures With UltraWide Fields of View. IEEE Transactions on Antennas and Propagation, 2018, 66, 6096-6105.	3.1	34
77	Application of the Memristor in Reconfigurable Electromagnetic Devices. IEEE Antennas and Propagation Magazine, 2015, 57, 239-248.	1.2	33
78	Leveraging Superchiral Light for Manipulation of Optical Chirality in the Near-Field of Plasmonic Metamaterials. ACS Photonics, 2017, 4, 1298-1305.	3.2	33
79	A metamaterial-enabled design enhancing decades-old short backfire antenna technology for space applications. Nature Communications, 2019, 10, 108.	5.8	33
80	Broadband, Miniaturized Stacked-Patch Antennas for L-Band Operation Based on Magneto-Dielectric Substrates. IEEE Transactions on Antennas and Propagation, 2010, 58, 2817-2822.	3.1	32
81	Synthesizing low loss negative index metamaterial stacks for the mid-infrared using genetic algorithms. Optics Express, 2009, 17, 14771.	1.7	31
82	Spoof plasmon radiation using sinusoidally modulated corrugated reactance surfaces. Optics Express, 2016, 24, 2443.	1.7	31
83	Low-index metamaterial designs in the visible spectrum. Optics Express, 2007, 15, 9267.	1.7	30
84	Field-ACSwitchable Broadband Polarizer Based on Reconfigurable Nanowire Assemblies. Advanced Functional Materials, 2017, 27, 1604703.	7.8	30
85	Orbital angular momentum generation method based on transformation electromagnetics. Optics Express, 2018, 26, 11708.	1.7	30
86	Predicting Scattering From Complex Nano-Structures via Deep Learning. IEEE Access, 2020, 8, 139983-139993.	2.6	30
87	Genetically engineered multiband high-impedance frequency selective surfaces. Microwave and Optical Technology Letters, 2003, 38, 400-403.	0.9	29
88	Electrostatic theory for designing lossless negative permittivity metamaterials. Optics Letters, 2010, 35, 1431.	1.7	29
89	A Compact Dual-Band Antenna Enabled by a Complementary Split-Ring Resonator-Loaded Metasurface. IEEE Transactions on Antennas and Propagation, 2017, 65, 6878-6888.	3.1	29
90	Multi-objective surrogate-assisted optimization applied to patch antenna design. , 2017, , .		29

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91	Wideband Transmit Arrays Based on Anisotropic Impedance Surfaces for Circularly Polarized Single-Feed Multibeam Generation in the Q-Band. IEEE Transactions on Antennas and Propagation, 2020, 68, 217-229.	3.1	29
92	A Low-Profile and Wideband Triple-Mode Antenna for Wireless Body Area Network Concurrent On-/Off-Body Communications. IEEE Transactions on Antennas and Propagation, 2020, 68, 1982-1994.	3.1	29
93	Single-layer metallodielectric nanostructures as dual-band midinfrared filters. Applied Physics Letters, 2008, 92, 263106.	1.5	28
94	Improved Model-Based Parameter Estimation Approach for Accelerated Periodic Method of Moments Solutions With Application to the Analysis of Convoluted Frequency Selected Surfaces and Metamaterials. IEEE Transactions on Antennas and Propagation, 2010, 58, 122-131.	3.1	28
95	Prism-Based DGTD With a Simplified Periodic Boundary Condition to Analyze FSS With $D_{\text{sym}}$ Symmetry in a Rectangular Array Under Normal Incidence. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 771-775.	2.4	28
96	Beam Scanning Using Flat Transformation Electromagnetic Focusing Lenses. IEEE Antennas and Wireless Propagation Letters, 2009, 8, 1115-1118.	2.4	27
97	Inhomogeneous Metasurfaces With Engineered Dispersion for Broadband Hybrid-Mode Horn Antennas. IEEE Transactions on Antennas and Propagation, 2013, 61, 4947-4956.	3.1	26
98	Dispersion engineering of metasurfaces for dual-frequency quasi-three-dimensional cloaking of microwave radiators. Optics Express, 2016, 24, 9629.	1.7	26
99	Platform Tolerant, High Encoding Capacity Dipole Array-Plate Chipless RFID Tags. IEEE Access, 2019, 7, 138707-138720.	2.6	26
100	An Autopolyploidy-Based Genetic Algorithm for Enhanced Evolution of Linear Polyfractal Arrays. IEEE Transactions on Antennas and Propagation, 2007, 55, 583-593.	3.1	25
101	Analysis and Design Optimization of Robust Aperiodic Micro-UAV Swarm-Based Antenna Arrays. IEEE Transactions on Antennas and Propagation, 2012, 60, 2295-2308.	3.1	25
102	Dielectric nanoresonator based lossless optical perfect magnetic mirror with near-zero reflection phase. Applied Physics Letters, 2016, 108, .	1.5	25
103	The Explosion of Artificial Intelligence in Antennas and Propagation: How Deep Learning Is Advancing Our State of the Art. IEEE Antennas and Propagation Magazine, 2021, 63, 16-27.	1.2	25
104	Demonstration of an Octave-Bandwidth Negligible-Loss Metamaterial Horn Antenna for Satellite Applications. IEEE Transactions on Antennas and Propagation, 2013, 61, 1081-1088.	3.1	24
105	A Comparison of Three Uniquely Different State of the Art and Two Classical Multiobjective Optimization Algorithms as Applied to Electromagnetics. IEEE Transactions on Antennas and Propagation, 2017, 65, 1267-1280.	3.1	24
106	Conformal metasurface-coated dielectric waveguides for highly confined broadband optical activity with simultaneous low-visibility and reduced crosstalk. Nature Communications, 2017, 8, 356.	5.8	24
107	Characterization of complementary patterned metallic membranes produced simultaneously by a dual fabrication process. Applied Physics Letters, 2010, 97, .	1.5	23
108	Matched Impedance Thin Planar Composite Magneto-Dielectric Metasurfaces. IEEE Transactions on Antennas and Propagation, 2012, 60, 1910-1920.	3.1	23



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109	Compact Low-Profile Tunable Metasurface-Enabled Antenna With Near-Arbitrary Polarization. IEEE Transactions on Antennas and Propagation, 2016, 64, 2775-2783.	3.1	22
110	Closed-Form Expressions for the Radiation Properties of Nanoloops in the Terahertz, Infrared and Optical Regimes. IEEE Transactions on Antennas and Propagation, 2017, 65, 121-133.	3.1	22
111	Exploiting Topological Properties of Mie-Resonance-Based Hybrid Metasurfaces for Ultrafast Switching of Light Polarization. ACS Photonics, 2020, 7, 2362-2373.	3.2	22
112	The Synthesis of Wide- and Multi-Bandgap Electromagnetic Surfaces With Finite Size and Nonuniform Capacitive Loading. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 1962-1972.	2.9	21
113	Ultra-Thin Absorbers Comprised by Cascaded High-Impedance and Frequency Selective Surfaces. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1089-1092.	2.4	21
114	On the use of surrogate models in the analytical decompositions of refractive index gradients obtained through quasiconformal transformation optics. Journal of Optics (United Kingdom), 2016, 18, 044019.	1.0	21
115	Bezier representations for the multiobjective optimization of conformal array amplitude weights. IEEE Transactions on Antennas and Propagation, 2006, 54, 1964-1970.	3.1	20
116	Compact Dual-Band Dual-Mode Antenna With Omni-/Unidirectional Radiation Characteristics. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2657-2660.	2.4	20
117	Compact, Low-Profile and Robust Textile Antennas With Improved Bandwidth for Easy Garment Integration. IEEE Access, 2020, 8, 77490-77500.	2.6	20
118	Complete polarization conversion using anisotropic temporal slabs. Optics Letters, 2021, 46, 1373.	1.7	20
119	Functional all-optical logic gates for true time-domain signal processing in nonlinear photonic crystal waveguides. Optics Express, 2020, 28, 18317.	1.7	20
120	Near-infrared metamaterial films with reconfigurable transmissive/reflective properties. Optics Letters, 2008, 33, 545.	1.7	19
121	A Versatile Design Strategy for Thin Composite Planar Double-Sided High-Impedance Surfaces. IEEE Transactions on Antennas and Propagation, 2012, 60, 2770-2780.	3.1	19
122	PML Implementation in a Nonconforming Mixed-Element DGTD Method for Periodic Structure Analysis. IEEE Transactions on Antennas and Propagation, 2019, 67, 6979-6988.	3.1	19
123	Dual-band infrared single-layer metallodielectric photonic crystals. Applied Physics Letters, 2004, 85, 1835-1837.	1.5	18
124	Single-layer multiband infrared metallodielectric photonic crystals designed by genetic algorithm optimization. Applied Physics Letters, 2005, 86, 081102.	1.5	18
125	Angle and polarization tolerant midinfrared dielectric filter designed by genetic algorithm optimization. Applied Physics Letters, 2010, 96, 223101.	1.5	18
126	Metamaterials with custom emissivity polarization in the near-infrared. Optics Express, 2013, 21, 3872.	1.7	18



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127	Efficient Cross-talk Reduction of Nanophotonic Circuits Enabled by Fabrication Friendly Periodic Silicon Strip Arrays. <i>Scientific Reports</i> , 2017, 7, 15827.	1.6	18
128	Metallic Membranes with Subwavelength Complementary Patterns: Distinct Substrates for Surface-Enhanced Raman Scattering. <i>ACS Nano</i> , 2011, 5, 5472-5477.	7.3	17
129	A Real-Valued Parallel Clonal Selection Algorithm and Its Application to the Design Optimization of Multi-Layered Frequency Selective Surfaces. <i>IEEE Transactions on Antennas and Propagation</i> , 2012, 60, 1831-1843.	3.1	17
130	Application of AIM and MBPE Techniques to Accelerate Modeling of 3-D Doubly Periodic Structures with Nonorthogonal Lattices Composed of Bianisotropic Media. <i>IEEE Transactions on Antennas and Propagation</i> , 2014, 62, 4067-4080.	3.1	17
131	Leaky-Wave Antennas Based on Capacitively Tuned Modulated Reactance Surfaces. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2016, 15, 678-681.	2.4	17
132	Stub-loaded inverted-F antenna synthesis via Wind Driven Optimization. , 2011, , .		16
133	Metamaterials with angle selective emissivity in the near-infrared. <i>Optics Express</i> , 2013, 21, 5215.	1.7	16
134	Investigation of Scattering Properties of Large-Scale Aperiodic Tilings Using a Combination of the Characteristic Basis Function and Adaptive Integral Methods. <i>IEEE Transactions on Antennas and Propagation</i> , 2013, 61, 3149-3160.	3.1	16
135	Optimization of Gradient Index Lenses Using Quasi-Conformal Contour Transformations. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2014, 13, 1787-1791.	2.4	16
136	Multiobjective Optimization-Aided Metamaterials-by-Design With Application to Highly Directive Nanodevices. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , 2017, 2, 147-158.	1.4	16
137	All-dielectric transformation medium mimicking a broadband converging lens. <i>Optics Express</i> , 2018, 26, 20331.	1.7	16
138	Terahertz Chiral Metamaterials Enabled by Textile Manufacturing. <i>Advanced Materials</i> , 2022, 34, e2110590.	11.1	16
139	Interleaved Ultrawideband Antenna Arrays Based on Optimized Polyfractal Tree Structures. <i>IEEE Transactions on Antennas and Propagation</i> , 2009, 57, 2622-2632.	3.1	15
140	Handedness Dependent Electromagnetically Induced Transparency in Hybrid Chiral Metamaterials. <i>Scientific Reports</i> , 2015, 5, 12224.	1.6	15
141	Leap-Frog Continuousâ€“Discontinuous Galerkin Time Domain Method for Nanoarchitectures With the Drude Model. <i>Journal of Lightwave Technology</i> , 2017, 35, 4888-4896.	2.7	15
142	Broadband transparent chiral mirrors: Design methodology and bandwidth analysis. <i>AIP Advances</i> , 2019, 9, .	0.6	15
143	Theory, Design, and Verification of Dual-Circularly Polarized Dual-Beam Arrays With Independent Control of Polarization: A Generalization of Sequential Rotation Arrays. <i>IEEE Transactions on Antennas and Propagation</i> , 2021, 69, 1369-1382.	3.1	15
144	Nature Inspired Optimization Techniques for Metamaterial Design. <i>Topics in Applied Physics</i> , 2013, , 97-146.	0.4	15

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145	Generalized Space-Filling Gosper Curves and Their Application to the Design of Wideband Modular Planar Antenna Arrays. IEEE Transactions on Antennas and Propagation, 2010, 58, 3931-3941.	3.1	14
146	Design of Ultra-Wideband, Aperiodic Antenna Arrays With the CMA Evolutionary Strategy. IEEE Transactions on Antennas and Propagation, 2014, 62, 1663-1672.	3.1	14
147	Tuning the optical response of a dimer nanoantenna using plasmonic nanoring loads. Scientific Reports, 2015, 5, 9813.	1.6	14
148	Transformation-optics-inspired anti-reflective coating design for gradient index lenses. Optics Letters, 2015, 40, 2521.	1.7	14
149	Evolving random fractal Cantor superlattices for the infrared using a genetic algorithm. Journal of the Royal Society Interface, 2016, 13, 20150975.	1.5	14
150	A Low Cost and Highly Efficient Metamaterial Reflector Antenna. IEEE Transactions on Antennas and Propagation, 2018, 66, 1545-1548.	3.1	14
151	High-Order Harmonic Optical Vortex Generation from Photonic Bound States in the Continuum. Advanced Optical Materials, 2022, 10, 2101497.	3.6	14
152	Generalized temporal transfer matrix method: a systematic approach to solving electromagnetic wave scattering in temporally stratified structures. Nanophotonics, 2022, 11, 1309-1320.	2.9	14
153	General properties of two-dimensional conformal transformations in electrostatics. Optics Express, 2011, 19, 20035.	1.7	13
154	All-Dielectric Transformed Material for Microwave Broadband Orbital Angular Momentum Vortex Beam. Physical Review Applied, 2019, 12, .	1.5	13
155	Design and Validation of an All-Dielectric Metamaterial Medium for Collimating Orbital-Angular-Momentum Vortex Waves at Microwave Frequencies. Physical Review Applied, 2019, 12, .	1.5	13
156	Continuous-discontinuous Galerkin time domain (CDGTD) method with generalized dispersive material (GDM) model for computational photonics. Optics Express, 2018, 26, 29005.	1.7	13
157	Analytical surrogate model for the aberrations of an arbitrary GRIN lens. Optics Express, 2016, 24, 17805.	1.7	12
158	Multiobjective Optimization for Electromagnetics and Optics: An Introduction and Tutorial Based on Real-World Applications. IEEE Antennas and Propagation Magazine, 2018, 60, 58-71.	1.2	12
159	Dielectric Resonator Antenna Geometry-Dependent Performance Tradeoffs. IEEE Open Journal of Antennas and Propagation, 2021, 2, 14-21.	2.5	12
160	Discontinuous Galerkin time domain analysis of electromagnetic scattering from dispersive periodic nanostructures at oblique incidence. Optics Express, 2019, 27, 13116.	1.7	12
161	Establishing exhaustive metasurface robustness against fabrication uncertainties through deep learning. Nanophotonics, 2021, 10, 4497-4509.	2.9	12
162	Bifunctional plasmonic metamaterials enabled by subwavelength nano-notches for broadband, polarization-independent enhanced optical transmission and passive beam-steering. Optics Express, 2013, 21, 31492.	1.7	11

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