Do-Hoon Kwon

List of Publications by Year
in descending order

94 papers	2,411 citations	257450 24 h-index	206112 48 g-index
94 all docs	94 docs citations	94 times ranked	1899 citing authors

#	Article	IF	Citations
1	Modulated Scalar Reactance Surfaces for Endfire Radiation Pattern Synthesis. IEEE Transactions on Antennas and Propagation, 2022, 70, 440-450.	5.1	3
2	Microwave Metasurface Cloaking for Freestanding Objects. Physical Review Applied, 2022, 17, .	3.8	10
3	Design of Single-Layer Dense Metasurfaces on Irregular Grids Using Discrete Dipole Approximation. IEEE Transactions on Antennas and Propagation, 2022, 70, 10592-10603.	5.1	2
4	A Multi-Functional Reconfigurable Metasurface: Electromagnetic Design Accounting for Fabrication Aspects. IEEE Transactions on Antennas and Propagation, 2021, 69, 1440-1454.	5.1	71
5	Planar Metasurface Design for Wide-Angle Refraction Using Interface Field Optimization. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 428-432.	4.0	15
6	Large and efficient unidirectional plane-waveâ€“surface-wave metasurface couplers based on modulated reactance surfaces. Physical Review B, 2021, 103, .	3.2	9
7	Functional Electromagnetic Surface Design via Complete Interface Field Synthesis. , 2021, , .		0
8	Planar Modulated Reactance Surfaces for Endfire Antenna Applications. Journal of Physics: Conference Series, 2021, 2015, 012081.	0.4	0
9	Illusion electromagnetics for free-standing objects using passive lossless metasurfaces. Physical Review B, 2020, 101, .	3.2	20
10	Toward the Realization of a Programmable Metasurface Absorber Enabled by Custom Integrated Circuit Technology. IEEE Access, 2020, 8, 92986-92998.	4.2	24
11	Modulated Reactance Surfaces for Leaky-Wave Radiation Based on Complete Aperture Field Synthesis. IEEE Transactions on Antennas and Propagation, 2020, 68, 5463-5477.	5.1	22
12	Hardware Realization and Performance Measurement of an Anti-Jam GPS Antenna Array. , 2019, , .		1
13	Intelligent Metasurfaces with Continuously Tunable Local Surface Impedance for Multiple Reconfigurable Functions. Physical Review Applied, 2019, 11, .	3.8	108
14	A Two-Dimensional LC-Network Metamaterial on an Irregular Grid. , 2019, , .		0
15	A Two-Dimensional LC-Network Metamaterial on an Irregular Grid. , 2019, , .		0
16	Transmission Magnitude and Phase Control for Polarization-Preserving Reflectionless Metasurfaces. Physical Review Applied, 2018, 9, .	3.8	21
17	Arbitrary beam control using passive lossless metasurfaces enabled by orthogonally polarized custom surface waves. Physical Review B, 2018, 97, .	3.2	31
18	Efficient Analytical Evaluation of Complex Dispersion Relations of a Multiple-Row Periodic Array of Magnetodielectric Circular Cylinders. IEEE Transactions on Antennas and Propagation, 2018, 66, 2449-2457.	5.1	3

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19	Effects of Electromagnetic Modeling Methods on Coverage Prediction of Anti-Jam GPS Antenna. , 2018, , .		0
20	Field Optimization for Scalar Metasurface Designs for Anomalous Plane- Wave Reflection. , 2018, , .		0
21	Lossless Tensor Surface Invisibility Cloaks Utilizing Surface Waves. , 2018, , .		1
22	Lossless tensor surface electromagnetic cloaking for large objects in free space. Physical Review B, 2018, 98, .	3.2	25
23	Lossless Scalar Metasurfaces for Anomalous Reflection Based on Efficient Surface Field Optimization. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 1149-1152.	4.0	37
24	Fano matching bandwidth bounds for small loop antennas based on spherical wave scattering. , 2017, , .		0
25	Realistic GPS Coverage Prediction for Dual-Polarized Controlled Reception Pattern Antennas. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 1907-1910.	4.0	8
26	Comparison of radiation pattern modeling methods for GPS controlled reception pattern array. , 2017, , .		1
27	Non-local metasurfaces for perfect control of reflection and transmission. , 2017, , .		2
28	Perfect reflection control for impenetrable surfaces using surface waves of orthogonal polarization. Physical Review B, 2017, 96, .	3.2	33
29	Perfect Reflectarrays Elements Based on Non-local Metasurfaces. , 2017, , .		0
30	A broadband perpendicularE-plane waveguide-to-suspended stripline transition. Microwave and Optical Technology Letters, 2016, 58, 1831-1834.	1.4	0
31	Higher-order bandwidth bounds for conductor-backed planar arrays. , 2016, , .		1
32	On the bandwidth of small dipoles and the electric polarizability. , 2016, , .		0
33	Design and Realization of Virtual Line Source Using Metamaterials. IEEE Transactions on Antennas and Propagation, 2016, 64, 5220-5229.	5.1	3
34	Bandwidth bounds for small dipole antennas based on spherical wave scattering. , 2016, , .		2
35	Received voltage and power for an arbitrary element of infinite planar arrays. , 2015, , .		0
36	Spectral-domain radiation Q analysis of a planar dipole over a conducting ground plane. , 2015, , .		1

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37	Effective Height, Receiving Area, and Receiving Efficiency of Infinite Planar Phased Array Elements. IEEE Transactions on Antennas and Propagation, 2015, 63, 2022-2031.	5.1	4
38	Bandwidth Limitations of Linearly Polarized Infinite Planar Phased Arrays in Free Space. IEEE Transactions on Antennas and Propagation, 2015, 63, 3423-3431.	5.1	4
39	Design and experimental validation of a virtual line source using metamaterials. , 2015, , .		1
40	Near-field MIMO communication utilizing both electric and magnetic field components. , 2014, , .		1
41	Radiation Q of planar dipole phased arrays on a grounded substrate. , 2014, , .		1
42	A vertical waveguide-to-suspended stripline transition. , 2014, , .		4
43	Guest Editorial: IEEE Antennas and Wireless Propagation Letters Special Cluster on Transformation Electromagnetics. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1765-1766.	4.0	0
44	Radiation Q Bounds for Small Electric Dipoles Over a Conducting Ground Plane. IEEE Transactions on Antennas and Propagation, 2014, 62, 2031-2040.	5.1	9
45	Energy Storage and Radiation Q of Infinite Planar Dipole Phased Arrays. IEEE Transactions on Antennas and Propagation, 2014, 62, 153-162.	5.1	22
46	Channel Multiplexing Technique Utilizing Electric and Magnetic Components of a Radio Wave. IEEE Communications Letters, 2014, 18, 317-320.	4.1	2
47	Transformation Electromagnetics for Cloaking, Lensing, and Radiation Applications. , 2014, , 33-81.		0
48	Bandwidth limitations of phased array elements. , 2013, , .		1
49	Efficient Mode-Matching Analysis of 2-D Scattering by Periodic Array of Circular Cylinders. IEEE Transactions on Antennas and Propagation, 2013, 61, 1327-1333.	5.1	3
50	Radiation quality factor analysis of planar phased arrays. , 2013, , .		1
51	Impedance measurement approach for small antennas without direct cable attachment. , 2013, , .		5
52	Full-wave analysis of virtual probe radiation in transmission-line metamaterial. , 2013, , .		2
53	Radiation Q of small vertically polarized dipole antennas over a ground plane. , 2013, , .		4
54	Two-dimensional metamaterial designs for line-source radiation from a virtual location. , 2012, , .		3

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55	Sum rule for conductor-backed thin-wire dipole antennas. , 2012, , .		0
56	Dichroic FSS design for angularly stable response using homogenization. , 2012, , .		0
57	Non-Orthogonal Grids in Two-Dimensional Transmission-Line Metamaterials. IEEE Transactions on Antennas and Propagation, 2012, 60, 4210-4218.	5.1	15
58	Quasi-Conformal Transformation Optics Lenses for Conformal Arrays. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 1125-1128.	4.0	36
59	Transmission-line metamaterial design of an embedded-recessed line source. , 2011, , .		5
60	Design of received and scattered powers for dipole arrays using load optimization. , 2010, , .		1
61	Low-profile embedded design of endfire scanning arrays with coordinate transformations. Journal of Applied Physics, 2010, 107, 034508.	2.5	6
62	Impedance-matched three-dimensional beam expander and compressor designs via transformation optics. Journal of Applied Physics, 2010, 107, .	2.5	21
63	Transformation Electromagnetics: An Overview of the Theory and Applications. IEEE Antennas and Propagation Magazine, 2010, 52, 24-46.	1.4	184
64	Transformation Electromagnetic Design of an Embedded Monopole in a Ground Recess for Conformal Applications. IEEE Antennas and Wireless Propagation Letters, 2010, 9, 432-435.	4.0	18
65	Low-profile embedded array design for endfire scanning using transformation electromagnetics. , 2010, , .		0
66	Virtual circular array using material-embedded linear source distributions. Applied Physics Letters, 2009, 95, .	3.3	14
67	Low-loss high-Q optical bandstop filter based on chalcogenide glass grating structures. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	1
68	Analysis of maximum received power by arbitrary lossless arrays. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	2
69	Beam Scanning Using Flat Transformation Electromagnetic Focusing Lenses. IEEE Antennas and Wireless Propagation Letters, 2009, 8, 1115-1118.	4.0	27
70	Transformation electromagnetic design of beam polarization rotators. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	0
71	Optimal Characteristics of an Arbitrary Receive Antenna. IEEE Transactions on Antennas and Propagation, 2009, 57, 3720-3727.	5.1	83
72	Flat focusing lens designs having minimized reflection based on coordinate transformation techniques. Optics Express, 2009, 17, 7807.	3.4	62

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73	Flat focusing lens designs based on transformation electromagnetics. , 2009, , .		0
74	Two-dimensional eccentric elliptic electromagnetic cloaks. Applied Physics Letters, 2008, 92, .	3.3	133
75	Near-infrared metamaterial films with reconfigurable transmissive/reflective properties. Optics Letters, 2008, 33, 545.	3.3	19
76	Optical planar chiral metamaterial designs for strong circular dichroism and polarization rotation. Optics Express, 2008, 16, 11802.	3.4	213
77	Material parameter retrieval procedure for general bi-isotropic metamaterials and its application to optical chiral negative-index metamaterial design. Optics Express, 2008, 16, 11822.	3.4	87
78	Polarization splitter and polarization rotator designs based on transformation optics. Optics Express, 2008, 16, 18731.	3.4	157
79	Radiation Q and Gain of TM and TE Sources in Phase-Delayed Rotated Configurations. IEEE Transactions on Antennas and Propagation, 2008, 56, 2783-2786.	5.1	5
80	Transformation optical designs for wave collimators, flat lenses and right-angle bends. New Journal of Physics, 2008, 10, 115023.	2.9	184
81	Anisotropic liquid crystals for tunable optical negative-index metamaterials. , 2008, , .		3
82	Two-dimensional electromagnetic cloak having a uniform thickness for elliptic cylindrical regions. Applied Physics Letters, 2008, 92, .	3.3	39
83	Restoration of antenna parameters in scattering environments using electromagnetic cloaking. Applied Physics Letters, 2008, 92, .	3.3	53
84	Tunable optical negative-index metamaterials employing anisotropic liquid crystals. Applied Physics Letters, 2007, 91, .	3.3	125
85	Comment on "Negative refractive index in artificial metamaterials". Optics Letters, 2007, 32, 1510.	3.3	9
86	Near-infrared metamaterials with dual-band negative-index characteristics. Optics Express, 2007, 15, 1647.	3.4	64
87	Liquid crystal clad near-infrared metamaterials with tunable negative-zero-positive refractive indices. Optics Express, 2007, 15, 3342.	3.4	166
88	Low-index metamaterial designs in the visible spectrum. Optics Express, 2007, 15, 9267.	3.4	30
89	Wideband balun and vertical transition between microstrip and parallel-strip transmission line. Microwave and Optical Technology Letters, 2007, 49, 1530-1532.	1.4	2
90	A wideband balun and vertical transition between conductor-backed CPW and parallel-strip transmission line. IEEE Microwave and Wireless Components Letters, 2006, 16, 152-154.	3.2	6

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91	A wideband vertical transition between co-planar waveguide and parallel-strip transmission line. IEEE Microwave and Wireless Components Letters, 2005, 15, 591-593.	3.2	17
92	On the radiation Q and the gain of crossed electric and magnetic dipole moments. IEEE Transactions on Antennas and Propagation, 2005, 53, 1681-1687.	5.1	47
93	Ray analysis of electromagnetic field build-up and quality factor of electrically large shielded enclosures. IEEE Transactions on Electromagnetic Compatibility, 1998, 40, 19-26.	2.2	23
94	High-frequency asymptotic acceleration of the fast multipole method. Radio Science, 1996, 31, 1199-1206.	1.6	33