

Filippo Capolino

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7543926/publications.pdf>

Version: 2024-02-01

295
papers

6,133
citations

87723

38
h-index

128067

60
g-index

297
all docs

297
docs citations

297
times ranked

4739
citing authors

#	ARTICLE	IF	CITATIONS
1	Millimeter-wave massive MIMO: the next wireless revolution?. , 2014, 52, 56-62.		657
2	Theory and Phenomena of Metamaterials. , 0, , .		291
3	Array thinning by using antennas in a Fabryâ€“Perot cavity for gain enhancement. IEEE Transactions on Antennas and Propagation, 2006, 54, 1979-1990.	3.1	248
4	Graphene-based tunable hyperbolic metamaterials and enhanced near-field absorption. Optics Express, 2013, 21, 7614.	1.7	246
5	Low Profile Fully Planar Folded Dipole Antenna on a High Impedance Surface. IEEE Transactions on Antennas and Propagation, 2012, 60, 51-62.	3.1	139
6	The Fundamental Physics of Directive Beaming at Microwave and Optical Frequencies and the Role of Leaky Waves. Proceedings of the IEEE, 2011, 99, 1780-1805.	16.4	125
7	Applications of Metamaterials. , 0, , .		105
8	Electric field enhancement in \vec{E} -near-zero slabs under TM-polarized oblique incidence. Physical Review B, 2013, 87, .	1.1	102
9	Complex modes and near-zero permittivity in 3D arrays of plasmonic nanoshells: loss compensation using gain [Invited]. Optical Materials Express, 2011, 1, 1077.	1.6	101
10	Hyperbolic metamaterial as super absorber for scattered fields generated at its surface. Physical Review B, 2012, 86, .	1.1	98
11	Strong coupling in the sub-wavelength limit using metamaterial nanocavities. Nature Communications, 2013, 4, 2882.	5.8	96
12	Grapheneâ€“dielectric composite metamaterials: evolution from elliptic to hyperbolic wavevector dispersion and the transverse epsilon-near-zero condition. Journal of Nanophotonics, 2013, 7, 073089.	0.4	88
13	Enhanced Magnetic and Electric Fields via Fano Resonances in Metasurfaces of Circular Clusters of Plasmonic Nanoparticles. ACS Photonics, 2014, 1, 254-260.	3.2	73
14	Theory of coupled resonator optical waveguides exhibiting high-order exceptional points of degeneracy. Physical Review B, 2017, 96, .	1.1	73
15	Low-damping epsilon-near-zero slabs: Nonlinear and nonlocal optical properties. Physical Review B, 2013, 87, .	1.1	72
16	Gain Enhancement of a V-Band Antenna Using a Fabry-PÃ©rot Cavity With a Self-Sustained All-Metal Cap With FSS. IEEE Transactions on Antennas and Propagation, 2015, 63, 909-921.	3.1	71
17	Silicon-based optical leaky wave antenna with narrow beam radiation. Optics Express, 2011, 19, 8735.	1.7	69
18	Design of a CMOS On-Chip Slot Antenna With Extremely Flat Cavity at 140 GHz. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 827-830.	2.4	68

#	ARTICLE	IF	CITATIONS
19	Non-lithographic SERS Substrates: Tailoring Surface Chemistry for Au Nanoparticle Cluster Assembly. <i>Small</i> , 2012, 8, 2239-2249.	5.2	68
20	Revisiting Orbital Angular Momentum Beams: Fundamentals, Reflectarray Generation, and Novel Antenna Applications. <i>IEEE Antennas and Propagation Magazine</i> , 2018, 60, 68-81.	1.2	67
21	Comparison of Methods for Calculating the Field Excited by a Dipole Near a 2-D Periodic Material. <i>IEEE Transactions on Antennas and Propagation</i> , 2007, 55, 1644-1655.	3.1	66
22	Directive Leaky-Wave Radiation From a Dipole Source in a Wire-Medium Slab. <i>IEEE Transactions on Antennas and Propagation</i> , 2008, 56, 1329-1339.	3.1	66
23	Collective electric and magnetic plasmonic resonances in spherical nanoclusters. <i>Optics Express</i> , 2011, 19, 2754.	1.7	64
24	Second harmonic generation from metamaterials strongly coupled to intersubband transitions in quantum wells. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	61
25	Giant Circular Dichroism at Visible Frequencies Enabled by Plasmonic Ramp-Shaped Nanostructures. <i>ACS Photonics</i> , 2019, 6, 924-931.	3.2	60
26	Giant gain enhancement in photonic crystals with a degenerate band edge. <i>Physical Review B</i> , 2016, 93, .	1.1	55
27	Localized modes in photonic quasicrystals with Penrose-type lattice. <i>Optics Express</i> , 2006, 14, 10021.	1.7	53
28	Thin anisotropic metasurfaces for simultaneous light focusing and polarization manipulation. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2015, 32, 318.	0.9	51
29	Longitudinal Monitoring of Biofilm Formation via Robust Surface-Enhanced Raman Scattering Quantification of <i>Pseudomonas aeruginosa</i> -Produced Metabolites. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 12364-12373.	4.0	51
30	Theory of Exceptional Points of Degeneracy in Uniform Coupled Waveguides and Balance of Gain and Loss. <i>IEEE Transactions on Antennas and Propagation</i> , 2017, 65, 5289-5302.	3.1	48
31	Vortex beams with strong longitudinally polarized magnetic field and their generation by using metasurfaces. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2015, 32, 345.	0.9	47
32	Phase-gradient gap-plasmon metasurface based blazed grating for real time dispersive imaging. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	46
33	Photoinduced Magnetic Nanoprobe Excited by an Azimuthally Polarized Vector Beam. <i>ACS Photonics</i> , 2016, 3, 2049-2058.	3.2	46
34	Complex bound and leaky modes in chains of plasmonic nanospheres. <i>Optics Express</i> , 2011, 19, 18345.	1.7	45
35	Exceptional Points of Degeneracy Induced by Linear Time-Periodic Variation. <i>Physical Review Applied</i> , 2019, 11, .	1.5	44
36	Sub-micron silicon nitride waveguide fabrication using conventional optical lithography. <i>Optics Express</i> , 2015, 23, 6780.	1.7	43

#	ARTICLE	IF	CITATIONS
37	A 94-GHz Extremely Thin Metasurface-Based BiCMOS On-Chip Antenna. IEEE Transactions on Antennas and Propagation, 2014, 62, 4439-4451.	3.1	42
38	Choosing splitting parameters and summation limits in the numerical evaluation of 1^{st} and 2^{nd} periodic Green's functions using the Ewald method. Radio Science, 2008, 43, .	0.8	41
39	Gain-assisted harmonic generation in near-zero permittivity metamaterials made of plasmonic nanoshells. New Journal of Physics, 2012, 14, 103016.	1.2	41
40	Theory and New Amplification Regime in Periodic Multimodal Slow Wave Structures With Degeneracy Interacting With an Electron Beam. IEEE Transactions on Plasma Science, 2016, 44, 594-611.	0.6	40
41	Second-harmonic double-resonance cones in dispersive hyperbolic metamaterials. Physical Review B, 2014, 89, .	1.1	39
42	Effective model and investigation of the near-field enhancement and subwavelength imaging properties of multilayer arrays of plasmonic nanospheres. Physical Review E, 2011, 84, 016607.	0.8	37
43	Exceptional Points of Degeneracy in Periodic Coupled Waveguides and the Interplay of Gain and Radiation Loss: Theoretical and Experimental Demonstration. IEEE Transactions on Antennas and Propagation, 2019, 67, 6909-6923.	3.1	37
44	Leaky-Wave Analysis of Wideband Planar Fabry-Pérot Cavity Antennas Formed by a Thick PRS. IEEE Transactions on Antennas and Propagation, 2019, 67, 5163-5175.	3.1	37
45	Highly Polarized, Directive Radiation From a Fabry-Pérot Cavity Leaky-Wave Antenna Based on a Metal Strip Grating. IEEE Transactions on Antennas and Propagation, 2010, 58, 3873-3883.	3.1	36
46	Radiative emission enhancement using nano-antennas made of hyperbolic metamaterial resonators. Applied Physics Letters, 2014, 105, .	1.5	36
47	Design and Analysis of a W-band 9-Element Imaging Array Receiver Using Spatial-Overlapping Super-Pixels in Silicon. IEEE Journal of Solid-State Circuits, 2014, 49, 1317-1332.	3.5	36
48	Experimental Demonstration of Degenerate Band Edge in Metallic Periodically Loaded Circular Waveguide. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 4037-4045.	2.9	36
49	Giant amplification in degenerate band edge slow-wave structures interacting with an electron beam. Physics of Plasmas, 2016, 23, .	0.7	35
50	Low Starting Electron Beam Current in Degenerate Band Edge Oscillators. IEEE Transactions on Plasma Science, 2016, 44, 918-929.	0.6	35
51	Characterization of complex plasmonic modes in two-dimensional periodic arrays of metal nanospheres. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 1446.	0.9	34
52	Ewald method for 3D periodic dyadic Green's functions and complex modes in composite materials made of spherical particles under the dual dipole approximation. Radio Science, 2012, 47, .	0.8	34
53	Demonstration of a Degenerate Band Edge in Periodically-Loaded Circular Waveguides. IEEE Microwave and Wireless Components Letters, 2015, 25, 700-702.	2.0	34
54	Sharply Focused Azimuthally Polarized Beams with Magnetic Dominance: Near-Field Characterization at Nanoscale by Photoinduced Force Microscopy. ACS Photonics, 2018, 5, 390-397.	3.2	34

#	ARTICLE	IF	CITATIONS
55	Composite material made of plasmonic nanoshells with quantum dot cores: loss-compensation and μ -near-zero physical properties. <i>Nanotechnology</i> , 2012, 23, 235703.	1.3	33
56	Degenerate band edge laser. <i>Physical Review B</i> , 2018, 97, .	1.1	33
57	ASMA€“FDTD: A Technique for Calculating the Field of a Finite Source in the Presence of an Infinite Periodic Artificial Material. <i>IEEE Microwave and Wireless Components Letters</i> , 2007, 17, 271-273.	2.0	32
58	Complex modes and effective refractive index in 3D periodic arrays of plasmonic nanospheres. <i>Optics Express</i> , 2011, 19, 26027.	1.7	31
59	An optical leaky wave antenna with Si perturbations inside a resonator for enhanced optical control of the radiation. <i>Optics Express</i> , 2012, 20, 21305.	1.7	31
60	Exclusive Magnetic Excitation Enabled by Structured Light Illumination in a Nanoscale Mie Resonator. <i>ACS Nano</i> , 2018, 12, 12159-12168.	7.3	30
61	Giant field enhancement in longitudinal epsilon-near-zero films. <i>Physical Review B</i> , 2017, 95, .	1.1	29
62	Extension of the Pierce Model to Multiple Transmission Lines Interacting With an Electron Beam. <i>IEEE Transactions on Plasma Science</i> , 2014, 42, 899-910.	0.6	28
63	Focused azimuthally polarized vector beam and spatial magnetic resolution below the diffraction limit. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2016, 33, 2265.	0.9	28
64	Modal Propagation and Excitation on a Wire-Medium Slab. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2008, 56, 1112-1124.	2.9	27
65	Exceptional points of degeneracy and symmetry in photonic coupled chains of scatterers. <i>Physical Review B</i> , 2017, 95, .	1.1	27
66	Elimination of Scan Blindness in Phased Array Antennas Using a Grounded-Dielectric EBG Material. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2007, 6, 106-109.	2.4	26
67	Enantiospecific Detection of Chiral Nanosamples Using Photoinduced Force. <i>Physical Review Applied</i> , 2017, 8, .	1.5	26
68	Equivalent Transmission Line Model With a Lumped X-Circuit for a Metalayer Made of Pairs of Planar Conductors. <i>IEEE Transactions on Antennas and Propagation</i> , 2013, 61, 852-861.	3.1	25
69	Comparison of electric field enhancements: Linear and triangular oligomers versus hexagonal arrays of plasmonic nanospheres. <i>Optics Express</i> , 2013, 21, 7957.	1.7	25
70	Driving Chemical Reactions in Plasmonic Nanogaps with Electrohydrodynamic Flow. <i>ACS Nano</i> , 2017, 11, 11317-11329.	7.3	25
71	Direct Use of the High Impedance Surface as an Antenna Without Dipole on Top. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2011, 10, 1536-1539.	2.4	24
72	Electrodynamics modeling of strong coupling between a metasurface and intersubband transitions in quantum wells. <i>Physical Review B</i> , 2014, 89, .	1.1	24

#	ARTICLE	IF	CITATIONS
73	Giant Resonance and Anomalous Quality Factor Scaling in Degenerate Band Edge Coupled Resonator Optical Waveguides. <i>Journal of Lightwave Technology</i> , 2018, 36, 3030-3039.	2.7	24
74	Investigation of a Wideband BiCMOS Fully On-Chip W^2 -Band Bowtie Slot Antenna. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2013, 12, 706-709.	2.4	23
75	Experimental Testing of a 3-D-Printed Metamaterial Slow Wave Structure for High-Power Microwave Generation. <i>IEEE Transactions on Plasma Science</i> , 2020, 48, 4356-4364.	0.6	23
76	Frozen Mode in Three-Way Periodic Microstrip Coupled Waveguide. <i>IEEE Microwave and Wireless Components Letters</i> , 2021, 31, 229-232.	2.0	23
77	Directing Cluster Formation of Au Nanoparticles from Colloidal Solution. <i>Langmuir</i> , 2013, 29, 4242-4251.	1.6	22
78	A 60 GHz simple-to-fabricate single-layer planar Fabry-Pérot cavity antenna. <i>IET Microwaves, Antennas and Propagation</i> , 2015, 9, 313-318.	0.7	22
79	Artificial magnetism at terahertz frequencies from three-dimensional lattices of TiO_2 microspheres accounting for spatial dispersion and magnetoelectric coupling. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2014, 31, 1078.	0.9	21
80	Theory of a Directive Optical Leaky Wave Antenna Integrated into a Resonator and Enhancement of Radiation Control. <i>Journal of Lightwave Technology</i> , 2014, 32, 1741-1749.	2.7	21
81	Exceptional Points of Degeneracy and Branch Points for Coupled Transmission Lines—Linear-Algebra and Bifurcation Theory Perspectives. <i>IEEE Transactions on Antennas and Propagation</i> , 2019, 67, 1025-1034.	3.1	21
82	High directivity in low-permittivity metamaterial slabs: Ray-optic vs. leaky-wave models. <i>Microwave and Optical Technology Letters</i> , 2006, 48, 2542-2548.	0.9	20
83	Wideband Planar Transmission Line Hyperbolic Metamaterial for Subwavelength Focusing and Resolution. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2013, 61, 4110-4117.	2.9	20
84	Q-BAND SINGLE-LAYER PLANAR FABRY-PEROT CAVITY ANTENNA WITH SINGLE INTEGRATED-FEED. <i>Progress in Electromagnetics Research C</i> , 2014, 52, 135-144.	0.6	20
85	Electric field enhancement with plasmonic colloidal nanoantennas excited by a silicon nitride waveguide. <i>Optics Express</i> , 2016, 24, 28337.	1.7	20
86	Magnetic Nanoantennas Made of Plasmonic Nanoclusters for Photoinduced Magnetic Field Enhancement. <i>Physical Review Applied</i> , 2017, 8, .	1.5	20
87	Unscrambling Structured Chirality with Structured Light at the Nanoscale Using Photoinduced Force. <i>ACS Photonics</i> , 2018, 5, 4360-4370.	3.2	20
88	Floquet wave-based analysis of transient scattering from doubly periodic, discretely planar, perfectly conducting structures. <i>Radio Science</i> , 2005, 40, n/a-n/a.	0.8	19
89	EIGER, C^++ : An open-source frequency-domain electromagnetics code. , 2007, , .		19
90	Directive emission from defect-free dodecagonal photonic quasicrystals: A leaky wave characterization. <i>Physical Review B</i> , 2009, 79, .	1.1	19

#	ARTICLE	IF	CITATIONS
91	Magnetoinductive Waves and Complex Modes in Two-Dimensional Periodic Arrays of Split Ring Resonators. IEEE Transactions on Antennas and Propagation, 2013, 61, 3554-3563.	3.1	19
92	Improved Bandwidth Formulas for Fabry-Pérot Cavity Antennas Formed by Using a Thin Partially-Reflective Surface. IEEE Transactions on Antennas and Propagation, 2014, 62, 2361-2367.	3.1	19
93	Theory of Double Ladder Lumped Circuits With Degenerate Band Edge. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 3-13.	3.5	19
94	Radiation Properties of a 2-D Periodic Leaky-Wave Antenna. IEEE Transactions on Antennas and Propagation, 2019, 67, 3560-3573.	3.1	19
95	Optimally Chiral Light: Upper Bound of Helicity Density of Structured Light for Chirality Detection of Matter at Nanoscale. ACS Photonics, 2020, 7, 2682-2691.	3.2	19
96	Fano resonances in metasurfaces made of linear trimers of plasmonic nanoparticles. Optics Letters, 2013, 38, 5216.	1.7	18
97	Fano collective resonance as complex mode in a two-dimensional planar metasurface of plasmonic nanoparticles. Applied Physics Letters, 2014, 105, .	1.5	18
98	A New Amplification Regime for Traveling Wave Tubes With Third-Order Modal Degeneracy. IEEE Transactions on Plasma Science, 2018, 46, 43-56.	0.6	18
99	Electron-Beam-Driven Devices With Synchronous Multiple Degenerate Eigenmodes. IEEE Transactions on Plasma Science, 2018, 46, 3126-3138.	0.6	18
100	Effective medium representation and complex modes in 3D periodic metamaterials made of cubic resonators with large permittivity at mid-infrared frequencies. Photonics and Nanostructures - Fundamentals and Applications, 2013, 11, 423-435.	1.0	17
101	Photoinduced magnetic force between nanostructures. Physical Review B, 2015, 92, .	1.1	17
102	Experimental Demonstration of Directive Si ₃ N ₄ Optical Leaky Wave Antennas With Semiconductor Perturbations. Journal of Lightwave Technology, 2016, 34, 4864-4871.	2.7	16
103	New oscillator concept based on band edge degeneracy in lumped double ladder circuits. IET Circuits, Devices and Systems, 2019, 13, 950-957.	0.9	16
104	Helicity maximization in a planar array of achiral high-density dielectric nanoparticles. Journal of Applied Physics, 2020, 127, .	1.1	16
105	Cooperative plasmon-mediated effects and loss compensation by gain dyes near a metal nanoparticle. Journal of the Optical Society of America B: Optical Physics, 2015, 32, 188.	0.9	15
106	Design Formulas for Planar Fabry-Pérot Cavity Antennas Formed by Thick Partially Reflective Surfaces. IEEE Transactions on Antennas and Propagation, 2016, 64, 5487-5491.	3.1	15
107	Concept for Pulse Compression Device Using Structured Spatial Energy Distribution. IEEE Transactions on Microwave Theory and Techniques, 2016, , 1-14.	2.9	15
108	Simultaneous Perfect Bending and Polarization Rotation of Electromagnetic Wavefront Using Chiral Gradient Metasurfaces. Physical Review Applied, 2020, 13, .	1.5	15

#	ARTICLE	IF	CITATIONS
109	Wave dynamics by a plane wave on a half-space metamaterial made of plasmonic nanospheres: a discrete Wiener-Hopf formulation. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2011, 28, 2174.	0.9	14
110	Reflective metasurface lens with an elongated needle-shaped focus. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2017, 34, 374.	0.9	14
111	Illusion mechanisms with cylindrical metasurfaces: A general synthesis approach. <i>Physical Review B</i> , 2019, 100, .	1.1	14
112	Effect of irregularities of nanosatellites position and size on collective electric and magnetic plasmonic resonances in spherical nanoclusters. <i>Optics Express</i> , 2013, 21, 7667.	1.7	13
113	Exceptional Points of Degeneracy Directly Induced by Space-Time Modulation of a Single Transmission Line. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2020, 19, 1906-1910.	2.4	13
114	Distributed Degenerate Band Edge Oscillator. <i>IEEE Transactions on Antennas and Propagation</i> , 2021, 69, 1821-1824.	3.1	13
115	Ultra-Sensitive Radio Frequency Biosensor at an Exceptional Point of Degeneracy Induced by Time Modulation. <i>IEEE Sensors Journal</i> , 2021, 21, 7250-7259.	2.4	13
116	Design of a single-feed all-metal 63 GHz Fabry-Perot cavity antenna using a TL and a wideband circuit model. <i>Digest / IEEE Antennas and Propagation Society International Symposium</i> , 2009, , .	0.0	12
117	Complex modes and artificial magnetism in three-dimensional periodic arrays of titanium dioxide microspheres at millimeter waves. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2012, 29, 1697.	0.9	12
118	Leaky-wave explanation of gain-bandwidth-enhanced Fabry-Perot Cavity antennas formed by a thick multilayer partially-reflective surface. , 2015, , .		12
119	Exceptional Point of Degeneracy in a Backward-Wave Oscillator with Distributed Power Extraction. <i>Physical Review Applied</i> , 2020, 14, .	1.5	12
120	Exceptional degeneracies in traveling wave tubes with dispersive slow-wave structure including space-charge effect. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	12
121	A 93-to-113GHz BiCMOS 9-element imaging array receiver utilizing spatial-overlapping pixels with wideband phase and amplitude control. , 2013, , .		11
122	A Cross-Shaped 2-D Periodic Leaky-Wave Antenna. <i>IEEE Transactions on Antennas and Propagation</i> , 2020, 68, 1289-1301.	3.1	11
123	General Conditions to Realize Exceptional Points of Degeneracy in Two Uniform Coupled Transmission Lines. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2020, 68, 3342-3354.	2.9	11
124	Exceptional point of sixth-order degeneracy in a modified coupled-resonator optical waveguide. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2020, 37, 2319.	0.9	11
125	Tightly coupled tripole conductor pairs as constituents for a planar 2D-isotropic negative refractive index metamaterial. <i>Optics Express</i> , 2009, 17, 15216.	1.7	10
126	Gain-bandwidth enhancement of 60GHz single-layer Fabry-Perot cavity antennas using sparse-array. , 2014, , .		10

#	ARTICLE	IF	CITATIONS
127	Array of dipoles near a hyperbolic metamaterial: Evanescent-to-propagating Floquet wave transformation. <i>Physical Review B</i> , 2014, 89, .	1.1	10
128	Generalized Lorentz-Lorenz homogenization formulas for binary lattice metamaterials. <i>Physical Review B</i> , 2015, 91, .	1.1	10
129	Helicity maximization below the diffraction limit. <i>Physical Review B</i> , 2020, 102, .	1.1	9
130	Metamaterials Based on Pairs of Tightly Coupled Scatterers. , 2009, , .		9
131	Optical magnetic field enhancement at nanoscale: a nanoantenna comparative study. <i>Optics Letters</i> , 2019, 44, 4957.	1.7	9
132	Experimental demonstration of exceptional points of degeneracy in linear time periodic systems and exceptional sensitivity. <i>Journal of Applied Physics</i> , 2022, 131, .	1.1	9
133	Frozen Mode in an Asymmetric Serpentine Optical Waveguide. <i>Advanced Photonics Research</i> , 2022, 3, .	1.7	9
134	Simulations and Measurements of Dual-Band 2-D Periodic Leaky Wave Antenna. , 2007, , .		8
135	High-gain omnidirectional radiation patterns from a metal strip grating leaky-wave antenna. , 2007, , .		8
136	Frequency dependent steering with backward leaky waves via photonic crystal interface layer. <i>Optics Express</i> , 2009, 17, 9879.	1.7	8
137	Plasmon optical trapping using silicon nitride trench waveguides. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2016, 33, 1182.	0.9	8
138	Analyze and Design of Thin Planar High Impedance Surface as an Antenna. , 2018, , .		8
139	Diffraction by a truncated planar array of dipoles:A Wienerâ€“Hopf approach. <i>Wave Motion</i> , 2019, 89, 28-42.	1.0	8
140	Short-pulse radiation by a sequentially excited semi-infinite periodic planar array of dipoles. <i>Radio Science</i> , 2003, 38, n/a-n/a.	0.8	7
141	Bandwidth analysis of highly-directive planar radiators based on partially-reflecting surfaces. , 2006, , .		7
142	A highly-efficient single-feed planar Fabry-Pérot cavity antenna for 60 GHz technology. , 2012, , .		7
143	Exceptional degeneracy in a waveguide periodically loaded with discrete gain and radiation loss elements. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	7
144	Metastructures: From physics to application. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	7

#	ARTICLE	IF	CITATIONS
145	High impedance layer for CMOS on-chip antenna at millimeter waves. , 2011, , .		6
146	High impedance surface as an antenna without a dipole on top. , 2011, , .		6
147	Time-Domain UTD Vertex Diffraction Coefficient for the Scattering by Perfectly Conducting Faceted Structures. IEEE Transactions on Antennas and Propagation, 2013, 61, 4204-4213.	3.1	6
148	Electromagnetic coupling and array packing induce exchange of dominance on complex modes in 3D periodic arrays of spheres with large permittivity. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 261.	0.9	6
149	Theory of Optical Leaky-Wave Antenna Integrated in a Ring Resonator for Radiation Control. Journal of Lightwave Technology, 2017, 35, 10-18.	2.7	6
150	Backward-Wave Oscillator with Distributed Power Extraction Based on Exceptional Point of Degeneracy and Gain and Radiation-Loss Balance. , 2019, , .		6
151	Design of a single-feed 60 GHz planar metallic Fabry-Perot cavity antenna with 20 dB gain. , 2009, , .		5
152	An optical leaky wave antenna with silicon perturbations for electronic control. Proceedings of SPIE, 2011, , .	0.8	5
153	Critical excitation-rate enhancement of a dipolar scatterer close to a plasmonic nanosphere and importance of multipolar self-coupling. Physical Review B, 2014, 90, .	1.1	5
154	In pursuit of photo-induced magnetic and chiral microscopy. EPJ Applied Metamaterials, 2018, 5, 7.	0.8	5
155	High-Power X -Band Relativistic Backward-Wave Oscillator with Exceptional Synchronous Regime Operating at an Exceptional Point. Physical Review Applied, 2021, 15, .	1.5	5
156	Artificial Magnetism via Nanoantennas under Azimuthally Polarized Vector Beam Illumination. , 2016, , .		5
157	Exceptional point in a degenerate system made of a gyrator and two unstable resonators. Physical Review A, 2022, 105, .	1.0	5
158	Single-feed highly-directive Fabry-Perot Cavity antenna for 60 GHz wireless systems: Design and fabrication. , 2010, , .		4
159	Designs of fully on-chip antennas in (Bi)CMOS technology. , 2012, , .		4
160	Large magnetic to electric field contrast in azimuthally polarized vortex beams generated by a metasurface (Presentation Recording). Proceedings of SPIE, 2015, , .	0.8	4
161	High-Power Backward-Wave Oscillator Using Folded Waveguide With Distributed Power Extraction Operating at an Exceptional Point. IEEE Transactions on Electron Devices, 2021, 68, 3588-3595.	1.6	4
162	A Combined Floquet-Wave $\hat{\epsilon}$ FDTD Algorithm for the Modeling of Transient Radiation from Infinite Periodic Structures. Springer Proceedings in Physics, 2004, , 249-257.	0.1	4

#	ARTICLE	IF	CITATIONS
163	Closed form formulas and tunability of resonances in pairs of gold-dielectric nanoshells. Proceedings of SPIE, 2010, , .	0.8	3
164	Novel high efficiency CMOS on-chip antenna structures at millimeter waves. , 2011, , .		3
165	LINEAR AND PLANAR PERIODIC ARRAYS OF METALLIC NANOSPHERES: FABRICATION, OPTICAL PROPERTIES AND APPLICATIONS. , 2011, , 141-194.		3
166	Characterization of the optical modes in 3D-periodic arrays of metallic nanospheres. , 2011, , .		3
167	Control of the radiation of a silicon-based optical leaky wave antenna through optical pumping. , 2011, , .		3
168	An on-chip W-band bowtie slot antenna in silicon. , 2012, , .		3
169	Sub-micron silicon nitride waveguide fabrication using conventional optical lithography. , 2014, , .		3
170	Experimental demonstration of directive Si ₃ N ₄ optical leaky wave antennas with semiconductor perturbations at near infrared frequencies. , 2015, , .		3
171	Surface enhanced Raman scattering for detection ofPseudomonas aeruginosaquorum sensing compounds. , 2015, , .		3
172	1-D Periodic Greenâ€™s Function for Leaky and Complex Waves Using the Ewald Method. IEEE Transactions on Antennas and Propagation, 2016, 64, 4703-4712.	3.1	3
173	Microwave Circuits with Exceptional Points and Applications in Oscillators and Sensors. , 2018, , .		3
174	Various Topologies of Coupled-Mode Structures Exhibiting Exceptional Points of Degeneracy. , 2018, , .		3
175	The Degeneracy of the Dominant Mode in Rectangular Waveguide. , 2019, , .		3
176	Two-Scale Structure for Giant Field Enhancement: Combination of Rayleigh Anomaly and Colloidal Plasmonic Resonance. Physical Review Applied, 2019, 11, .	1.5	3
177	Triple Ladder Lumped Circuit With Sixth Order Modal Exceptional Degeneracy. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 1910-1918.	3.5	3
178	Traveling Wave Tube Eigenmode Solution for Beam-Loaded Slow Wave Structure Based on Particle-in-Cell Simulations. IEEE Transactions on Plasma Science, 2022, 50, 635-648.	0.6	3
179	How to achieve exceptional points in coupled resonators using a gyrator or PT-symmetry, and in a time-modulated single resonator: high sensitivity to perturbations. EPJ Applied Metamaterials, 2022, 9, 14.	0.8	3
180	Leaky Modes on a Grounded Wire-Medium Slab. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	2

#	ARTICLE	IF	CITATIONS
181	Network Oriented Dyadic Time Domain Green's Function for a Sequentially Excited Infinite Planar Array of Dipoles in Free Space. IEEE Transactions on Antennas and Propagation, 2007, 55, 2228-2238.	3.1	2
182	Aperiodic-Tiling-Based Mushroom-Type High-Impedance Surfaces. IEEE Antennas and Wireless Propagation Letters, 2008, 7, 54-57.	2.4	2
183	Description and characterization of the complex modes in a linear chain of gold nanospheres. , 2011, , .		2
184	Dual polarized near-field focusing plate for near-field optical focusing in two dimensions. Optics Express, 2011, 19, 24483.	1.7	2
185	Enhancing radiation control of an optical leaky wave antenna in a resonator. Proceedings of SPIE, 2012, , .	0.8	2
186	Optical leaky-wave antenna integrated in ring resonator. , 2014, , .		2
187	Infrared polarizing reflectarray metasurfaces. , 2014, , .		2
188	Exceptional points of degeneracy in coupled-mode periodic structures. , 2016, , .		2
189	V-band wideband Fabry-Pérot cavity antenna made of thick partially-reflective surface. , 2016, , .		2
190	Functional metasurfaces: Do we need normal polarizations?. , 2017, , .		2
191	Low Phase Noise Oscillator Design Using Degenerate Band Edge Ladder Architectures. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 35-39.	2.2	2
192	Empowering structured light to enhance chirality detection and characterization at nanoscale. , 2019, , .		2
193	Optical Leaky Wave Antenna Experiment Demonstration and Electronic Modulation Investigation. , 2015, , .		2
194	Asymmetric surface wave excitation through metasurface-edge diffraction. Optics Letters, 2020, 45, 5420.	1.7	2
195	Third order modal exceptional degeneracy in waveguides with glide-time symmetry. Physical Review A, 2022, 105, .	1.0	2
196	High-Sensitive Parity-Time Symmetric Oscillator in Coupled Transmission Lines With Nonlinear Gain. IEEE Journal of Microwaves, 2022, 2, 389-400.	4.9	2
197	Sixth-Order Degenerate Band Edge in Coupled Microstrip Waveguides. Physical Review Applied, 2022, 17, .	1.5	2
198	The array scanning method (ASM)-FDTD algorithm and its application to the excitation of two-dimensional EBG materials and waveguides. , 2007, , .		1

#	ARTICLE	IF	CITATIONS
199	Narrow Beam Radiation from a CMOS Compatible Leaky Wave Optical Antenna. , 2010, , .		1
200	Artificial magnetic conductor from a layer of dogbone-shaped conductors over a ground plane. , 2010, , .		1
201	Characterization of metamaterials made of stacked layers of dogbone conductor pairs. , 2010, , .		1
202	A dual polarized near-field focusing plate at microwave frequencies providing sub-wavelength focusing in two dimensions. , 2011, , .		1
203	Possible feeds of the HIS antenna without dipole on top. , 2012, , .		1
204	Educating students on metamaterials - The story of the EUProMeta. , 2012, , .		1
205	Magnetoinductive waves in 2D periodic arrays of split ring resonators. , 2012, , .		1
206	A 63 GHz single-feed low-profile Fabry-Pérot cavity antenna using a thick metallic FSS. , 2013, , .		1
207	Concept of an optical leaky-wave antenna embedded in a Fabry-Pérot resonator. , 2013, , .		1
208	Closed-form expressions of local effective bianisotropic constitutive parameters for reciprocal metamaterials. , 2014, , .		1
209	Vector vortex beam transmitarrays composed of split-ring slot elements. , 2015, , .		1
210	High-gain single-layer radial line slot array designed for V-band applications. , 2016, , .		1
211	Degenerate band edge electron beam oscillators: Low starting current. , 2016, , .		1
212	Third order modal degeneracy in waveguids: Features and application in amplifiers. , 2017, , .		1
213	Hyperbolic Metamaterials at Microwaves With Stacked Inductive Coiled-Wire Arrays. IEEE Transactions on Antennas and Propagation, 2019, 67, 6494-6507.	3.1	1
214	High-Q Substrate-Integrated-Waveguide Resonator with Degenerate Band Edge. , 2019, , .		1
215	Overview of Wideband Fabry-Pérot Cavity Antennas with Thick Partially Reflective Surface. , 2019, , .		1
216	Analysis of a Wideband Fabry-Pérot Cavity Antenna at 60 GHz using Grid Impedance Approximation. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
217	2D Periodic Leaky-Wave Antennas in the Microwave and Optical Regimes. , 2019, , .		1
218	Applications and Potentials of Reciprocal Bianisotropic Metasurfaces. , 2019, , .		1
219	Perfect Anomalous Reflection and Refraction Accompanied by an Ideal Polarization Conversion: Potential of a Chiral Metasurface. , 2019, , .		1
220	Degenerate Band Edge Resonances in Air-filled Substrate Integrated Waveguide. , 2020, , .		1
221	Review of Recent Advances in the Leaky-Wave Analysis of 2-D Leaky-Wave Antennas. , 2020, , .		1
222	Small-Scale Beam Scanning with an Ultrathin High Impedance Surface-Based Leaky Wave Antenna with Multiple Feeds. , 2020, , .		1
223	Templated electrokinetic directed chemical assembly for the fabrication of close-packed plasmonic metamolecules. , 2017, , .		1
224	Electromagnetic Metamaterials as Artificial Composite Structures. The Electrical Engineering Handbook, 2012, , 595-682.	0.2	1
225	Demonstration of a Plasmo-Thermomechanical Radiation Detector with Si3N4 Waveguide Optical Readout Circuit. , 2018, , .		1
226	Beamsteering Capability of a Leaky Wave-Based Curved High Impedance Surface Antenna. , 2020, , .		1
227	Gain Enhancement of a Wideband Fabry-Pérot Cavity Antenna Using Sparse Array Feed. , 2020, , .		1
228	A 3D-Printed Metamaterial Slow Wave Structure for High-Power Microwave Generation. , 2020, , .		1
229	Directive emission from a single subwavelength aperture in a periodically corrugated silver film. , 2007, , .		0
230	High-Impedance Surfaces with Aperiodically-Ordered Textures. , 2007, , .		0
231	Development of micro-structured metamaterials for innovative antenna layouts. , 2007, , .		0
232	Effective analysis of arrays of nanospheres for near-field enhancement and subwavelength imaging in the optical region. , 2008, , .		0
233	A comparative study of directive emission from photonic quasicrystals. Proceedings of SPIE, 2008, , .	0.8	0
234	Metamaterial waveguide with loss compensation. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
235	3D Isotropic magnetic and negative index nanocluster metamaterials. , 2011, , .		0
236	Erbium-based plasmonic-assisted vertical emitter. , 2011, , .		0
237	A comparison of metalayers based on arrayed pairs of planar conductors. , 2011, , .		0
238	Influence of disorder on the optical properties of spherical plasmonic nanoclusters. , 2012, , .		0
239	Hiding and absorbing the power emitted by a dipole at the interface of an indefinite medium. , 2012, , .		0
240	Radiation properties of an integrated optical leaky wave antenna with periodic silicon perturbations. , 2012, , .		0
241	Numerical modeling of nanostructured metamaterials. , 2012, , .		0
242	Metamaterials based on plasmonic nanoshells and loss-compensation using fluorescent dye molecules and quantum dots. Proceedings of SPIE, 2012, , .	0.8	0
243	Conditions for electric field enhancement in ϵ -near-zero Slabs under TM-polarized oblique incidence. , 2013, , .		0
244	Graphene-based hyperbolic metamaterial. , 2013, , .		0
245	Graphene-based Hyperbolic Metamaterial at Terahertz Frequencies. , 2013, , .		0
246	Studying dipole moment modification in a single fluorescent dye beside metallic Nano-Particle based on the Green's function theory. , 2013, , .		0
247	Subwavelength focusing and resolution with hyperbolic transmission line metamaterial. , 2013, , .		0
248	Artificial magnetism at terahertz frequencies in 3D arrays of TiO_2 microspheres including spatial dispersion and magnetoelectric coupling. , 2013, , .		0
249	Analytic impulsive time-domain UTD coefficient for pyramid-vertex diffraction. , 2013, , .		0
250	Wave dynamics in a hyperbolic metamaterial excited by a two-dimensional periodic array of sources at its surface. , 2013, , .		0
251	Metamaterials strongly coupled to intersubband transitions: Circuit model and second order nonlinear processes. , 2014, , .		0
252	Gyrotropic effects in hyperbolic metamaterials. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
253	Optical leaky wave antennas integrated with resonator topologies. , 2014, , .		0
254	Effects of dipolar scatterer orientation beside a plasmonic nanosphere in excitation rate enhancement. , 2014, , .		0
255	Maximizing Strong Coupling between Metasurface Resonators and Intersubband Transitions. , 2014, , .		0
256	Time domain power flow in hyperbolic metmaterial excited by a pulsed dipole. , 2015, , .		0
257	Degenerate band edge in periodically-loaded circular waveguides. , 2015, , .		0
258	Theory and simulation of the interaction between periodic multi-transmission lines with a degenerate band edge and electron beams. , 2015, , .		0
259	Uniform and non uniform optical leaky-wave antennas for field shaping. , 2015, , .		0
260	Theory of coupled waveguides with modal degeneracies and gain. , 2016, , .		0
261	V-band planar single-layer circularly-polarized Fabry-Pérot cavity antennas. , 2016, , .		0
262	Super synchronous operation of traveling wave tubes based on band edge degeneracy. , 2016, , .		0
263	Parity-time symmetry in chain of scatterers. , 2016, , .		0
264	Time domain analysis of coupled-waveguides with modal degeneracies and gain. , 2016, , .		0
265	Wideband single-layer Fabry-Pérot cavity antenna with a radial variation of the cavity permittivity. , 2017, , .		0
266	Self-assembled plasmonic nanogaps: Enabling early detection of biofilm formation. , 2017, , .		0
267	Efficient Generation of High Power Microwaves using the Degenerate Band Edge Oscillators. , 2017, , .		0
268	Experimental Verification of Degenerate Band Edge Dispersion in Metallic Waveguides. , 2017, , .		0
269	Realization of Fourth Order Exceptional Points of Degeneracy in Uniform Coupled-Waveguides. , 2018, , .		0
270	Exceptional Points of Degeneracy in a Linear Array Oscillator with Gain and Loss Balance. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
271	Wiener-Hopf analysis of the scattering by a two dimensional periodic semi - infinite array of dipoles. , 2018, , .		0
272	Cylindrical to rectangular coordinate transformation for planar phase front synthesis. IET Microwaves, Antennas and Propagation, 2018, 12, 814-819.	0.7	0
273	Exceptional Points of Degeneracy in lossless Periodic Coupled Waveguides. , 2018, , .		0
274	Linear Time-Periodic Systems with Exceptional Points of Degeneracy. , 2019, , .		0
275	Low Starting Current Oscillator Based on the Degenerate Band Edge in a Double Helix Slow Wave Structure. , 2019, , .		0
276	Exceptional Points of Degeneracy induced in Uniform and Periodic Coupled Systems. , 2019, , .		0
277	Pulse Generation using a Degenerate Band Edge Structure. , 2019, , .		0
278	Wiener-Hopf analysis of the diffraction by a half-plane dipole array. , 2019, , .		0
279	Exceptional Points of Degeneracy in a Transmission Line Periodically Loaded with Gain and Radiation Loss. , 2021, , .		0
280	Enhancement of Directivity by Using Metamaterial Substrates. , 2009, , .		0
281	Super-Resolution and Near-Field Enhancement with Layers of Resonant Arrays of Nanoparticles. , 2009, , .		0
282	Plasmonic sub-wavelength phase-gradient meta-surfaces for real time dispersive imaging. , 2014, , .		0
283	Enhancement of Radiative Emission using a Hyperbolic Metamaterial Nano-antenna. , 2014, , .		0
284	Plasmon Optical Trapping in Silicon Nitride Trench Waveguide. , 2015, , .		0
285	Electric Field Enhancement by Two-scale Structure. , 2018, , .		0
286	Enantio-specific Detection of Chirality at Nanoscale Using Photo-induced Force. , 2018, , .		0
287	Nanoscale Field Mapping of Interfering Beams from Nomarski Prism Using Photo-Induced Force Microscopy. , 2018, , .		0
288	Wide Gain-Bandwidth from an Ultrathin High Impedance Surface-Based Leaky Wave Antenna using Multi-Feed Excitation. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
289	A Concept for a Leaky Wave Antenna Oscillator With Second Order Degeneracy. , 2020, , .		0
290	Fabry-Pérot cavity antenna generating multi frequency overlapping apertures. , 2020, , .		0
291	Backward-Wave Oscillator with Distributed Power Extraction Operating at an Exceptional Point of Degeneracy. , 2020, , .		0
292	High Power Backward Wave Oscillator using Serpentine Waveguide with Distributed Power Extraction Operating at an Exceptional Point. , 2021, , .		0
293	Exceptional Points of Degeneracy in Electromagnetic Periodic Waveguides and the Role of Symmetries. , 2022, , .		0
294	Parity-Time Glide-Symmetry and Third Order Exceptional Degeneracy in a Three-Way Microstrip Waveguide. , 2022, , .		0
295	High-sensitivity in various gyrator-based circuits with exceptional points of degeneracy. EPJ Applied Metamaterials, 2022, 9, 8.	0.8	0