Carsten Rockstuhl

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	A Plasmonic Photocatalyst Consisting of Silver Nanoparticles Embedded in Titanium Dioxide. Journal of the American Chemical Society, 2008, 130, 1676-1680.	6.6	1,422
2	Asymmetric Transmission of Linearly Polarized Light at Optical Metamaterials. Physical Review Letters, 2010, 104, 253902.	2.9	554
3	A perfect absorber made of a graphene micro-ribbon metamaterial. Optics Express, 2012, 20, 28017.	1.7	507
4	Advanced Jones calculus for the classification of periodic metamaterials. Physical Review A, 2010, 82, .	1.0	494
5	Coupling between a dark and a bright eigenmode in a terahertz metamaterial. Physical Review B, 2009, 79, .	1.1	363
6	Analogue of electromagnetically induced transparency in a terahertz metamaterial. Physical Review B, 2009, 80, .	1.1	340
7	Terahertz metamaterial with asymmetric transmission. Physical Review B, 2009, 80, .	1.1	319
8	On the reinterpretation of resonances in split-ring-resonators at normal incidence. Optics Express, 2006, 14, 8827.	1.7	289
9	Fabry-Pérot Resonances in One-Dimensional Plasmonic Nanostructures. Nano Letters, 2009, 9, 2372-2377.	4.5	276
10	Observing metamaterial induced transparency in individual Fano resonators with broken symmetry. Applied Physics Letters, 2011, 99, .	1.5	268
11	An electromagnetic multipole expansion beyond the long-wavelength approximation. Optics Communications, 2018, 407, 17-21.	1.0	266
12	Resonance shifts and spill-out effects in self-consistent hydrodynamic nanoplasmonics. Nature Communications, 2015, 6, 7132.	5.8	250
13	Retrieving effective parameters for metamaterials at oblique incidence. Physical Review B, 2008, 77, .	1.1	201
14	Direct Near-Field Optical Imaging of Higher Order Plasmonic Resonances. Nano Letters, 2008, 8, 3155-3159.	4.5	201
15	A generalized Kerker condition for highly directive nanoantennas. Optics Letters, 2015, 40, 2645.	1.7	201
16	Plasmonic Nanowire Antennas: Experiment, Simulation, and Theory. Nano Letters, 2010, 10, 3596-3603.	4.5	194
17	Fully integrated quantum photonic circuit with an electrically driven light source. Nature Photonics, 2016, 10, 727-732.	15.6	190
18	Babinet's principle for optical frequency metamaterials and nanoantennas. Physical Review B, 2007, 76,	1.1	182

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19	Spatial and Spectral Light Shaping with Metamaterials. Advanced Materials, 2012, 24, 6300-6304.	11.1	167
20	Resonances of split-ring resonator metamaterials in the near infrared. Applied Physics B: Lasers and Optics, 2006, 84, 219-227.	1.1	161
21	Absorption enhancement in solar cells by localized plasmon polaritons. Journal of Applied Physics, 2008, 104, .	1.1	159
22	Dynamically self-assembled silver nanoparticles as a thermally tunable metamaterial. Nature Communications, 2015, 6, 6590.	5.8	154
23	Engineering photonic nanojets. Optics Express, 2011, 19, 10206.	1.7	153
24	Chiral Metamaterial Composed of Three-Dimensional Plasmonic Nanostructures. Nano Letters, 2011, 11, 4400-4404.	4.5	146
25	Comparison and optimization of randomly textured surfaces in thin-film solar cells. Optics Express, 2010, 18, A335.	1.7	138
26	Theory of metasurface based perfect absorbers. Journal Physics D: Applied Physics, 2017, 50, 503002.	1.3	138
27	Multipole analysis of meta-atoms. Metamaterials, 2011, 5, 64-73.	2.2	136
28	New Twists of 3D Chiral Metamaterials. Advanced Materials, 2019, 31, e1807742.	11.1	130
29	Design of an Artificial Three-Dimensional Composite Metamaterial with Magnetic Resonances in the Visible Range of the Electromagnetic Spectrum. Physical Review Letters, 2007, 99, 017401.	2.9	120
30	Allâ€Dielectric Crescent Metasurface Sensor Driven by Bound States in the Continuum. Advanced Functional Materials, 2021, 31, 2104652.	7.8	115
31	Validity of effective material parameters for optical fishnet metamaterials. Physical Review B, 2010, 81, .	1.1	113
32	Self-Assembled Plasmonic Core–Shell Clusters with an Isotropic Magnetic Dipole Response in the Visible Range. ACS Nano, 2011, 5, 6586-6592.	7.3	111
33	Tunable graphene antennas for selective enhancement of THz-emission. Optics Express, 2013, 21, 3737.	1.7	104
34	Photon management by metallic nanodiscs in thin film solar cells. Applied Physics Letters, 2009, 94, .	1.5	101
35	Strong influence of packing density in terahertz metamaterials. Applied Physics Letters, 2010, 97, .	1.5	100
36	Multipole approach to metamaterials. Physical Review A, 2008, 78, .	1.0	99

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37	Towards the Origin of the Nonlinear Response in Hybrid Plasmonic Systems. Physical Review Letters, 2011, 106, 133901.	2.9	99
38	The Fano Resonance in Symmetry Broken Terahertz Metamaterials. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 820-826.	2.0	95
39	Conductive Coupling of Split Ring Resonators: A Path to THz Metamaterials with Ultrasharp Resonances. Physical Review Letters, 2014, 112, 183903.	2.9	93
40	Bloch oscillations in plasmonic waveguide arrays. Nature Communications, 2014, 5, 3843.	5.8	87
41	Effective properties of amorphous metamaterials. Physical Review B, 2009, 79, .	1.1	86
42	Exact Multipolar Decompositions with Applications in Nanophotonics. Advanced Optical Materials, 2019, 7, 1800783.	3.6	86
43	Manipulation of Magnetic Dipole Emission from Eu ³⁺ with Mie-Resonant Dielectric Metasurfaces. Nano Letters, 2019, 19, 1015-1022.	4.5	85
44	A 3D tunable and multi-frequency graphene plasmonic cloak. Optics Express, 2013, 21, 12592.	1.7	83
45	Magnetoelectric coupling in nonidentical plasmonic nanoparticles: Theory and applications. Physical Review B, 2015, 91, .	1.1	83
46	3D photonic crystal intermediate reflector for micromorph thinâ€film tandem solar cell. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2796-2810.	0.8	82
47	On the use of localized plasmon polaritons in solar cells. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2844-2861.	0.8	79
48	Excitation of a high-Q subradiant resonance mode in mirrored single-gap asymmetric split ring resonator terahertz metamaterials. Applied Physics Letters, 2012, 101, 071108.	1.5	79
49	All-dielectric reciprocal bianisotropic nanoparticles. Physical Review B, 2015, 92, .	1.1	79
50	Multipolar Coupling in Hybrid Metal–Dielectric Metasurfaces. ACS Photonics, 2016, 3, 349-353.	3.2	79
51	Amplitude- and phase-resolved optical near fields of split-ring-resonator-based metamaterials. Optics Letters, 2008, 33, 848.	1.7	78
52	Engineering the randomness for enhanced absorption in solar cells. Applied Physics Letters, 2008, 92, 171114.	1.5	77
53	Cavity-Enhanced and Ultrafast Superconducting Single-Photon Detectors. Nano Letters, 2016, 16, 7085-7092.	4.5	77
54	Spiral-type terahertz antennas and the manifestation of the Mushiake principle. Optics Express, 2009, 17, 9971.	1.7	76

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55	Manipulation of photoluminescence of two-dimensional MoSe2 by gold nanoantennas. Scientific Reports, 2016, 6, 22296.	1.6	75
56	Employing dielectric diffractive structures in solar cells – a numerical study. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2777-2795.	0.8	73
57	Achiral, Helicity Preserving, and Resonant Structures for Enhanced Sensing of Chiral Molecules. ACS Photonics, 2019, 6, 482-491.	3.2	73
58	Transition from thin-film to bulk properties of metamaterials. Physical Review B, 2008, 77, .	1.1	71
59	Benchmarking Five Global Optimization Approaches for Nano-optical Shape Optimization and Parameter Reconstruction. ACS Photonics, 2019, 6, 2726-2733.	3.2	71
60	Quantum Plasmonic Sensors. Chemical Reviews, 2021, 121, 4743-4804.	23.0	70
61	Light localization at randomly textured surfaces for solar-cell applications. Applied Physics Letters, 2007, 91, 171104.	1.5	69
62	Designing optical elements from isotropic materials by using transformation optics. Physical Review A, 2010, 81, .	1.0	67
63	Optical properties of a fabricated self-assembled bottom-up bulk metamaterial. Optics Express, 2011, 19, 9607.	1.7	66
64	The impact of nearest neighbor interaction on the resonances in terahertz metamaterials. Applied Physics Letters, 2009, 94, 021116.	1.5	65
65	3D THz metamaterials from micro/nanomanufacturing. Laser and Photonics Reviews, 2012, 6, 219-244.	4.4	65
66	The origin of magnetic polarizability in metamaterials at optical frequencies - an electrodynamic approach. Optics Express, 2007, 15, 8871.	1.7	64
67	High sensitivity sensors made of perforated waveguides. Optics Express, 2007, 15, 2592.	1.7	63
68	Rugate filter for light-trapping in solar cells. Optics Express, 2008, 16, 9332.	1.7	62
69	Helicity-Preserving Optical Cavity Modes for Enhanced Sensing of Chiral Molecules. Physical Review Letters, 2020, 124, 033201.	2.9	62
70	Deep-Subwavelength Plasmonic Nanoresonators Exploiting Extreme Coupling. Nano Letters, 2013, 13, 3482-3486.	4.5	61
71	Objects of Maximum Electromagnetic Chirality. Physical Review X, 2016, 6, .	2.8	61
72	Controlling the dynamics of quantum mechanical systems sustaining dipole-forbidden transitions via optical nanoantennas. Physical Review B, 2012, 86, .	1.1	60

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73	Strong coupling of optical nanoantennas and atomic systems. Physical Review B, 2013, 88, .	1.1	60
74	Resonances in complementary metamaterials and nanoapertures. Optics Express, 2008, 16, 2080.	1.7	59
75	Threeâ€Dimensional Photonic Crystal Intermediate Reflectors for Enhanced Lightâ€Trapping in Tandem Solar Cells. Advanced Materials, 2011, 23, 3896-3900.	11.1	58
76	A bottom-up approach to fabricate optical metamaterials by self-assembled metallic nanoparticles. Optical Materials Express, 2012, 2, 269.	1.6	58
77	Circular optical nanoantennas: an analytical theory. Physical Review B, 2012, 85, .	1.1	58
78	A Bianisotropic Metasurface With Resonant Asymmetric Absorption. IEEE Transactions on Antennas and Propagation, 2015, 63, 3004-3015.	3.1	58
79	Superconducting nanowire single-photon detector implemented in a 2D photonic crystal cavity. Optica, 2018, 5, 658.	4.8	58
80	Directional selectivity and ultraâ€lightâ€trapping in solar cells. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2831-2843.	0.8	57
81	Cryogenic temperatures as a path toward high-Q terahertz metamaterials. Applied Physics Letters, 2010, 96, .	1.5	57
82	Probing the transition from an uncoupled to a strong near-field coupled regime between bright and dark mode resonators in metasurfaces. Applied Physics Letters, 2014, 105, .	1.5	57
83	Resonant metasurfaces at oblique incidence: interplay of order and disorder. Scientific Reports, 2014, 4, 4484.	1.6	57
84	Correlation between single-cylinder properties and bandgap formation in photonic structures. Optics Letters, 2006, 31, 1741.	1.7	56
85	Intermediate reflectors for enhanced top cell performance in photovoltaic thin-film tandem cells. Optics Express, 2009, 17, 8439.	1.7	56
86	Scattering properties of meta-atoms. Physical Review B, 2011, 83, .	1.1	56
87	Coupling of Plasmon Resonances in Tunable Layered Arrays of Gold Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 8955-8960.	1.5	56
88	Silica-based monolithic sensing plates for waveguide-mode sensors. Optics Express, 2008, 16, 6408.	1.7	54
89	Light propagation in a fishnet metamaterial. Physical Review B, 2008, 78, .	1.1	54
90	Approaching the Lambertian limit in randomly textured thin-film solar cells. Optics Express, 2011, 19, A865.	1.7	54

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91	A Selfâ€Organized Anisotropic Liquidâ€Crystal Plasmonic Metamaterial. Advanced Materials, 2013, 25, 1999-2004.	11.1	53
92	Talbot images of wavelength-scale amplitude gratings. Optics Express, 2012, 20, 4903.	1.7	52
93	The hybrid concept for realization of an ultra-thin plasmonic metamaterial antireflection coating and plasmonic rainbow. Nanoscale, 2014, 6, 6037-6045.	2.8	52
94	Perfect absorbers on curved surfaces and their potential applications. Optics Express, 2012, 20, 18370.	1.7	51
95	A self-assembled three-dimensional cloak in the visible. Scientific Reports, 2013, 3, 2328.	1.6	51
96	Polarization-independent negative-index metamaterial in the near infrared. Optics Letters, 2009, 34, 704.	1.7	50
97	Doubly resonant optical nanoantenna arrays for polarization resolved. Optics Express, 2010, 18, 4184.	1.7	50
98	Effective Optical Properties of Plasmonic Nanocomposites. Materials, 2014, 7, 727-741.	1.3	50
99	Cloaked contact grids on solar cells by coordinate transformations: designs and prototypes. Optica, 2015, 2, 850.	4.8	50
100	Optimal Gaussian measurements for phase estimation in single-mode Gaussian metrology. Npj Quantum Information, 2019, 5, .	2.8	50
101	Local versus global absorption in thin-film solar cells with randomly textured surfaces. Applied Physics Letters, 2008, 93, 061105.	1.5	49
102	Optical activity in chiral media composed of three-dimensional metallic meta-atoms. Physical Review B, 2009, 79, .	1.1	49
103	Manipulating the interaction between localized and delocalized surface plasmon-polaritons in graphene. Physical Review B, 2014, 90, .	1.1	49
104	Quantum Plasmonic Sensing: Beyond the Shot-Noise and Diffraction Limit. ACS Photonics, 2016, 3, 992-999.	3.2	49
105	Retrieving effective parameters for quasiplanar chiral metamaterials. Applied Physics Letters, 2008, 93,	1.5	47
106	Cloaking dielectric spherical objects by a shell of metallic nanoparticles. Physical Review B, 2011, 83, .	1.1	46
107	Light trapping in periodically textured amorphous silicon thin film solar cells using realistic interface morphologies. Optics Express, 2013, 21, A595.	1.7	46
108	Experimental realisation of all-dielectric bianisotropic metasurfaces. Applied Physics Letters, 2016, 108,	1.5	46

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109	Phase-change material-based nanoantennas with tunable radiation patterns. Optics Letters, 2016, 41, 4099.	1.7	45
110	Metallic nanoparticles as intermediate reflectors in tandem solar cells. Applied Physics Letters, 2009, 95, .	1.5	44
111	Exact dipolar moments of a localized electric current distribution. Optics Express, 2015, 23, 33044.	1.7	44
112	Subwavelength Focusing of Bloch Surface Waves. ACS Photonics, 2017, 4, 1477-1483.	3.2	44
113	Homogenization of resonant chiral metamaterials. Physical Review B, 2010, 82, .	1.1	43
114	Self-assembled plasmonic metamaterials. Nanophotonics, 2013, 2, 211-240.	2.9	43
115	On the dynamic toroidal multipoles from localized electric current distributions. Scientific Reports, 2017, 7, 7527.	1.6	43
116	Enhanced transmission of periodic, quasiperiodic, and random nanoaperture arrays. Applied Physics Letters, 2007, 91, .	1.5	42
117	Application of the boundary-element method to the interaction of light with single and coupled metallic nanoparticles. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 1969.	0.8	41
118	Computing the T-matrix of a scattering object with multiple plane wave illuminations. Beilstein Journal of Nanotechnology, 2017, 8, 614-626.	1.5	41
119	Survey of Plasmonic Nanoparticles: From Synthesis to Application. Particle and Particle Systems Characterization, 2014, 31, 721-744.	1.2	40
120	Advanced Optical Metamaterials. Advanced Materials, 2010, 22, 2354-2357.	11.1	39
121	Understanding the electric and magnetic response of isolated metaatoms by means of a multipolar field decomposition. Optics Express, 2010, 18, 14454.	1.7	39
122	The impact of intermediate reflectors on light absorption in tandem solar cells with randomly textured surfaces. Applied Physics Letters, 2009, 94, 211101.	1.5	38
123	Plasmon Coupling in Self-Assembled Gold Nanoparticle-Based Honeycomb Islands. Journal of Physical Chemistry C, 2013, 117, 18634-18641.	1.5	38
124	Dissipation-driven entanglement between qubits mediated by plasmonic nanoantennas. Physical Review B, 2014, 89, .	1.1	38
125	Enhanced Directional Emission from Monolayer WSe ₂ Integrated onto a Multiresonant Silicon-Based Photonic Structure. ACS Photonics, 2017, 4, 3031-3038.	3.2	38
126	High Resolution Interference Microscopy: A Tool for Probing Optical Waves in the Far-Field on a Nanometric Length Scale. Current Nanoscience, 2006, 2, 337-350.	0.7	36

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127	Long-Distance Indirect Excitation of Nanoplasmonic Resonances. Nano Letters, 2011, 11, 2765-2769.	4.5	36
128	Reflection and transmission of light at periodic layered metamaterial films. Physical Review B, 2011, 84,	1.1	36
129	Distinguishing chemical and electromagnetic enhancement in surfaceâ€enhanced Raman spectra: The case of <i>para</i> â€nitrothiophenol. Journal of Raman Spectroscopy, 2013, 44, 1497-1505.	1.2	36
130	Inverse Design of Nanophotonic Devices with Structural Integrity. ACS Photonics, 2020, 7, 2190-2196.	3.2	36
131	Nonlinear plasmonic antennas. Materials Today, 2014, 17, 478-485.	8.3	35
132	The spectral shift between near- and far-field resonances of optical nano-antennas. Optics Express, 2014, 22, 9971.	1.7	35
133	Beyond dipolar Huygens' metasurfaces for full-phase coverage and unity transmittance. Nanophotonics, 2020, 9, 75-82.	2.9	35
134	Disorder-Induced Phase Transitions in the Transmission of Dielectric Metasurfaces. Physical Review Letters, 2019, 122, 015702.	2.9	35
135	Gouy phase anomaly in photonic nanojets. Applied Physics Letters, 2011, 98, 191114.	1.5	34
136	Fabrication of Nearlyâ€Hyperuniform Substrates by Tailored Disorder for Photonic Applications. Advanced Optical Materials, 2018, 6, 1701272.	3.6	34
137	An optical biosensor based on localized surface plasmon resonance of silver nanostructured films. Journal of Optics, 2007, 9, 699-703.	1.5	33
138	Evaluation of gold nanowire pairs as a potential negative index material. Applied Physics B: Lasers and Optics, 2006, 84, 139-148.	1.1	32
139	Optical metamaterials with quasicrystalline symmetry: Symmetry-induced optical isotropy. Physical Review B, 2013, 88, .	1.1	32
140	Anomalous refraction, diffraction, and imaging in metamaterials. Physical Review B, 2009, 79, .	1.1	31
141	Three-dimensional metamaterial nanotips. Physical Review B, 2010, 81, .	1.1	31
142	Contribution of the magnetic resonance to the third harmonic generation from a fishnet metamaterial. Physical Review B, 2012, 86, .	1.1	31
143	Quantum noise reduction in intensity-sensitive surface-plasmon-resonance sensors. Physical Review A, 2017, 96, .	1.0	31
144	Rigorous wave-optical treatment of photon recycling in thermodynamics of photovoltaics: Perovskite thin-film solar cells. Physical Review B, 2018, 98, .	1.1	31

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145	High-resolution measurement of phase singularities produced by computer-generated holograms. Optics Communications, 2004, 242, 163-169.	1.0	30
146	Dual and Chiral Objects for Optical Activity in General Scattering Directions. ACS Photonics, 2015, 2, 376-384.	3.2	30
147	Shape manipulation of ion irradiated Ag nanoparticles embedded in lithium niobate. Nanotechnology, 2016, 27, 145202.	1.3	30
148	Fundamental limits of optical force and torque. Physical Review B, 2017, 95, .	1.1	30
149	Rigorous diffraction theory applied to the analysis of the optical force on elliptical nano- and micro-cylinders. Journal of Optics, 2004, 6, 921-931.	1.5	29
150	Analyzing the scattering properties of coupled metallic nanoparticles. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2004, 21, 1761.	0.8	29
151	Calculation of the torque on dielectric elliptical cylinders. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2005, 22, 109.	0.8	29
152	Multipole nonlinearity of metamaterials. Physical Review A, 2009, 80, .	1.0	29
153	Simple and versatile analytical approach for planar metamaterials. Physical Review B, 2010, 82, .	1.1	29
154	Retrieving the effective parameters of metamaterials from the single interface scattering problem. Applied Physics Letters, 2010, 97, 061102.	1.5	29
155	Second-order nonlinear frequency conversion processes in plasmonic slot waveguides. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 1606.	0.9	29
156	Tunable scattering cancellation cloak with plasmonic ellipsoids in the visible. Physical Review B, 2016, 93, .	1.1	29
157	Refraction limit of miniaturized optical systems: a ball-lens example. Optics Express, 2016, 24, 6996.	1.7	29
158	Multiâ€Photon 4D Printing of Complex Liquid Crystalline Microstructures by In Situ Alignment Using Electric Fields. Advanced Materials Technologies, 2022, 7, 2100944.	3.0	29
159	Experimental determination of the dispersion relation of light in metamaterials by white-light interferometry. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 660.	0.9	28
160	Relating localized nanoparticle resonances to an associated antenna problem. Physical Review B, 2011, 84, .	1.1	28
161	Towards negative index self-assembled metamaterials. Physical Review B, 2014, 89, .	1.1	28
162	Laser printing of active optical microstructures. Applied Physics Letters, 2001, 78, 868-870.	1.5	27

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163	The size control of silver nano-particles in SiO2matrix film. Nanotechnology, 2005, 16, 1565-1568.	1.3	27
164	Nanoscale investigation of lightâ€ŧrapping in a‣i:H solar cell structures with randomly textured interfaces. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2766-2776.	0.8	27
165	A metamaterial based on coupled metallic nanoparticles and its band-gap property. Journal of Microscopy, 2008, 229, 281-286.	0.8	27
166	Imbert-Fedorov shift at metamaterial interfaces. Physical Review A, 2008, 77, .	1.0	27
167	Quantum plasmonic NOON state in a silver nanowire and its use for quantum sensing. Optica, 2018, 5, 1229.	4.8	27
168	The interplay of intermediate reflectors and randomly textured surfaces in tandem solar cells. Applied Physics Letters, 2010, 97, .	1.5	26
169	Nanoantennas for ultrabright single photon sources. Optics Letters, 2014, 39, 1246.	1.7	26
170	Computation of Electromagnetic Properties of Molecular Ensembles. ChemPhysChem, 2020, 21, 878-887.	1.0	26
171	Efficient simulation of biperiodic, layered structures based on the T-matrix method. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1782.	0.9	26
172	Suppression of the local density of states in a medium made of randomly arranged dielectric spheres. Physical Review B, 2009, 79, .	1.1	25
173	Diffractive optical elements based on plasmonic metamaterials. Applied Physics Letters, 2011, 98, .	1.5	25
174	Beyond local effective material properties for metamaterials. Physical Review B, 2018, 97, .	1.1	25
175	Inverse photonic design of functional elements that focus Bloch surface waves. Light: Science and Applications, 2018, 7, 104.	7.7	25
176	Tailored Light Scattering through Hyperuniform Disorder in Selfâ€Organized Arrays of Highâ€Index Nanodisks. Advanced Optical Materials, 2021, 9, 2100186.	3.6	25
177	Tunable photonic devices by 3D laser printing of liquid crystal elastomers. Optical Materials Express, 2020, 10, 2928.	1.6	25
178	Revisiting substrate-induced bianisotropy in metasurfaces. Physical Review B, 2015, 91, .	1.1	24
179	Quantum Optical Realization of Arbitrary Linear Transformations Allowing for Loss and Gain. Physical Review X, 2018, 8, .	2.8	24
180	Boosting Light Emission from Single Hydrogen Phthalocyanine Molecules by Charging. Nano Letters, 2020, 20, 7600-7605.	4.5	24

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181	Quantum plasmonic sensing using single photons. Optics Express, 2018, 26, 29272.	1.7	24
182	High symmetry versus optical isotropy of a negative-index metamaterial. Physical Review B, 2010, 81, .	1.1	23
183	Phase anomalies in Talbot light carpets of self-images. Optics Express, 2013, 21, 1287.	1.7	23
184	A numerical approach for analyzing higher harmonic generation in multilayer nanostructures. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 1118.	0.9	22
185	Light absorption in textured thin film silicon solar cells: A simple scalar scattering approach versus rigorous simulation. Applied Physics Letters, 2011, 98, .	1.5	22
186	Nonlocal effects: relevance for the spontaneous emission rates of quantum emitters coupled to plasmonic structures. Optics Letters, 2014, 39, 6118.	1.7	22
187	Optical force and torque on dipolar dual chiral particles. Physical Review B, 2016, 94, .	1.1	22
188	Core-Shell Particles as Building Blocks for Systems with High Duality Symmetry. Physical Review Applied, 2018, 9, .	1.5	22
189	Metamaterial nanotips. Applied Physics Letters, 2009, 94, 113110.	1.5	21
190	Phase anomalies in Bessel-Gauss beams. Optics Express, 2012, 20, 28929.	1.7	21
191	Optimal measurements for quantum fidelity between Gaussian states and its relevance to quantum metrology. Physical Review A, 2019, 100, .	1.0	21
192	Photon recycling in nanopatterned perovskite thin-films for photovoltaic applications. APL Photonics, 2019, 4, 076104.	3.0	21
193	Decomposition of scattered electromagnetic fields into vector spherical wave functions on surfaces with general shapes. Physical Review B, 2019, 99, .	1.1	21
194	Plasmonic Nanocrystal Arrays on Photonic Crystals with Tailored Optical Resonances. ACS Applied Materials & Interfaces, 2020, 12, 37657-37669.	4.0	21
195	Toward Biological Diagnosis System Based on Digital Versatile Disc Technology. Japanese Journal of Applied Physics, 2007, 46, 4003-4006.	0.8	20
196	Effective properties of terahertz double split-ring resonators at oblique incidence. Journal of the Optical Society of America B: Optical Physics, 2009, 26, B143.	0.9	20
197	Closed-form expression for the scattering coefficients at an interface between two periodic media. Applied Physics Letters, 2011, 98, .	1.5	20
198	Purely bianisotropic scatterers. Physical Review B, 2016, 94, .	1.1	20

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199	Liquid Crystal Templated Chiral Plasmonic Films with Dynamic Tunability and Moldability. Advanced Functional Materials, 2022, 32, .	7.8	20
200	Double-element metamaterial with negative index at near-infrared wavelengths. Optics Letters, 2009, 34, 1678.	1.7	19
201	Scattering cancellation of the magnetic dipole field from macroscopic spheres. Optics Express, 2012, 20, 13896.	1.7	19
202	A path to implement optimized randomly textured surfaces for solar cells. Applied Physics Letters, 2013, 103, 131115.	1.5	19
203	Stacked and Tunable Large-Scale Plasmonic Nanoparticle Arrays for Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 10230-10237.	1.5	19
204	Plasmonic nanoantenna based triggered single-photon source. Physical Review B, 2016, 93, .	1.1	19
205	Unified theory to describe and engineer conservation laws in light-matter interactions. Physical Review A, 2017, 95, .	1.0	19
206	Enhancement of and interference among higher order multipole transitions in molecules near a plasmonic nanoantenna. Nature Communications, 2019, 10, 5775.	5.8	19
207	On enhanced sensing of chiral molecules in optical cavities. Applied Physics Reviews, 2020, 7, .	5.5	19
208	The design of evanescent-field-coupled waveguide-mode sensors. Nanotechnology, 2008, 19, 095503.	1.3	18
209	Resonant Goos-Hächen and Imbert-Fedorov shifts at photonic crystal slabs. Physical Review A, 2008, 77, .	1.0	18
210	Combining randomly textured surfaces and photonic crystals for the photon management in thin film microcrystalline silicon solar cells. Optics Express, 2013, 21, A450.	1.7	18
211	Plasmonic nanoring fabrication tuned to pitch: Efficient, deterministic, and large scale realization of ultra-small gaps for next generation plasmonic devices. Applied Physics Letters, 2014, 105, .	1.5	18
212	Synthesis, Separation, and Hypermethod Characterization of Gold Nanoparticle Dimers Connected by a Rigid Rod Linker. Journal of Physical Chemistry C, 2015, 119, 17809-17817.	1.5	18
213	Experimental quantum polarimetry using heralded single photons. Metrologia, 2020, 57, 045008.	0.6	18
214	A Comprehensive Multipolar Theory for Periodic Metasurfaces. Advanced Optical Materials, 2022, 10, .	3.6	18
215	Understanding the functionality of an array of invisibility cloaks. Physical Review B, 2011, 84, .	1.1	17
216	Fluorescence enhancement in large-scale self-assembled gold nanoparticle double arrays. Journal of Applied Physics, 2015, 118, .	1.1	17

#	Article	IF	CITATIONS
217	Experimental demonstration of spectrally broadband Huygens sources using low-index spheres. APL Photonics, 2019, 4, 020802.	3.0	17
218	Biomolecular sensors utilizing waveguide modes excited by evanescent fields. Journal of Microscopy, 2008, 229, 320-326.	0.8	16
219	Longitudinal-differential interferometry: direct imaging of axial superluminal phase propagation. Optics Letters, 2012, 37, 305.	1.7	16
220	Scattering Dark States in Multiresonant Concentric Plasmonic Nanorings. ACS Photonics, 2015, 2, 1085-1090.	3.2	16
221	Broadband Anti-Reflective Coating Based on Plasmonic Nanocomposite. Materials, 2016, 9, 636.	1.3	16
222	Quantitative and Direct Near-Field Analysis of Plasmonic-Induced Transparency and the Observation of a Plasmonic Breathing Mode. ACS Nano, 2016, 10, 2214-2224.	7.3	16
223	Retrieving effective material parameters of metamaterials characterized by nonlocal constitutive relations. Physical Review B, 2019, 99, .	1.1	16
224	Analysis of the phonon-polariton response of silicon carbide microparticles and nanoparticles by use of the boundary element method. Journal of the Optical Society of America B: Optical Physics, 2005, 22, 481.	0.9	15
225	Characteristics of nanostructured Ag films by the reduction of sputtered AgOxthin films. Nanotechnology, 2006, 17, 79-82.	1.3	15
226	Nanoscale pore fabrication for high sensitivity waveguide-mode biosensors. Microelectronic Engineering, 2007, 84, 1685-1689.	1.1	15
227	Exploiting extreme coupling to realize a metamaterial perfect absorber. Microelectronic Engineering, 2013, 111, 110-113.	1.1	15
228	Broadband suppression of backscattering at optical frequencies using low permittivity dielectric spheres. Scientific Reports, 2017, 7, 14762.	1.6	15
229	Studying plasmonic resonance modes of hierarchical self-assembled meta-atoms based on their transfer matrix. Physical Review B, 2017, 96, .	1.1	15
230	Hot-spot relaxation time current dependence in niobium nitride waveguide-integrated superconducting nanowire single-photon detectors. Optics Express, 2017, 25, 8739.	1.7	15
231	Carrier-to-noise ratio enhancement of super-resolution near-field structure disks by Ag nanostructure. Applied Physics Letters, 2006, 88, 051104.	1.5	14
232	Strategy for cloaking of twisted domains. Physical Review A, 2009, 79, .	1.0	14
233	Bayesian Optimization With Improved Scalability and Derivative Information for Efficient Design of Nanophotonic Structures. Journal of Lightwave Technology, 2021, 39, 167-177.	2.7	14
234	Avoiding the Center‧ymmetry Trap: Programmed Assembly of Dipolar Precursors into Porous, Crystalline Molecular Thin Films. Advanced Materials, 2021, 33, e2103287.	11.1	14

#	Article	IF	CITATIONS
235	Simulation of light scattering in large, disordered nanostructures using a periodic T-matrix method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 272, 107802.	1.1	14
236	Minimalist Mie coefficient model. Optics Express, 2020, 28, 16511.	1.7	14
237	Antireflective Huygens' Metasurface with Correlated Disorder Made from High-Index Disks Implemented into Silicon Heterojunction Solar Cells. ACS Photonics, 2021, 8, 3476-3485.	3.2	14
238	Theoretical and experimental investigation of phase singularities generated by optical micro- and nano-structures. Journal of Optics, 2004, 6, S271-S276.	1.5	13
239	Wavelength-dependent optical force on elliptical silver cylinders at plasmon resonance. Optics Letters, 2004, 29, 2181.	1.7	13
240	Negative-index metamaterials from nanoapertures. Physical Review B, 2007, 76, .	1.1	13
241	Genuine effectively biaxial left-handed metamaterials due to extreme coupling. Optics Letters, 2012, 37, 596.	1.7	13
242	Exciting Bright and Dark Eigenmodes in Strongly Coupled Asymmetric Metallic Nanoparticle Arrays. Journal of Physical Chemistry C, 2012, 116, 17746-17752.	1.5	13
243	Bottom-Up Fabrication of Hybrid Plasmonic Sensors: Gold-Capped Hydrogel Microspheres Embedded in Periodic Metal Hole Arrays. ACS Applied Materials & Interfaces, 2016, 8, 26392-26399.	4.0	13
244	A Multiâ€Scale Approach for Modeling the Optical Response of Molecular Materials Inside Cavities. Advanced Materials, 2022, 34, e2200350.	11.1	13
245	The effect of disorder on the local density of states in two-dimensional quasi-periodic photonic crystals. New Journal of Physics, 2006, 8, 206-206.	1.2	12
246	The split cube in a cage: bulk negative-index material for infrared applications. Journal of Optics, 2009, 11, 114010.	1.5	12
247	Angular resolved effective optical properties of a Swiss cross metamaterial. Applied Physics Letters, 2009, 95, .	1.5	12
248	Plasmonic modes of extreme subwavelength nanocavities. Optics Letters, 2010, 35, 2693.	1.7	12
249	Plasmonic nanoparticle clusters with tunable plasmonic resonances in the visible spectral region. Journal of Materials Chemistry C, 2014, 2, 6415.	2.7	12
250	Enhancement of second-harmonic generation in nonlinear nanolaminate metamaterials by nanophotonic resonances. Optics Express, 2016, 24, 9651.	1.7	12
251	Dual-SNOM investigations of multimode interference in plasmonic strip waveguides. Nanoscale, 2017, 9, 6695-6702.	2.8	12
252	Achieving Highly Stable, Reversibly Reconfigurable Plasmonic Nanocrystal Superlattices through the Use of Semifluorinated Surface Ligands. Chemistry of Materials, 2018, 30, 8201-8210.	3.2	12

#	Article	IF	CITATIONS
253	Mask-aligner lithography using a continuous-wave diode laser frequency-quadrupled to 193 nm. Optics Express, 2018, 26, 730.	1.7	12
254	Wireless coils based on resonant and nonresonant coupledâ€wire structure for small animal multinuclear imaging. NMR in Biomedicine, 2019, 32, e4079.	1.6	12
255	Energy-Based Plasmonicity Index to Characterize Optical Resonances in Nanostructures. Journal of Physical Chemistry C, 2020, 124, 24331-24343.	1.5	12
256	Enhancing the optical rotation of chiral molecules using helicity preserving all-dielectric metasurfaces. Applied Physics Letters, 2021, 118, .	1.5	12
257	Fabrication of Inert Silver Nanoparticles with a Thin Silica Coating. Japanese Journal of Applied Physics, 2008, 47, 8641-8643.	0.8	11
258	Terahertz phase modulator. Nature Photonics, 2009, 3, 130-131.	15.6	11
259	Improving the efficiency of thin film tandem solar cells by plasmonic intermediate reflectors. Photonics and Nanostructures - Fundamentals and Applications, 2010, 8, 291-296.	1.0	11
260	Effects of anisotropic disorder in an optical metamaterial. Applied Physics A: Materials Science and Processing, 2011, 103, 591-595.	1.1	11
261	Enhancing the nonlinear response of plasmonic nanowire antennas by engineering their terminations. Physical Review B, 2013, 88, .	1.1	11
262	Effects of film growth modes on light trapping in silicon thin film solar cells. Applied Physics Letters, 2014, 104, .	1.5	11
263	Nonradiative and Radiative Resonances in Coupled Metamolecules. Advanced Optical Materials, 2016, 4, 252-258.	3.6	11
264	Sub-Poisson-binomial light. Physical Review A, 2016, 94, .	1.0	11
265	Image formation properties and inverse imaging problem in aperture based scanning near field optical microscopy. Optics Express, 2016, 24, 4128.	1.7	11
266	Multipole approach in electrodynamics of metamaterials. Applied Physics A: Materials Science and Processing, 2011, 103, 899-904.	1.1	10
267	Highly resonant and directional optical nanoantennas. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 388.	0.8	10
268	Insights into directional scattering: from coupled dipoles to asymmetric dimer nanoantennas. Optics Express, 2016, 24, 19638.	1.7	10
269	Global optimization of complex optical structures using Bayesian optimization based on Gaussian processes. Proceedings of SPIE, 2017, , .	0.8	10
270	Multiple self-healing Bloch surface wave beams generated by a two-dimensional fraxicon. Communications Physics, 2018, 1, .	2.0	10

#	Article	IF	CITATIONS
271	Strategy for tailoring the size distribution of nanospheres to optimize rough backreflectors of solar cells. Optics Express, 2018, 26, A111.	1.7	10
272	Formation of nanocrystalline graphene on germanium. Nanoscale, 2018, 10, 12156-12162.	2.8	10
273	Insights into Backscattering Suppression in Solar Cells from the Helicity-Preservation Point of View. Physical Review Applied, 2019, 12, .	1.5	10
274	Modeling Optical Materials at the Single Scatterer Level: The Transition from Homogeneous to Heterogeneous Materials. Advanced Theory and Simulations, 2020, 3, 2000192.	1.3	10
275	Understanding and Controlling the Crystallization Process in Reconfigurable Plasmonic Superlattices. ACS Nano, 2021, 15, 4916-4926.	7.3	10
276	Artificial neural networks used to retrieve effective properties of metamaterials. Optics Express, 2021, 29, 36072.	1.7	10
277	Integrating cold plasma equations into the Fourier modal method to analyze second harmonic generation at metallic nanostructures. Journal of Modern Optics, 2011, 58, 438-448.	0.6	9
278	Enhancing resonances of optical nanoantennas by circular gratings. Optics Express, 2015, 23, 14583.	1.7	9
279	Transverse multipolar light-matter couplings in evanescent waves. Physical Review A, 2016, 94, .	1.0	9
280	Characterization of a circular optical nanoantenna by nonlinear photoemission electron microscopy. Applied Physics B: Lasers and Optics, 2016, 122, 1.	1.1	9
281	Entangled light from bimodal optical nanoantennas. Physical Review B, 2017, 95, .	1.1	9
282	Printing sub-micron structures using Talbot mask-aligner lithography with a 193 nm CW laser light source. Optics Express, 2018, 26, 22218.	1.7	9
283	Sandwiching intermediate reflectors in tandem solar cells for improved photon management. Applied Physics Letters, 2012, 101, .	1.5	8
284	Propagation of electromagnetic fields in bulk terahertz metamaterials: A combined experimental and theoretical study. Physical Review B, 2013, 87, .	1.1	8
285	Extreme coupling: A route towards local magnetic metamaterials. Physical Review B, 2014, 89, .	1.1	8
286	Hybridizing whispering gallery modes and plasmonic resonances in a photonic metadevice for biosensing applications [Invited]. Journal of the Optical Society of America B: Optical Physics, 2017, 34, D46.	0.9	8
287	Theory of optical forces on small particles by multiple plane waves. Journal of Applied Physics, 2018, 124, .	1.1	8
288	Predicting Observable Quantities of Self-Assembled Metamaterials from the T-Matrix of Its Constituting Meta-Atom. Materials, 2018, 11, 213.	1.3	8

#	Article	IF	CITATIONS
289	Interaction of atomic systems with quantum vacuum beyond electric dipole approximation. Scientific Reports, 2020, 10, 5879.	1.6	8
290	Towards Perfect Optical Diffusers: Dielectric Huygens' Metasurfaces with Critical Positional Disorder. Advanced Materials, 2021, , 2105868.	11.1	8
291	Tuneable helices of plasmonic nanoparticles using liquid crystal templates: molecular dynamics investigation of an unusual odd–even effect in liquid crystalline dimers. Chemical Communications, 2022, 58, 7364-7367.	2.2	8
292	Negative-index materials: Two approaches for nanofabricated metamaterials. Microelectronic Engineering, 2009, 86, 1138-1141.	1.1	7
293	Experimental and theoretical study of the Gouy phase anomaly of light in the focus of microlenses. Journal of Optics (United Kingdom), 2013, 15, 105708.	1.0	7
294	Singular-value decomposition for electromagnetic-scattering analysis. Physical Review A, 2017, 95, .	1.0	7
295	Measuring the electromagnetic chirality of 2D arrays under normal illumination. Optics Letters, 2017, 42, 4075.	1.7	7
296	Shape design of a reflecting surface using Bayesian Optimization. Journal of Physics: Conference Series, 2018, 963, 012003.	0.3	7
297	Using a pseudo-thermal light source to teach spatial coherence. European Journal of Physics, 2018, 39, 045303.	0.3	7
298	Analysis of the detection response of waveguide-integrated superconducting nanowire single-photon detectors at high count rate. Applied Physics Letters, 2019, 115, .	1.5	7
299	From single-particle-like to interaction-mediated plasmonic resonances in graphene nanoantennas. Journal of Applied Physics, 2021, 129, 093103.	1.1	7
300	Self-Assembled Arrays of Gold Nanorod-Decorated Dielectric Microspheres with a Magnetic Dipole Response in the Visible Range for Perfect Lensing and Cloaking Applications. ACS Applied Nano Materials, 2020, 3, 6108-6117.	2.4	7
301	Homogenization of wire media with a general purpose nonlocal constitutive relation. Journal of the Optical Society of America B: Optical Physics, 2019, 36, F99.	0.9	7
302	Optimal circular dichroism sensing with quantum light: Multiparameter estimation approach. Physical Review A, 2021, 104, .	1.0	7
303	In Situ Diagnostics and Role of Lightâ€Induced Forces in Metal Laser Nanoprinting. Laser and Photonics Reviews, 2022, 16, .	4.4	7
304	To scatter or not to scatter. Nature Materials, 2016, 15, 821-822.	13.3	6
305	Identification of Dielectric, Plasmonic, and Hybrid Modes in Metal-Coated Whispering-Gallery-Mode Resonators. ACS Photonics, 2018, 5, 2365-2373.	3.2	6
306	Secondâ€Harmonic Generation by 3D Laminate Metacrystals. Advanced Optical Materials, 2019, 7, 1801235.	3.6	6

#	Article	IF	CITATIONS
307	Using states with a large photon number variance to increase quantum Fisher information in single-mode phase estimation. Journal of Physics Communications, 2019, 3, 115008.	0.5	6
308	Merging Topâ€Down and Bottomâ€Up Approaches to Fabricate Artificial Photonic Nanomaterials with a Deterministic Electric and Magnetic Response. Advanced Functional Materials, 2020, 30, 1905722.	7.8	6
309	Self-stabilizing curved metasurfaces as a sail for light-propelled spacecrafts. Optics Express, 2021, 29, 21562.	1.7	6
310	Light-trapping structures for planar solar cells inspired by transformation optics. Optics Express, 2021, 29, 19903.	1.7	6
311	A thin-film broadband perfect absorber based on plasmonic copper nanoparticles. Micro and Nano Engineering, 2022, 16, 100154.	1.4	6
312	<title>Phase singularities generated by optical microstructures: theory and experimental results</title> ., 2001, 4403, 257.		5
313	Calculation of the torque exerted by light fields on silver elliptical nanocylinders. Europhysics Letters, 2006, 73, 313-319.	0.7	5
314	Micromachining of Novel SiC on Si Structures for Device and Sensor Applications. Materials Science Forum, 2006, 527-529, 1111-1114.	0.3	5
315	Phase Anomalies in Micro-Optics. Progress in Optics, 2013, , 115-197.	0.4	5
316	Impedance generalization for plasmonic waveguides beyond the lumped circuit model. Physical Review B, 2013, 88, .	1.1	5
317	Longitudinal–differential phase distribution near the focus of a high numerical aperture lens: study of wavefront spacing and Gouy phase. Journal of Modern Optics, 2013, 60, 197-201.	0.6	5
318	Optically assisted trapping with high-permittivity dielectric rings: Towards optical aerosol filtration. Applied Physics Letters, 2016, 109, .	1.5	5
319	Optical alignment of oval graphene flakes. Optics Letters, 2017, 42, 1039.	1.7	5
320	Influence of Co bilayers and trilayers on the plasmon-driven light emission from Cu(111) in a scanning tunneling microscope. Physical Review B, 2020, 101, .	1.1	5
321	Superconducting-Nanowire Single-Photon Spectrometer Exploiting Cascaded Photonic Crystal Cavities. Physical Review Applied, 2020, 13, .	1.5	5
322	Lower limits for the homogenization of periodic metamaterials made from electric dipolar scatterers. Physical Review B, 2021, 103, .	1.1	5
323	Modeling and measuring plasmonic excitations in hollow spherical gold nanoparticles. Journal of Chemical Physics, 2022, 156, 094103.	1.2	5
324	Revising quantum optical phenomena in adatoms coupled to graphene nanoantennas. Nanophotonics, 2022, 11, 3281-3298.	2.9	5

#	Article	IF	CITATIONS
325	On-line control of laser beam quality by means of diffractive optical components. , 2003, 4932, 549.		4
326	Electromagnetic induction in metamaterials. Applied Physics B: Lasers and Optics, 2008, 93, 107-110.	1.1	4
327	Plasmonic devices with controllable resonances – an avenue towards high-speed and mass fabrication of optical meta-materials. Journal of Microscopy, 2008, 229, 396-401.	0.8	4
328	Three-dimensional photonic crystals as intermediate filter for thin-film tandem solar cells. , 2008, , .		4
329	Directional selectivity and light-trapping in solar cells. Proceedings of SPIE, 2008, , .	0.8	4
330	Photonic nanojet engineering: focal point shaping with scattering phenomena of dielectric microspheres. , 2011, , .		4
331	A Green's function based analytical method for forward and inverse modeling of quasi-periodic nanostructured surfaces. Journal of Applied Physics, 2017, 122, 183103.	1.1	4
332	Fast and reliable method to estimate losses of single-mode waveguides with an arbitrary 2D trajectory. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2018, 35, 1063.	0.8	4
333	Visualizing and manipulating the spatial and temporal coherence of light with an adjustable light source in an undergraduate experiment. European Journal of Physics, 2019, 40, 055302.	0.3	4
334	Quantifying Fano properties in self-assembled metamaterials. Physical Review B, 2019, 99, .	1.1	4
335	Towards more general constitutive relations for metamaterials: A checklist for consistent formulations. Physical Review B, 2020, 101, .	1.1	4
336	Toward Maximally Electromagnetically Chiral Scatterers at Optical Frequencies. ACS Photonics, 2022, 9, 1954-1964.	3.2	4
337	Online laser beam characterization by means of diffractive optical correlation filters. , 2002, 4770, 122.		3
338	Infrared Gratings Based on SiC/Si-Heterostructures. Materials Science Forum, 2005, 483-485, 433-436.	0.3	3
339	Intrinsic Surface and Bulk Defect Modes in Quasi-Periodic Photonic Crystals. Journal of Lightwave Technology, 2007, 25, 2299-2305.	2.7	3
340	Bulk properties of metamaterials. , 2008, , .		3
341	Multipole model for metamaterials with gain: from nano-laser to quantum metamaterials. , 2011, , .		3
342	Surface Plasmon Polaritons in Metallic Nanostructures: Fundamentals and Their Application to Thin-Film Solar Cells. Springer Series in Optical Sciences, 2012, , 131-155.	0.5	3

#	Article	IF	CITATIONS
343	Optical bistability in a doubly resonant <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"><mml:msup><mml:mi>ï‡</mml:mi><mml:mrow><mml:mo>(</mml:mo><mml:mn>2</mml:mn> plasmonic nanocavity. Physical Review A, 2012, 85, .</mml:mrow></mml:msup></mml:math>	<mmai:mo></mmai:mo>) s /mml:mo>
344	Negative refractive index materials for improved solar cells. Physical Review B, 2013, 88, .	1.1	3
345	Efficient mode conversion in an optical nanoantenna mediated by quantum emitters. Optics Letters, 2016, 41, 2294.	1.7	3
346	Quantum description of radiative decay in optical cavities. Physical Review A, 2018, 97, .	1.0	3
347	Surface plasmon polaritons sustained at the interface of a nonlocal metamaterial. Physical Review B, 2018, 98, .	1.1	3
348	LIGO analogy lab—A set of undergraduate lab experiments to demonstrate some principles of gravitational wave detection. American Journal of Physics, 2019, 87, 44-56.	0.3	3
349	Investigation of dipole emission near a dielectric metasurface using a dual-tip scanning near-field optical microscope. Nanophotonics, 2021, .	2.9	3
350	Extreme renormalisations of dimer eigenmodes by strong light–matter coupling. New Journal of Physics, 2020, 22, 103001.	1.2	3
351	Directional Coupling of Emitters into Waveguides: A Symmetry Perspective. Laser and Photonics Reviews, 0, , 2000516.	4.4	3
352	Modification of the optical properties of molecular chains upon coupling to adatoms. Physical Review B, 2021, 104, .	1.1	3
353	Multiscale Modeling of Broadband Perfect Absorbers Based on Gold Metallic Molecules. ACS Omega, 0, , .	1.6	3
354	Multiplexed Optical Data Storage. , 0, , .		2
355	Surface-Enhanced Raman Scattering by Hemi-Ellipsoidal Ag Nanoparticles Generated from Silver-Oxide Thin Films. Japanese Journal of Applied Physics, 2007, 46, L1080-L1082.	0.8	2
356	Diffractive and energy selective photonic crystals for thin-film tandem solar cells. , 2007, , .		2
357	A periodic structure mimics a metamaterial. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2007, 24, A60.	0.8	2
358	Enhanced third harmonic generation using plasmonic metamaterials. , 2009, , .		2
359	Negative index in chiral metamaterials. , 2011, , .		2
360	Effective properties of metamaterials. , 2011, , .		2

#	Article	IF	CITATIONS
361	Optical properties of mesogen-coated gold nanoparticles. , 2012, , .		2
362	Far-infrared properties of hybrid plasmonic geometries. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 644.	0.8	2
363	Generation of highly confined optical bottle beams by exploiting the photonic nanojet effect. , 2012, , .		2
364	Approaching the Lambertian Limit in Randomly Textured Thin-Film Solar Cells. Materials Research Society Symposia Proceedings, 2012, 1391, 7.	0.1	2
365	Homogenization of metamaterials from a Bloch mode perspective. , 2012, , .		2
366	Multipole Analysis of Self-assembled Metamaterials. Nano-optics and Nanophotonics, 2013, , 89-117.	0.2	2
367	Single-pass and omniangle light extraction from light-emitting diodes using transformation optics. Optics Letters, 2015, 40, 5626.	1.7	2
368	Cloaking of Metal Contacts on Solar Cells. , 2015, , .		2
369	A simple DPSS laser setup and experiments for undergraduates. European Journal of Physics, 2017, 38, 014004.	0.3	2
370	Colossal enhancement of the magnetic dipole moment by exploiting lattice coupling in metasurfaces. Journal of the Optical Society of America B: Optical Physics, 2021, 38, C217.	0.9	2
371	Higher order constitutive relations and interface conditions for metamaterials with strong spatial dispersion. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 412, 127570.	0.9	2
372	Mask-aligner Talbot lithography using a 193 nm CW light source. , 2018, , .		2
373	High-resolution interference microscopy with spectral resolution for the characterization of individual particles and self-assembled meta-atoms. Optics Express, 2019, 27, 20990.	1.7	2
374	Induced higher order multipolar resonances from interacting scatterers. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 241.	0.9	2
375	Coherent MIMO Radar Systems in Three-Dimensional Surveillance Scenarios. , 2021, , .		2
376	Characterization of YAG laser beams at 1030 nm by diffractive optical correlation filters. , 2003, , .		1
377	On the dispersion relation in metamaterials: an analytic approach. , 2008, , .		1
378	Towards large area THz electromagnetic metamaterials. Proceedings of SPIE, 2008, , .	0.8	1

#	Article	IF	CITATIONS
379	Plasmonics in Thin Film Solar Cells. , 2009, , .		1
380	Large scale simulations in the realm of nanooptics. , 2010, , .		1
381	Photonic Crystal Intermediate Reflector in Micromorph Tandem Solar Cells. , 2011, , .		1
382	Electromagnetically induced transparency in an individual Fano resonator metamaterial. , 2012, , .		1
383	Educating students on metamaterials - The story of the EUProMeta. , 2012, , .		1
384	Liquid crystal plasmonic metamaterials. Proceedings of SPIE, 2013, , .	0.8	1
385	Symmetry properties of metamaterials at oblique incidence. , 2013, , .		1
386	METAMORPHOSE VI – the Virtual Institute for artificial electromagnetic materials and metamaterials: origin, mission, and activities. EPJ Applied Metamaterials, 2014, 1, 1.	0.8	1
387	Magnetoelectric coupling without electric and magnetic response?. , 2016, , .		1
388	Improving the Resolution in Mask-Aligner Lithography. , 2018, , .		1
389	Normalization approach for scattering modes in classical and quantum electrodynamics. Physical Review A, 2018, 97, .	1.0	1
390	Full-field optical coherence tomography—An educational setup for an undergraduate lab. American Journal of Physics, 2020, 88, 1132-1139.	0.3	1
391	Annual energy yield of mono- and bifacial silicon heterojunction solar modules with high-index dielectric nanodisk arrays as anti-reflective and light trapping structures. Optics Express, 2021, 29, 34494.	1.7	1
392	Tailored Light Scattering through Hyperuniform Disorder in Selfâ€Organized Arrays of Highâ€Index Nanodisks (Advanced Optical Materials 17/2021). Advanced Optical Materials, 2021, 9, 2170068.	3.6	1
393	Enabling proximity mask-aligner lithography with a 193nm CW light source. , 2018, , .		1
394	Absorption Enhancement Using Surface Textures Defined by a Monolayer of Tailored Nanospheres. , 2016, , .		1
395	Photon Management in Thin Film Solar Cells. , 2009, , .		1
396	Multipole analysis of meta-atoms. , 2012, , .		1

#	Article	IF	CITATIONS
397	Second Order Nonlinear Frequency Conversion Processes In Plasmonic Slot Waveguides. , 2012, , .		1
398	Semiconductor-based narrow-line and high-brilliance 193-nm laser system for industrial applications. , 2018, , .		1
399	Computational rule-based approach for corner correction of non-Manhattan geometries in mask aligner photolithography. Optics Express, 2019, 27, 32523.	1.7	1
400	Efficient Simulation of Bi-periodic, Layered Structures with the T-Matrix Method. , 2020, , .		1
401	Temperature-Dependent Plasmonic Response of Graphene Nanoresonators. ACS Photonics, 2022, 9, 2256-2262.	3.2	1
402	Investigation of the basic properties of phase singularities generated by a phase bar or trench. Optics Communications, 2004, 235, 11-21.	1.0	0
403	Submicro-optics: big effects on a small scale. , 2004, 5453, 40.		0
404	Configurations of elongated gold nanostructures on silica as metamaterials: theory, technology, and optical properties. , 2006, , .		0
405	The effect of disorder on band gaps in two-dimensional quasi-periodic photonic crystals. , 2006, , .		0
406	Nanoaperture based Metamaterials. , 2007, , TuB16.		0
407	Optimization of Rugate filters for ultra light-trapping in solar cells. , 2008, , .		0
408	Nano-scale Investigation of Light Scattering at Randomly Textured Light Trapping Structures for Thin-film Silicon Solar Cells. Materials Research Society Symposia Proceedings, 2008, 1101, 1.	0.1	0
409	The optical near-field of randomly textured light trapping structures for thin-film solar cells. Proceedings of SPIE, 2008, , .	0.8	Ο
410	The Imbert-Fedorov and Goos-Hänchen shift at metamaterial interfaces. , 2008, , .		0
411	Chirality as a bulk property retrieved from the dispersion relation. , 2009, , .		Ο
412	Localizing light using metamaterial nanotips. , 2009, , .		0
413	Multipole Metamaterials: A mesoscopic investigation towards effective linear and nonlinear optical material interaction. , 2009, , .		0
414	Measuring Angular Dependent Effective Properties Of Metamaterials. , 2009, , .		0

0

#	Article	IF	CITATIONS
415	Analytical modelling of linear and nonlinear properties of metamaterials based on multipole expansion. , 2009, , .		0
416	Multipole metamaterials. , 2009, , .		0
417	Micromorph silicon tandem solar cells with fully integrated 3D photonic crystal intermediate reflectors. , 2010, , .		0
418	Optical Properties of Bottom-up Metamaterials. , 2010, , .		0
419	Is It Possible To Homogenize Resonant Chiral Metamaterials?. , 2010, , .		0
420	Metamaterial nanotips with multi-frequency local field enhancement. , 2010, , .		0
421	Linear Plasmonic Nano-Antennas: Experiment, Simulation, and Theory. , 2010, , .		0
422	Asymmetric Transmission of Linearly Polarized Light through Low Symmetry Metamaterials. , 2010, , .		0
423	Electromagnetically Induced Transparency in a Terahertz Metamaterial. , 2010, , .		0
424	Intermediate reflectors in thin film solar cells comprising randomly textured surfaces. , 2010, , .		0
425	Multipole model for metamaterial homogenization. , 2010, , .		0
426	MULTIPOLE METAMATERIALS. World Scientific Series in Nanoscience and Nanotechnology, 2011, , 67-99.	0.1	0
427	Diffractive coupling engineered sharp LC resonance in terahertz metamaterials. , 2011, , .		0
428	Metamaterials in waveguide geometries. , 2011, , .		0
429	Resonant coupling of dielectric waveguides with plasmonic metaatoms. , 2011, , .		0
430	Photon Management in Thin-Film Solar Cells. , 2011, , .		0
431	Quasicrystalline metamaterials. , 2012, , .		0

Bottom-up metamaterials with an isotropic magnetic response in the visible. , 2012, , .

25

#	Article	IF	CITATIONS
433	Cloaking dielectric spheres by a shell of plasmonic and polaritonic nanoparticles. Proceedings of SPIE, 2012, , .	0.8	0
434	Properties of periodic metasurfaces versus amorphous arrangements at oblique incidence. , 2013, , .		0
435	Numerical investigations on the effects of film growth modes on light trapping in silicon thin film solar cells. , 2014, , .		Ο
436	Coupling of quantum emitters and metallic nanoantennae for the generation of nonclassical light at high rates. Physica Scripta, 2014, T160, 014037.	1.2	0
437	Enhancing the Efficiency of Upconversion by Double-Resonant Plasmonic Nanorings. , 2014, , .		Ο
438	Metasurfaces inner symmetries: from square lattices to quasicrystalline layouts (presentation video). Proceedings of SPIE, 2014, , .	0.8	0
439	Diffractive optical elements made from photonic metamaterials. , 2015, , .		0
440	Advanced Disc-Ring Optical Nanoantennas Investigated by Photoelectron Emission Microscopy (PEEM). , 2015, , .		0
441	Transition of optical regime in miniaturized optical systems: light interactions beyond the refraction limit. Proceedings of SPIE, 2016, , .	0.8	0
442	Hybrid metal-dielectric nanostructures for advanced light-field manipulation (Conference) Tj ETQq0 0 0 rgBT /C)verlock 10	Tf 50 382 Td
443	Cavity-Enhanced Superconducting Single Photon Detectors. , 2018, , .		Ο
444	Antennas for photons: light-matter coupling at nanoscale. , 2018, , .		0
445	Tailoring disordered structures for light management. , 2018, , .		Ο
446	Lightâ€Trapping Front Textures for Solar Cells from Tailored Mixtures of Nanospheres: A Numerical Study. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800699.	0.8	0
447	Tailored Disorder for the Light Management in Photovoltaics. , 2019, , .		Ο
448	Introduction to quantum plasmonic sensing. , 2020, , 67-112.		0
449	Correction to "Achiral, Helicity Preserving, and Resonant Structures for Enhanced Sensing of Chiral Molecules― ACS Photonics, 2020, 7, 546-546.	3.2	0
450	Photonic Nanomaterials: Merging Topâ€Down and Bottomâ€Up Approaches to Fabricate Artificial Photonic Nanomaterials with a Deterministic Electric and Magnetic Response (Adv. Funct. Mater.) Tj ETQq0 0 () rg B7. \$Ove	rloade 10 Tf 5C

#	Article	IF	CITATIONS
451	Stacked neural networks for predicting scattering spectra of core-(multi)shell particles. , 2021, , .		Ο
452	Challenges and Opportunities for Computational Nanophotonics. , 2021, , .		0
453	Effects of symmetry-breaking on electromagnetic backscattering. Scientific Reports, 2021, 11, 1721.	1.6	0
454	Dimensionnement par FDTD d'éléments optiques diffractifs utilisant le principe du milieu effectif. European Physical Journal Special Topics, 2004, 119, 117-118.	0.2	0
455	Designing randomness - the impact of textured surfaces on the efficiency of thin-film solar cells. , 2008, , .		0
456	Angle-dependent effective properties of metamaterials — material vs. wave parameters. , 2008, , .		0
457	Effective Parameters For Anisotropic Metamaterials. , 2009, , .		0
458	Isotropic negative index optical metamaterials. , 2010, , .		0
459	Randomly textured surfaces for photon management in silicon thin film solar cells. , 2010, , .		0
460	Planar terahertz metamaterial at cryogenic temperatures. , 2010, , .		0
461	Three-dimensional metamaterial nanotips. , 2010, , .		0
462	Understanding Optical Activity and EIT-Analogous in Optical Metamaterials with an Analytical Multipole Analysis. , 2010, , .		0
463	Observation of Axial Phase Evolution of Highly Confined Light Fields. , 2011, , .		0
464	Achieving the Yablonovitch Limit in Thin-Film Solar Cells with Tailored Randomly Textured Interfaces. , 2011, , .		0
465	On the Isotropic Magnetic Response of Fabricated Core-Shell Clusters and its Ability to Cloak. , 2011, , .		0
466	3D photonic crystal intermediate reflectors for enhanced light-trapping in tandem solar cells. , 2012, ,		0
467	Quasicrystal metamaterials: a route to optical isotropy. , 2012, , .		0
468	Plasmonic nanoparticle interaction in hybrid plasmonic-dielectric waveguides. , 2013, , .		0

Plasmonic nanoparticle interaction in hybrid plasmonic-dielectric waveguides. , 2013, , . 468

#	Article	IF	CITATIONS
469	Novel Idealistic and Realistic Approaches for a Better Photon Management. , 2013, , .		0
470	Ultra-sharp Resonances Based on Conductive Coupling of Split Ring Resonators. , 2013, , .		0
471	Analytical Model of Guided Modes in Structures with Rough Surfaces. , 2015, , .		0
472	Opaline backside structures for photon management in solar cells. , 2015, , .		0
473	A Green's Function Based Inverse Method to Perceive Gratings that Critically Couple Light into Solar Cells. , 2016, , .		0
474	Theory of Optical Metamaterials. , 2016, , 4103-4117.		0
475	Probing and Mapping Optical Fields in Si Disk Arrays with Eu3+. , 2017, , .		0
476	Enhanced and directional photoluminescence from doubly-resonant WSe2-Si hybrid structure. , 2017, ,		0
477	Tailored Substrate Topographies by Self-Organized Colloidal Particles. , 2017, , .		0
478	Tailored Structural Disorder in Optical Metasurfaces. , 2018, , .		0
479	Engineered nanostructures characterization by spectral interferometric microscopy. , 2019, , .		0
480	Perturbing beyond the shallow amplitude regime: Green's function scattering formalism with Bloch modes. Journal of the Optical Society of America B: Optical Physics, 2019, 36, F89.	0.9	0
481	Nearly-hyperuniform anti-reflection coatings made from high-index nanodisks for silicon heterojunction solar cells. , 2021, , .		0
482	Orientational Disorder in Chiral Bilayer Dielectric Metasurfaces. , 2021, , .		0
483	Fast retrieval of effective material parameters using artificial neural network. , 2020, , .		0