

Junsuk Rho

List of Publications by Year in descending order

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Version: 2024-02-01

263
papers

14,422
citations

19657

61
h-index

24258

110
g-index

270
all docs

270
docs citations

270
times ranked

9153
citing authors

#	ARTICLE	IF	CITATIONS
1	Photonic Spin Hall Effect at Metasurfaces. <i>Science</i> , 2013, 339, 1405-1407.	12.6	1,026
2	Amino-acid- and peptide-directed synthesis of chiral plasmonic gold nanoparticles. <i>Nature</i> , 2018, 556, 360-365.	27.8	785
3	Photoinduced handedness switching in terahertz chiral metamolecules. <i>Nature Communications</i> , 2012, 3, 942.	12.8	407
4	Complex-amplitude metasurface-based orbital angular momentum holography in momentum space. <i>Nature Nanotechnology</i> , 2020, 15, 948-955.	31.5	386
5	Spherical hyperlens for two-dimensional sub-diffractive imaging at visible frequencies. <i>Nature Communications</i> , 2010, 1, 143.	12.8	366
6	Experimental realization of three-dimensional indefinite cavities at the nanoscale with anomalous scaling laws. <i>Nature Photonics</i> , 2012, 6, 450-454.	31.4	316
7	Complete amplitude and phase control of light using broadband holographic metasurfaces. <i>Nanoscale</i> , 2018, 10, 4237-4245.	5.6	299
8	Deep learning enabled inverse design in nanophotonics. <i>Nanophotonics</i> , 2020, 9, 1041-1057.	6.0	295
9	Recent advances in 2D, 3D and higher-order topological photonics. <i>Light: Science and Applications</i> , 2020, 9, 130.	16.6	254
10	Predicting nonlinear properties of metamaterials from the linear response. <i>Nature Materials</i> , 2015, 14, 379-383.	27.5	243
11	Electromagnetic chirality: from fundamentals to nontraditional chiroptical phenomena. <i>Light: Science and Applications</i> , 2020, 9, 139.	16.6	231
12	Nanophotonics for light detection and ranging technology. <i>Nature Nanotechnology</i> , 2021, 16, 508-524.	31.5	213
13	Hyperbolic metamaterials: fusing artificial structures to natural 2D materials. <i>ELight</i> , 2022, 2, .	23.9	190
14	Simultaneous Inverse Design of Materials and Structures via Deep Learning: Demonstration of Dipole Resonance Engineering Using Core-Shell Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 24264-24268.	8.0	183
15	Pixelated bifunctional metasurface-driven dynamic vectorial holographic color prints for photonic security platform. <i>Nature Communications</i> , 2021, 12, 3614.	12.8	176
16	Designing nanophotonic structures using conditional deep convolutional generative adversarial networks. <i>Nanophotonics</i> , 2019, 8, 1255-1261.	6.0	175
17	Single-step manufacturing of hierarchical dielectric metalens in the visible. <i>Nature Communications</i> , 2020, 11, 2268.	12.8	172
18	Plasmonic- and dielectric-based structural coloring: from fundamentals to practical applications. <i>Nano Convergence</i> , 2018, 5, 1.	12.1	170

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19	Maskless Plasmonic Lithography at 22-nm Resolution. <i>Scientific Reports</i> , 2011, 1, 175.	3.3	158
20	Dielectric Meta-Holograms Enabled with Dual Magnetic Resonances in Visible Light. <i>ACS Nano</i> , 2017, 11, 9382-9389.	14.6	157
21	Holographic metasurface gas sensors for instantaneous visual alarms. <i>Science Advances</i> , 2021, 7, .	10.3	149
22	Cysteine-encoded chirality evolution in plasmonic rhombic dodecahedral gold nanoparticles. <i>Nature Communications</i> , 2020, 11, 263.	12.8	145
23	“Crypto-Display” in Dual-Mode Metasurfaces by Simultaneous Control of Phase and Spectral Responses. <i>ACS Nano</i> , 2018, 12, 6421-6428.	14.6	130
24	Metasurface-Driven Optically Variable Devices. <i>Chemical Reviews</i> , 2021, 121, 13013-13050.	47.7	125
25	Metasurfaces Based on Phase-Change Material as a Reconfigurable Platform for Multifunctional Devices. <i>Materials</i> , 2017, 10, 1046.	2.9	122
26	Outfitting Next Generation Displays with Optical Metasurfaces. <i>ACS Photonics</i> , 2018, 5, 3876-3895.	6.6	118
27	Stimuli-Responsive Dynamic Metaholographic Displays with Designer Liquid Crystal Modulators. <i>Advanced Materials</i> , 2020, 32, e2004664.	21.0	116
28	Finding the optical properties of plasmonic structures by image processing using a combination of convolutional neural networks and recurrent neural networks. <i>Microsystems and Nanoengineering</i> , 2019, 5, 27.	7.0	115
29	Sub-ambient daytime radiative cooling by silica-coated porous anodic aluminum oxide. <i>Nano Energy</i> , 2021, 79, 105426.	16.0	113
30	Full-space Cloud of Random Points with a Scrambling Metasurface. <i>Light: Science and Applications</i> , 2018, 7, 63.	16.6	112
31	Optimisation of colour generation from dielectric nanostructures using reinforcement learning. <i>Optics Express</i> , 2019, 27, 5874.	3.4	112
32	Tunable metasurfaces towards versatile metalenses and metaholograms: a review. <i>Advanced Photonics</i> , 2022, 4, .	11.8	108
33	Optical toroidal dipolar response by an asymmetric double-bar metamaterial. <i>Applied Physics Letters</i> , 2012, 101, 144105.	3.3	107
34	Smart SERS Hot Spots: Single Molecules Can Be Positioned in a Plasmonic Nanojunction Using Host-Guest Chemistry. <i>Journal of the American Chemical Society</i> , 2018, 140, 4705-4711.	13.7	102
35	Polarisation insensitive multifunctional metasurfaces based on all-dielectric nanowaveguides. <i>Nanoscale</i> , 2018, 10, 18323-18330.	5.6	98
36	Spectral Modulation through the Hybridization of Mie-Scatterers and Quasi-Guided Mode Resonances: Realizing Full and Gradients of Structural Color. <i>ACS Nano</i> , 2020, 14, 15317-15326.	14.6	98

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37	Tungsten-based Ultrathin Absorber for Visible Regime. Scientific Reports, 2018, 8, 2443.	3.3	96
38	Observation of Enhanced Optical Spin Hall Effect in a Vertical Hyperbolic Metamaterial. ACS Photonics, 2019, 6, 2530-2536.	6.6	96
39	A Spin-Encoded All-Dielectric Metahologram for Visible Light. Laser and Photonics Reviews, 2019, 13, 1900065.	8.7	95
40	Optical and acoustic metamaterials: superlens, negative refractive index and invisibility cloak. Journal of Optics (United Kingdom), 2017, 19, 084007.	2.2	94
41	Electrically Tunable Bifocal Metalens with Diffraction-Limited Focusing and Imaging at Visible Wavelengths. Advanced Science, 2021, 8, e2102646.	11.2	89
42	Printable Nanocomposite Metalens for High-Contrast Near-Infrared Imaging. ACS Nano, 2021, 15, 698-706.	14.6	89
43	Thermally robust ring-shaped chromium perfect absorber of visible light. Nanophotonics, 2018, 7, 1827-1833.	6.0	88
44	Pragmatic Metasurface Hologram at Visible Wavelength: The Balance between Diffraction Efficiency and Fabrication Compatibility. ACS Photonics, 2018, 5, 1643-1647.	6.6	87
45	Photonic Encryption Platform via Dual-Band Vectorial Metaholograms in the Ultraviolet and Visible. ACS Nano, 2022, 16, 3546-3553.	14.6	87
46	Three-dimensional nanoprinting via charged aerosol jets. Nature, 2021, 592, 54-59.	27.8	86
47	Metamaterial-Based Radiative Cooling: Towards Energy-Free All-Day Cooling. Energies, 2019, 12, 89.	3.1	85
48	Self-Powered Humidity Sensor Using Chitosan-Based Plasmonic Metal-Hydrogel Metal Filters. Advanced Optical Materials, 2020, 8, 1901932.	7.3	85
49	Ultrafast acousto-plasmonic control and sensing in complex nanostructures. Nature Communications, 2014, 5, 4042.	12.8	84
50	Optical spin-symmetry breaking for high-efficiency directional helicity-multiplexed metaholograms. Microsystems and Nanoengineering, 2021, 7, 5.	7.0	81
51	Disordered-nanoparticle-based etalon for ultrafast humidity-responsive colorimetric sensors and anti-counterfeiting displays. Science Advances, 2022, 8, eabm8598.	10.3	77
52	Control of light absorbance using plasmonic grating based perfect absorber at visible and near-infrared wavelengths. Scientific Reports, 2017, 7, 2611.	3.3	75
53	Liquid crystal-powered Mie resonators for electrically tunable photorealistic color gradients and dark blacks. Light: Science and Applications, 2022, 11, 118.	16.6	73
54	Spectrally Selective Nanoparticle Mixture Coating for Passive Daytime Radiative Cooling. ACS Applied Materials & Interfaces, 2021, 13, 21119-21126.	8.0	71

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55	Giant chiro-optical responses in multipolar-resonances-based single-layer dielectric metasurfaces. <i>Photonics Research</i> , 2021, 9, 1667.	7.0	71
56	Revealing Structural Disorder in Hydrogenated Amorphous Silicon for a Low-Loss Photonic Platform at Visible Frequencies. <i>Advanced Materials</i> , 2021, 33, e2005893.	21.0	69
57	Nanostructured chromium-based broadband absorbers and emitters to realize thermally stable solar thermophotovoltaic systems. <i>Nanoscale</i> , 2022, 14, 6425-6436.	5.6	69
58	Engineering spin and antiferromagnetic resonances to realize an efficient direction-multiplexed visible meta-hologram. <i>Nanoscale Horizons</i> , 2020, 5, 57-64.	8.0	68
59	Challenges in fabrication towards realization of practical metamaterials. <i>Microelectronic Engineering</i> , 2016, 163, 7-20.	2.4	66
60	Visibly Transparent Radiative Cooler under Direct Sunlight. <i>Advanced Optical Materials</i> , 2021, 9, 2002226.	7.3	66
61	Metasurfaces-Based Absorption and Reflection Control: Perfect Absorbers and Reflectors. <i>Journal of Nanomaterials</i> , 2017, 2017, 1-18.	2.7	65
62	Nanoimprint lithography for high-throughput fabrication of metasurfaces. <i>Frontiers of Optoelectronics</i> , 2021, 14, 229-251.	3.7	65
63	Novel Spin-Decoupling Strategy in Liquid Crystal-Integrated Metasurfaces for Interactive Metadisplays. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	65
64	Double-deep Q-learning to increase the efficiency of metasurface holograms. <i>Scientific Reports</i> , 2019, 9, 10899.	3.3	64
65	Optical metasurfaces for generating and manipulating optical vortex beams. <i>Nanophotonics</i> , 2022, 11, 941-956.	6.0	63
66	Topological edge and corner states in a two-dimensional photonic Su-Schrieffer-Heeger lattice. <i>Nanophotonics</i> , 2020, 9, 3227-3234.	6.0	62
67	Fabrication of three-dimensional suspended, interlayered and hierarchical nanostructures by accuracy-improved electron beam lithography overlay. <i>Scientific Reports</i> , 2017, 7, 6668.	3.3	61
68	Effect of temperature on the oxidation of Cu nanowires and development of an easy to produce, oxidation-resistant transparent conducting electrode using a PEDOT:PSS coating. <i>Scientific Reports</i> , 2018, 8, 10639.	3.3	59
69	Tunable Metasurfaces: Kerker-Conditioned Dynamic Cryptographic Nanoprints (Advanced Optical) Tj ETQq1 1 0.784314 rgBT /Over	7.3	58
70	Facile Nanocasting of Dielectric Metasurfaces with Sub-100 nm Resolution. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 26109-26115.	8.0	57
71	Twisted non-diffracting beams through all dielectric meta-axicons. <i>Nanoscale</i> , 2019, 11, 20571-20578.	5.6	57
72	Tunable Metasurfaces: The Path to Fully Active Nanophotonics. <i>Advanced Photonics Research</i> , 2021, 2, 2000205.	3.6	57

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73	Metamaterials and imaging. Nano Convergence, 2015, 2, 22.	12.1	56
74	Biomimetic ultra-broadband perfect absorbers optimised with reinforcement learning. Physical Chemistry Chemical Physics, 2020, 22, 2337-2342.	2.8	56
75	Geometric and physical configurations of meta-atoms for advanced metasurface holography. Informa An-Materi-ly, 2021, 3, 739-754.	17.3	56
76	Recent Progress on Ultrathin Metalenses for Flat Optics. IScience, 2020, 23, 101877.	4.1	55
77	Near-zero reflection of all-dielectric structural coloration enabling polarization-sensitive optical encryption with enhanced switchability. Nanophotonics, 2020, 10, 919-926.	6.0	55
78	Geometric metasurface enabling polarization independent beam splitting. Scientific Reports, 2018, 8, 9468.	3.3	53
79	A Broadband Optical Diode for Linearly Polarized Light Using Symmetry-Breaking Metamaterials. Advanced Optical Materials, 2017, 5, 1700600.	7.3	52
80	Recent Advances in Tunable and Reconfigurable Metamaterials. Micromachines, 2018, 9, 560.	2.9	52
81	Metasurfaces-based imaging and applications: from miniaturized optical components to functional imaging platforms. Nanoscale Advances, 2020, 2, 605-625.	4.6	52
82	Single-Step Fabricable Flexible Metadisplays for Sensitive Chemical/Biomedical Packaging Security and Beyond. ACS Applied Materials & Interfaces, 2022, 14, 31194-31202.	8.0	52
83	Realization of Wafer-Scale Hyperlens Device for Sub-diffractive Biomolecular Imaging. ACS Photonics, 2018, 5, 2549-2554.	6.6	50
84	Kerker-Conditioned Dynamic Cryptographic Nanoprints. Advanced Optical Materials, 2019, 7, 1801070.	7.3	50
85	Switchable diurnal radiative cooling by doped VO ₂ . Opto-Electronic Advances, 2021, 4, 200006-200006.	13.3	50
86	Polarization-sensitive tunable absorber in visible and near-infrared regimes. Scientific Reports, 2018, 8, 12393.	3.3	48
87	Electrically tunable metasurface perfect absorber for infrared frequencies. Nano Convergence, 2017, 4, 36.	12.1	47
88	Structural color switching with a doped indium-gallium-zinc-oxide semiconductor. Photonics Research, 2020, 8, 1409.	7.0	46
89	Metasurface Holography Reaching the Highest Efficiency Limit in the Visible via One-Step Nanoparticle-Embedded Resin Printing. Laser and Photonics Reviews, 2022, 16, .	8.7	46
90	Nearly Perfect Transmissive Subtractive Coloration through the Spectral Amplification of Mie Scattering and Lattice Resonance. ACS Applied Materials & Interfaces, 2021, 13, 26299-26307.	8.0	45

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91	Wavelength-decoupled geometric metasurfaces by arbitrary dispersion control. Communications Physics, 2019, 2, .	5.3	44
92	Piezoelectric energy harvesting using mechanical metamaterials and phononic crystals. Communications Physics, 2022, 5, .	5.3	44
93	Acoustic wave science realized by metamaterials. Nano Convergence, 2017, 4, 3.	12.1	43
94	On-demand design of spectrally sensitive multiband absorbers using an artificial neural network. Photonics Research, 2021, 9, B153.	7.0	43
95	Active Color Control in a Metasurface by Polarization Rotation. Applied Sciences (Switzerland), 2018, 8, 982.	2.5	42
96	Recent progress on metasurfaces: applications and fabrication. Journal Physics D: Applied Physics, 2021, 54, 383002.	2.8	42
97	Demonstration of nanoimprinted hyperlens array for high-throughput sub-diffraction imaging. Scientific Reports, 2017, 7, 46314.	3.3	40
98	Chemo-Mechanically Operating Palladium-Polymer Nanograting Film for a Self-Powered H ₂ Gas Sensor. ACS Nano, 2020, 14, 16813-16822.	14.6	40
99	Moth-eye shaped on-demand broadband and switchable perfect absorbers based on vanadium dioxide. Scientific Reports, 2020, 10, 4522.	3.3	40
100	Dual-Band Operating Metaholograms with Heterogeneous Meta-Atoms in the Visible and Near-Infrared. Advanced Optical Materials, 2021, 9, 2100609.	7.3	40
101	Chiroptical Metasurfaces: Principles, Classification, and Applications. Sensors, 2021, 21, 4381.	3.8	40
102	Spin Hall Effect of Light with Near-Unity Efficiency in the Microwave. Laser and Photonics Reviews, 2021, 15, 2000393.	8.7	39
103	Manifesting Simultaneous Optical Spin Conservation and Spin Isolation in Diatomic Metasurfaces. Advanced Optical Materials, 2021, 9, 2002002.	7.3	39
104	Laser digital patterning of conductive electrodes using metal oxide nanomaterials. Nano Convergence, 2020, 7, 23.	12.1	39
105	Reaching the highest efficiency of spin Hall effect of light in the near-infrared using all-dielectric metasurfaces. Nature Communications, 2022, 13, 2036.	12.8	39
106	Solution-Processed Flexible Biomemristor Based on Gold-Decorated Chitosan. ACS Applied Materials & Interfaces, 2021, 13, 5445-5450.	8.0	38
107	Full and gradient structural colouration by lattice amplified gallium nitride Mie-resonators. Nanoscale, 2020, 12, 21392-21400.	5.6	37
108	Realization of broadband negative refraction in visible range using vertically stacked hyperbolic metamaterials. Scientific Reports, 2019, 9, 14093.	3.3	36

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109	Describing Meta-Atoms Using the Exact Higher-Order Polarizability Tensors. ACS Photonics, 2020, 7, 1153-1162.	6.6	36
110	Metasurface zone plate for light manipulation in vectorial regime. Communications Physics, 2019, 2, .	5.3	35
111	Vanadium Dioxide for Dynamically Tunable Photonics. ChemNanoMat, 2021, 7, 713-727.	2.8	35
112	Planar Achiral Metasurfaces-Induced Anomalous Chiroptical Effect of Optical Spin Isolation. ACS Applied Materials & Interfaces, 2020, 12, 48899-48909.	8.0	35
113	Capillary-force-induced collapse lithography for controlled plasmonic nanogap structures. Microsystems and Nanoengineering, 2020, 6, 65.	7.0	34
114	Deep sub-wavelength nanofocusing of UV-visible light by hyperbolic metamaterials. Scientific Reports, 2016, 6, 38645.	3.3	33
115	Topologically nontrivial photonic nodal surface in a photonic metamaterial. Physical Review B, 2019, 99, .	3.2	33
116	Top-down nanofabrication approaches toward single-digit-nanometer scale structures. Journal of Mechanical Science and Technology, 2021, 35, 837-859.	1.5	33
117	Multiple-patterning colloidal lithography-implemented scalable manufacturing of heat-tolerant titanium nitride broadband absorbers in the visible to near-infrared. Microsystems and Nanoengineering, 2021, 7, 14.	7.0	33
118	Photodeposited metal-semiconductor nanocomposites and their applications. Journal of Materiomics, 2018, 4, 83-94.	5.7	32
119	Backward Phase-Matched Second-Harmonic Generation from Stacked Metasurfaces. Physical Review Letters, 2021, 126, 033901.	7.8	32
120	Spin Hall Effect under Arbitrarily Polarized or Unpolarized Light. Laser and Photonics Reviews, 2021, 15, 2100138.	8.7	32
121	Overcoming diffraction limit: From microscopy to nanoscopy. Applied Spectroscopy Reviews, 2018, 53, 290-312.	6.7	30
122	Diffraction-induced enhancement of optical spin Hall effect in a dielectric grating. APL Photonics, 2020, 5, .	5.7	30
123	Cascade domino lithography for extreme photon squeezing. Materials Today, 2020, 39, 89-97.	14.2	29
124	Electrically focus-tuneable ultrathin lens for high-resolution square subpixels. Light: Science and Applications, 2020, 9, 98.	16.6	29
125	Recent Advances in Non-Traditional Elastic Wave Manipulation by Macroscopic Artificial Structures. Applied Sciences (Switzerland), 2020, 10, 547.	2.5	29
126	Highly suppressed solar absorption in a daytime radiative cooler designed by genetic algorithm. Nanophotonics, 2022, 11, 2107-2115.	6.0	29

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127	Metasurface-empowered spectral and spatial light modulation for disruptive holographic displays. <i>Nanoscale</i> , 2022, 14, 4380-4410.	5.6	29
128	Extremely Broadband Topological Surface States in a Photonic Topological Metamaterial. <i>Advanced Optical Materials</i> , 2019, 7, 1900900.	7.3	28
129	Importance of higher-order multipole transitions on chiral nearfield interactions. <i>Nanophotonics</i> , 2019, 8, 941-948.	6.0	28
130	Emerging advanced metasurfaces: Alternatives to conventional bulk optical devices. <i>Microelectronic Engineering</i> , 2020, 220, 111146.	2.4	28
131	Design of high transmission color filters for solar cells directed by deep Q-learning. <i>Solar Energy</i> , 2020, 195, 670-676.	6.1	28
132	Reliable Ge ₂ Sb ₂ Te ₅ Integrated High-Density Nanoscale Conductive Bridge Random Access Memory using Facile Nitrogen Doping Strategy. <i>Advanced Electronic Materials</i> , 2018, 4, 1800360.	5.1	27
133	Visualization and Investigation of Charge Transport in Mixed-Halide Perovskite via Lateral Structured Photovoltaic Devices. <i>Advanced Functional Materials</i> , 2018, 28, 1804067.	14.9	27
134	Dual-Functional Nanoscale Devices Using Phase-Change Materials: A Reconfigurable Perfect Absorber with Nonvolatile Resistance-Change Memory Characteristics. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 564.	2.5	27
135	Reconfigurable all-dielectric Fano metasurfaces for strong full-space intensity modulation of visible light. <i>Nanoscale Horizons</i> , 2020, 5, 1088-1095.	8.0	27
136	Employing vanadium dioxide nanoparticles for flexible metasurfaces with switchable absorption properties at near-infrared frequencies. <i>Journal of Optics (United Kingdom)</i> , 2020, 22, 114002.	2.2	26
137	Self-Powered Gas Sensor Based on a Photovoltaic Cell and a Colorimetric Film with Hierarchical Micro/Nanostructures. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 39024-39032.	8.0	24
138	Design of a transmissive metasurface antenna using deep neural networks. <i>Optical Materials Express</i> , 2021, 11, 2310.	3.0	24
139	Total Reflection-Induced Efficiency Enhancement of the Spin Hall Effect of Light. <i>ACS Photonics</i> , 2021, 8, 2705-2712.	6.6	24
140	Photonic spin Hall effect by the spin-orbit interaction in a metasurface with elliptical nano-structures. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	23
141	Geometrically flat hyperlens designed by transformation optics. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 194003.	2.8	23
142	Tutorial on metalenses for advanced flat optics: Design, fabrication, and critical considerations. <i>Journal of Applied Physics</i> , 2022, 131, .	2.5	23
143	Scalable and High-Throughput Top-Down Manufacturing of Optical Metasurfaces. <i>Sensors</i> , 2020, 20, 4108.	3.8	22
144	Inducing and Probing Localized Excitons in Atomically Thin Semiconductors via Tip-Enhanced Cavity Spectroscopy. <i>Advanced Functional Materials</i> , 2021, 31, 2102893.	14.9	22

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145	Inverse design of ultra-narrowband selective thermal emitters designed by artificial neural networks. <i>Optical Materials Express</i> , 2021, 11, 1863.	3.0	22
146	Experimental demonstration of broadband negative refraction at visible frequencies by critical layer thickness analysis in a vertical hyperbolic metamaterial. <i>Nanophotonics</i> , 2021, 10, 3871-3877.	6.0	22
147	Experimental verification of asymmetric transmission in continuous omega-shaped metamaterials. <i>RSC Advances</i> , 2018, 8, 38556-38561.	3.6	21
148	MAXIM: Metasurfaces-oriented electromagnetic wave simulation software with intuitive graphical user interfaces. <i>Computer Physics Communications</i> , 2021, 264, 107846.	7.5	21
149	Flexible high-performance graphene hybrid photodetectors functionalized with gold nanostars and perovskites. <i>NPG Asia Materials</i> , 2020, 12, .	7.9	21
150	Polarization-controlled coherent phonon generation in acoustoplasmonic metasurfaces. <i>Physical Review B</i> , 2018, 97, .	3.2	20
151	Three-dimensional artificial chirality towards low-cost and ultra-sensitive enantioselective sensing. <i>Nanoscale</i> , 2022, 14, 3720-3730.	5.6	20
152	Three-Dimensional Plasmonic Nanocluster-Driven Light-Matter Interaction for Photoluminescence Enhancement and Picomolar-Level Biosensing. <i>Nano Letters</i> , 2022, 22, 4702-4711.	9.1	20
153	Sensitive method for measuring third order nonlinearities in compact dielectric and hybrid plasmonic waveguides. <i>Optics Express</i> , 2016, 24, 545.	3.4	19
154	Surface-enhanced spectroscopy: Toward practical analysis probe. <i>Applied Spectroscopy Reviews</i> , 2019, 54, 142-175.	6.7	19
155	Metasurfaces: Subwavelength nanostructure arrays for ultrathin flat optics and photonics. <i>MRS Bulletin</i> , 2020, 45, 180-187.	3.5	19
156	Spin-valley locked topological edge states in a staggered chiral photonic crystal. <i>New Journal of Physics</i> , 2020, 22, 113022.	2.9	18
157	All-dielectric metasurface imaging platform applicable to laser scanning microscopy with enhanced axial resolution and wavelength selection. <i>Optical Materials Express</i> , 2019, 9, 3248.	3.0	18
158	Generalized analytic formula for spin Hall effect of light: shift enhancement and interface independence. <i>Nanophotonics</i> , 2022, 11, 2803-2809.	6.0	18
159	Tuning the optical and electrical properties of MoS ₂ by selective Ag photo-reduction. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	17
160	Dynamic Optical Spin Hall Effect in Chitosan-Coated All-Dielectric Metamaterials for a Biosensing Platform. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2021, 27, 1-8.	2.9	17
161	Resolution enhancement of fluorescence microscopy using encoded patterns from all-dielectric metasurfaces. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	16
162	Development of Artificial Neural Network System to Recommend Process Conditions of Injection Molding for Various Geometries. <i>Advanced Intelligent Systems</i> , 2020, 2, 2000037.	6.1	16

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163	Underwater stealth metasurfaces composed of split-orifice“conduit hybrid resonators. Journal of Applied Physics, 2021, 129, .	2.5	16
164	Deep Q-network to produce polarization-independent perfect solar absorbers: a statistical report. Nano Convergence, 2020, 7, 26.	12.1	16
165	Incident“Polarization“Independent Spin Hall Effect of Light Reaching Half Beam Waist. Laser and Photonics Reviews, 2022, 16, .	8.7	16
166	Second Harmonic Optical Circular Dichroism of Plasmonic Chiral Helicoid-III Nanoparticles. ACS Photonics, 2022, 9, 784-792.	6.6	16
167	Thermally-curable nanocomposite printing for the scalable manufacturing of dielectric metasurfaces. Microsystems and Nanoengineering, 2022, 8, .	7.0	16
168	Demonstration of steering acoustic waves by generalized Eaton lens. Applied Physics Letters, 2018, 113, .	3.3	15
169	Accurate and instant frequency estimation from noisy sinusoidal waves by deep learning. Nano Convergence, 2019, 6, 27.	12.1	15
170	Unlocking the future of optical security with metasurfaces. Light: Science and Applications, 2021, 10, 144.	16.6	15
171	Gap-plasmon-driven spin angular momentum selection of chiral metasurfaces for intensity-tunable metaholography working at visible frequencies. Nanophotonics, 2022, 11, 4123-4133.	6.0	15
172	Electrically tunable metasurfaces: from direct to indirect mechanisms. New Journal of Physics, 2022, 24, 075001.	2.9	15
173	Nanocatalosomes as Plasmonic Bilayer Shells with Interlayer Catalytic Nanospaces for Solar“Light“Induced Reactions. Angewandte Chemie - International Edition, 2020, 59, 9460-9469.	13.8	14
174	Multilevel Absorbers via the Integration of Undoped and Tungsten-Doped Multilayered Vanadium Dioxide Thin Films. ACS Applied Materials & Interfaces, 2022, 14, 1404-1412.	8.0	14
175	Nanophotonic modal dichroism: mode-multiplexed modulators. Optics Letters, 2016, 41, 4394.	3.3	13
176	Fabrication and characterization of zeolitic imidazolate framework-embedded cellulose acetate membranes for osmotically driven membrane process. Scientific Reports, 2019, 9, 5779.	3.3	13
177	Ultra“Sharp Circular Dichroism Induced by Twisted Layered C4 Oligomers. Advanced Theory and Simulations, 2020, 3, 1900229.	2.8	13
178	Bulk Metamaterials Exhibiting Chemically Tunable Hyperbolic Responses. Journal of the American Chemical Society, 2021, 143, 20725-20734.	13.7	13
179	Singlet Exciton Delocalization in Gold Nanoparticle-Tethered Poly(3-hexylthiophene) Nanofibers with Enhanced Intrachain Ordering. Macromolecules, 2017, 50, 8487-8496.	4.8	12
180	Open-circuit voltage of organic solar cells: Effect of energetically and spatially nonuniform distribution of molecular energy levels in the photoactive layer. Nano Energy, 2020, 78, 105336.	16.0	12

#	ARTICLE	IF	CITATIONS
181	Singular Lenses for Flexural Waves on Elastic Thin Curved Plates. <i>Physical Review Applied</i> , 2021, 15, .	3.8	12
182	Atomically Conformal Metal Laminations on Plasmonic Nanocrystals for Efficient Catalysis. <i>Journal of the American Chemical Society</i> , 2021, 143, 10582-10589.	13.7	12
183	Multipole decomposition for interactions between structured optical fields and meta-atoms. <i>Optics Express</i> , 2020, 28, 36756.	3.4	12
184	Accordion-like plasmonic silver nanorod array exhibiting multiple electromagnetic responses. <i>NPG Asia Materials</i> , 2018, 10, 190-196.	7.9	11
185	Critical Layer Thickness Analysis of Vertically Stacked Hyperbolic Metamaterials for Effective Negative Refraction Generation. <i>Advanced Theory and Simulations</i> , 2020, 3, 2000138.	2.8	11
186	Elucidating the photoluminescence-enhancement mechanism in a push-pull conjugated polymer induced by hot-electron injection from gold nanoparticles. <i>Photonics Research</i> , 2021, 9, 131.	7.0	11
187	Surface-enhanced circular dichroism by multipolar radiative coupling. <i>Optics Letters</i> , 2018, 43, 2856.	3.3	10
188	Biocompatible Nanotransfer Printing Based on Water Bridge Formation in Hyaluronic Acid and Its Application to Smart Contact Lenses. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 35069-35078.	8.0	10
189	New trends in nanophotonics. <i>Nanophotonics</i> , 2020, 9, 983-985.	6.0	10
190	Intrachain Delocalization Effect of Charge Carriers on the Charge-Transfer State Dynamics in Organic Solar Cells. <i>Journal of Physical Chemistry C</i> , 2022, 126, 3171-3179.	3.1	10
191	Deep learning for topological photonics. <i>Advances in Physics: X</i> , 2022, 7, .	4.1	10
192	Effect of ALD Processes on Physical and Electrical Properties of HfO ₂ Dielectrics for the Surface Passivation of a CMOS Image Sensor Application. <i>IEEE Access</i> , 2022, 10, 68724-68730.	4.2	10
193	Highly Efficient Visible Hologram through Dielectric Metasurface. <i>Journal of Physics: Conference Series</i> , 2018, 1092, 012003.	0.4	9
194	A finite element method towards acoustic phononic crystals by weak formulation. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 375901.	1.8	9
195	Demonstration of Equal-Intensity Beam Generation by Dielectric Metasurfaces. <i>Journal of Visualized Experiments</i> , 2019, , .	0.3	9
196	Charge Recycling Mechanism Through a Triplet Charge-Transfer State in Ternary-Blend Organic Solar Cells Containing a Nonfullerene Acceptor. <i>ACS Energy Letters</i> , 2021, 6, 2610-2618.	17.4	9
197	A Pragmatic Metasurface with Asymmetric Spin Interactions. , 2020, , .		9
198	Three-dimensional photonic topological insulator without spin-orbit coupling. <i>Nature Communications</i> , 2022, 13, .	12.8	9

#	ARTICLE	IF	CITATIONS
199	Demonstration of a Hyperlens-integrated Microscope and Super-resolution Imaging. Journal of Visualized Experiments, 2017, , .	0.3	8
200	Plasmonic metasurface cavity for simultaneous enhancement of optical electric and magnetic fields in deep subwavelength volume. Optics Express, 2018, 26, 13340.	3.4	8
201	Plasmonic-enhanced chirality examined by generalized wavenumber eigenvalue simulation. Optics Express, 2018, 26, 14051.	3.4	8
202	Seismic phononic crystals by elastodynamic Navier equation. Physical Review E, 2019, 100, 063002.	2.1	8
203	Facile fabrication of stretchable photonic Ag nanostructures by soft-contact patterning of ionic Ag solution coatings. Nanophotonics, 2022, 11, 2693-2700.	6.0	8
204	High Refractive Index Ti ₃ O ₅ Films for Dielectric Metasurfaces. Chinese Physics Letters, 2017, 34, 088102.	3.3	7
205	Quantum Hall phase and chiral edge states simulated by a coupled dipole method. Physical Review B, 2020, 101, .	3.2	7
206	Optical characterizations and thermal analyses of HfO ₂ /SiO ₂ multilayered diffraction gratings for high-power continuous wave laser. JPhys Photonics, 2020, 2, 025004.	4.6	7
207	Next-Generation Imaging Techniques: Functional and Miniaturized Optical Lenses Based on Metamaterials and Metasurfaces. Micromachines, 2021, 12, 1142.	2.9	7
208	Solution-processable electrode-material embedding in dynamically inscribed nanopatterns (SPEEDIN) for continuous fabrication of durable flexible devices. Microsystems and Nanoengineering, 2021, 7, 74.	7.0	7
209	Double-Focusing Gradient-Index Lens with Elastic Bragg Mirror for Highly Efficient Energy Harvesting. Nanomaterials, 2022, 12, 1019.	4.1	7
210	Understanding carbon nanotube channel formation in the lipid membrane. Nanotechnology, 2018, 29, 115702.	2.6	6
211	Spectrally Sharp Plasmon Resonances in the Near Infrared: Subwavelength Core-shell Nanoparticles. Physical Review Applied, 2019, 12, .	3.8	6
212	Burr- and etch-free direct machining of shape-controlled micro- and nanopatterns on polyimide films by continuous nanoinscribing for durable flexible devices. Microelectronic Engineering, 2022, 257, 111740.	2.4	6
213	High efficiency second and third harmonic generation from magnetic metamaterials by using a grating. Optics Communications, 2017, 397, 17-21.	2.1	5
214	Focus-tunable Planar Lenses by Controlled Carriers over Exciton. Advanced Optical Materials, 2021, 9, 2001526.	7.3	5
215	Micron-scale light structuring via flat nanodevices. , 2018, , .		5
216	Realizing Spin-Conserved and Spin-Encrypted Hologram using Multipolar-modulated Meta-platform. Journal of Physics: Conference Series, 2021, 2015, 012060.	0.4	5

#	ARTICLE	IF	CITATIONS
217	The latest trends in nanophotonics. <i>Nanophotonics</i> , 2022, 11, 2389-2392.	6.0	5
218	Length-controlled and selective growth of individual indium nitride nanowires by localized laser heating. <i>Applied Physics Express</i> , 2019, 12, 056501.	2.4	4
219	Retrieving continuously varying effective properties of non-resonant acoustic metamaterials. <i>Applied Physics Express</i> , 2019, 12, 052008.	2.4	4
220	Meta-Holographic Displays: Stimuli-Responsive Dynamic Metaholographic Displays with Designer Liquid Crystal Modulators (<i>Adv. Mater.</i> 50/2020). <i>Advanced Materials</i> , 2020, 32, 2070378.	21.0	4
221	Warping of Powder Injection Molded Copper Structure. <i>Metals and Materials International</i> , 2021, 27, 1131-1137.	3.4	4
222	Angular selection of transmitted light and enhanced spontaneous emission in grating-coupled hyperbolic metamaterials. <i>Optics Express</i> , 2021, 29, 21458-21472.	3.4	4
223	Helicity-Multiplexed Hologram via All-dielectric Metasurface in the Visible Domain. , 2019, , .		4
224	Manipulating twisted light beam through all-dielectric metasurfaces. , 2019, , .		4
225	The role of current loop in harmonic generation from magnetic metamaterials in two polarizations. <i>Optics Communications</i> , 2017, 401, 66-70.	2.1	3
226	Development of a hemispherical rotational modulation collimator system for imaging spatial distribution of radiation sources. <i>Journal of Instrumentation</i> , 2017, 12, C12050-C12050.	1.2	3
227	Effect of Hot-Electron Injection on the Excited-State Dynamics of a Hybrid Plasmonic System Containing Poly(3-hexylthiophene)-Coated Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2019, 123, 26564-26570.	3.1	3
228	A Single-Layer Dielectric Metasurface Enabling Wave Incidence Direction Control. , 2019, , .		3
229	Augmented Photoluminescence in a Conjugated Polymer by the Incorporation of CdSe/CdS Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2020, 124, 20605-20613.	3.1	3
230	Tunable Resonator: Self-Powered Humidity Sensor Using Chitosan-Based Plasmonic Metal-Hydrogel-Metal Filters (<i>Advanced Optical Materials</i> 9/2020). <i>Advanced Optical Materials</i> , 2020, 8, 2070038.	7.3	3
231	Chiroptical effect induced by achiral structures for full-dimensional manipulation of optical waves. , 2021, , .		3
232	Enhancement of Luminous Intensity Emission from Incoherent LED Light Sources within the Detection Angle of 10° Using Metalenses. <i>Nanomaterials</i> , 2022, 12, 153.	4.1	3
233	Light Manipulation at Compact Scale via All-Dielectric Metasurfaces. , 2018, , .		2
234	r-BN: A fine hyperbolic dispersion modulator for bulk metamaterials consisting of heterostructured nanohybrids of h-BN and graphene. <i>Journal of Solid State Chemistry</i> , 2022, 309, 122937.	2.9	2

#	ARTICLE	IF	CITATIONS
235	Frequency-domain modelling of gain in pump-probe experiment by an inhomogeneous medium. Journal of Physics Condensed Matter, 2018, 30, 064003.	1.8	1
236	Ultra-Broadband Tungsten Absorber. , 2018, , .		1
237	Recent Progress in Metamaterials-Based Imaging. , 2020, , .		1
238	Nanocatalosomes as Plasmonic Bilayer Shells with Interlayer Catalytic Nanospaces for Solarâ€Lightâ€Induced Reactions. Angewandte Chemie, 2020, 132, 9547-9556.	2.0	1
239	Realization of Artificial Chirality in Micro-/Nano-Scale Three-Dimensional Plasmonic Structures. Topics in Applied Physics, 2021, , 241-263.	0.8	1
240	Inducing and Probing Localized Excitons in Atomically Thin Semiconductors via Tipâ€Enhanced Cavityâ€Spectroscopy (Adv. Funct. Mater. 33/2021). Advanced Functional Materials, 2021, 31, 2170243.	14.9	1
241	Demonstration of Spin-Multiplexed and Direction-Multiplexed All-Dielectric Visible Metaholograms. Journal of Visualized Experiments, 2020, , .	0.3	1
242	Mode Matched Harmonic Generation in Plasmonic Nanostructures. , 2013, , .		0
243	Three-dimensional Indefinite Metamaterial Nanocavities with Anomalous Scaling Law. , 2013, , .		0
244	Towards 3D metamaterials at optical frequencies. , 2016, , .		0
245	Realization of 3D Metamaterial and Plasmonic Devices at Optical Frequencies. , 2017, , .		0
246	Resistive Switching Memory: Reliable Ge₂Sb₂Te₅â€Integrated Highâ€Density Nanoscale Conductive Bridge Random Access Memory using Facile Nitrogenâ€Doping Strategy (Adv. Electron. Mater. 11/2018). Advanced Electronic Materials, 2018, 4, 1870052.	5.1	0
247	Titelbild: Nanocatalosomes as Plasmonic Bilayer Shells with Interlayer Catalytic Nanospaces for Solarâ€Lightâ€Induced Reactions (Angew. Chem. 24/2020). Angewandte Chemie, 2020, 132, 9281-9281.	2.0	0
248	Artificial Intelligence Meets Engineered Photonic Materials: introduction to special issue. Optical Materials Express, 2021, 11, 3431.	3.0	0
249	Dualâ€Band Operating Metaholograms with Heterogeneous Metaâ€Atoms in the Visible and Nearâ€Infrared (Advanced Optical Materials 19/2021). Advanced Optical Materials, 2021, 9, 2170075.	7.3	0
250	Three-Dimensional Nanoscale Optical Cavities of Indefinite Metamaterial. , 2012, , .		0
251	10.1063/1.4757613.1. , 2012, , .		0
252	Resonating Metasurface Photon and its Spin Manipulation. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
253	Dynamic Cryptographic Nanoprints Mediated by Kerker's Conditions. , 2018, , .		0
254	Biodegradable MIOM resonator for wide plasmonic coloring using chitosan film. , 2018, , .		0
255	Peptide encoded gigantic chirality evolution in 3D plasmonic helicoids. , 2018, , .		0
256	Artificial Chirality Evolution in Micro-/Nano-scale 3D Plasmonic Metamaterials. , 2019, , .		0
257	Low-cost scalable manufacturing of dielectric metalenses for commercialization of high-end ultrathin lenses. , 2020, , .		0
258	The tailored complex refractive index of hydrogenated amorphous silicon for dielectric metasurfaces. , 2020, , .		0
259	Three-dimensional nonlinear plasmonic metamaterials. , 2020, , .		0
260	Pixelated Microsized Quantum Dot Arrays Using Surface-Tension-Induced Flow. ACS Applied Materials & Interfaces, 2021, 13, 51718-51725.	8.0	0
261	Artificial chirality evolution in micro-/nano-scale three-dimensional plasmonic metamaterials. , 2021, , .		0
262	Dynamic Flat Optical Devices Realized by Doped Semiconductors and Functional Liquid Crystals. , 2021, , .		0
263	Nanofabrication of Plasmonic Structures. , 2022, , 85-134.		0