Junsuk Rho

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3438878/publications.pdf

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	Highly suppressed solar absorption in a daytime radiative cooler designed by genetic algorithm. Nanophotonics, 2022, 11, 2107-2115.	6.0	29
2	Optical metasurfaces for generating and manipulating optical vortex beams. Nanophotonics, 2022, 11, 941-956.	6.0	63
3	Three-dimensional artificial chirality towards low-cost and ultra-sensitive enantioselective sensing. Nanoscale, 2022, 14, 3720-3730.	5.6	20
4	Intrachain Delocalization Effect of Charge Carriers on the Charge-Transfer State Dynamics in Organic Solar Cells. Journal of Physical Chemistry C, 2022, 126, 3171-3179.	3.1	10
5	Enhancement of Luminous Intensity Emission from Incoherent LED Light Sources within the Detection Angle of 10Â° Using Metalenses. Nanomaterials, 2022, 12, 153.	4.1	3
6	Hyperbolic metamaterials: fusing artificial structures to natural 2D materials. ELight, 2022, 2, .	23.9	190
7	Generalized analytic formula for spin Hall effect of light: shift enhancement and interface independence. Nanophotonics, 2022, 11, 2803-2809.	6.0	18
8	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
9	Metasurface-empowered spectral and spatial light modulation for disruptive holographic displays. Nanoscale, 2022, 14, 4380-4410.	5.6	29
10	r-BN: A fine hyperbolic dispersion modulator for bulk metamaterials consisting of heterostructured nanohybrids of h-BN and graphene. Journal of Solid State Chemistry, 2022, 309, 122937.	2.9	2
11	Nanostructured chromium-based broadband absorbers and emitters to realize thermally stable solar thermophotovoltaic systems. Nanoscale, 2022, 14, 6425-6436.	5.6	69
12	Photonic Encryption Platform via Dual-Band Vectorial Metaholograms in the Ultraviolet and Visible. ACS Nano, 2022, 16, 3546-3553.	14.6	87
13	Disordered-nanoparticleâ€“based etalon for ultrafast humidity-responsive colorimetric sensors and anti-counterfeiting displays. Science Advances, 2022, 8, eabm8598.	10.3	77
14	Incidentâ€Polarizationâ€Independent Spin Hall Effect of Light Reaching Half Beam Waist. Laser and Photonics Reviews, 2022, 16, .	8.7	16
15	Deep learning for topological photonics. Advances in Physics: X, 2022, 7, .	4.1	10
16	Second Harmonic Optical Circular Dichroism of Plasmonic Chiral Helicoid-III Nanoparticles. ACS Photonics, 2022, 9, 784-792.	6.6	16
17	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
18	Double-Focusing Gradient-Index Lens with Elastic Bragg Mirror for Highly Efficient Energy Harvesting. Nanomaterials, 2022, 12, 1019.	4.1	7

#	Article	IF	Citations
19	Tunable metasurfaces towards versatile metalenses and metaholograms: a review. Advanced Photonics, 2022, 4, .	11.8	108
20	Tutorial on metalenses for advanced flat optics: Design, fabrication, and critical considerations. Journal of Applied Physics, 2022, 131, .	2.5	23
21	Facile fabrication of stretchable photonic Ag nanostructures by soft-contact patterning of ionic Ag solution coatings. Nanophotonics, 2022, 11, 2693-2700.	6.0	8
22	Nanofabrication of Plasmonic Structures. , 2022, , 85-134.		0
23	Piezoelectric energy harvesting using mechanical metamaterials and phononic crystals. Communications Physics, 2022, 5, .	5.3	44
24	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
25	The latest trends in nanophotonics. Nanophotonics, 2022, 11, 2389-2392.	6.0	5
26	Liquid crystal-powered Mie resonators for electrically tunable photorealistic color gradients and dark blacks. Light: Science and Applications, 2022, 11, 118.	16.6	73
27	Novel Spinâ€Decoupling Strategy in Liquid Crystalâ€Integrated Metasurfaces for Interactive Metadisplays. Advanced Optical Materials, 2022, 10, .	7.3	65
28	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
29	Three-Dimensional Plasmonic Nanocluster-Driven Lightâ€“Matter Interaction for Photoluminescence Enhancement and Picomolar-Level Biosensing. Nano Letters, 2022, 22, 4702-4711.	9.1	20
30	Effect of ALD Processes on Physical and Electrical Properties of HfO₂ Dielectrics for the Surface Passivation of a CMOS Image Sensor Application. IEEE Access, 2022, 10, 68724-68730.	4.2	10
31	Metasurface Holography Reaching the Highest Efficiency Limit in the Visible via Oneâ€Step Nanoparticleâ€Embeddedâ€Resin Printing. Laser and Photonics Reviews, 2022, 16, .	8.7	46
32	Three-dimensional photonic topological insulator without spinâ€“orbit coupling. Nature Communications, 2022, 13, .	12.8	9
33	Electrically tunable metasurfaces: from direct to indirect mechanisms. New Journal of Physics, 2022, 24, 075001.	2.9	15
34	Thermally-curable nanocomposite printing for the scalable manufacturing of dielectric metasurfaces. Microsystems and Nanoengineering, 2022, 8, .	7.0	16
35	Single-Step Fabricable Flexible Metadisplays for Sensitive Chemical/Biomedical Packaging Security and Beyond. ACS Applied Materials & Interfaces, 2022, 14, 31194-31202.	8.0	52
36	Focusâ€Tunable Planar Lenses by Controlled Carriers over Exciton. Advanced Optical Materials, 2021, 9, 2001526.	7.3	5

#	Article	IF	Citations
37	Sub-ambient daytime radiative cooling by silica-coated porous anodic aluminum oxide. Nano Energy, 2021, 79, 105426.	16.0	113
38	Spin Hall Effect of Light with Nearâ€Unity Efficiency in the Microwave. Laser and Photonics Reviews, 2021, 15, 2000393.	8.7	39
39	Warpage of Powder Injection Molded Copper Structure. Metals and Materials International, 2021, 27, 1131-1137.	3.4	4
40	Realization of Artificial Chirality in Micro-/Nano-Scale Three-Dimensional Plasmonic Structures. Topics in Applied Physics, 2021, , 241-263.	0.8	1
41	Switchable diurnal radiative cooling by doped VO₂. Opto-Electronic Advances, 2021, 4, 200006-200006.	13.3	50
42	Backward Phase-Matched Second-Harmonic Generation from Stacked Metasurfaces. Physical Review Letters, 2021, 126, 033901.	7.8	32
43	Revealing Structural Disorder in Hydrogenated Amorphous Silicon for a Lowâ€Loss Photonic Platform at Visible Frequencies. Advanced Materials, 2021, 33, e2005893.	21.0	69
44	Elucidating the photoluminescence-enhancement mechanism in a push-pull conjugated polymer induced by hot-electron injection from gold nanoparticles. Photonics Research, 2021, 9, 131.	7.0	11
45	Solution-Processed Flexible Biomemristor Based on Gold-Decorated Chitosan. ACS Applied Materials & Interfaces, 2021, 13, 5445-5450.	8.0	38
46	Manifesting Simultaneous Optical Spin Conservation and Spin Isolation in Diatomic Metasurfaces. Advanced Optical Materials, 2021, 9, 2002002.	7.3	39
47	Top-down nanofabrication approaches toward single-digit-nanometer scale structures. Journal of Mechanical Science and Technology, 2021, 35, 837-859.	1.5	33
48	Underwater stealth metasurfaces composed of split-orificeâ€“conduit hybrid resonators. Journal of Applied Physics, 2021, 129, .	2.5	16
49	Chiroptical effect induced by achiral structures for full-dimensional manipulation of optical waves. , 2021, , .		3
50	Three-dimensional nanoprinting via charged aerosol jets. Nature, 2021, 592, 54-59.	27.8	86
51	Singular Lenses for Flexural Waves on Elastic Thin Curved Plates. Physical Review Applied, 2021, 15, .	3.8	12
52	On-demand design of spectrally sensitive multiband absorbers using an artificial neural network. Photonics Research, 2021, 9, B153.	7.0	43
53	Optical spin-symmetry breaking for high-efficiency directional helicity-multiplexed metaholograms. Microsystems and Nanoengineering, 2021, 7, 5.	7.0	81
54	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

#	Article	IF	Citations
55	Nanoimprint lithography for high-throughput fabrication of metasurfaces. Frontiers of Optoelectronics, 2021, 14, 229-251.	3.7	65
56	Vanadium Dioxide for Dynamically Tunable Photonics. ChemNanoMat, 2021, 7, 713-727.	2.8	35
57	Visibly Transparent Radiative Cooler under Direct Sunlight. Advanced Optical Materials, 2021, 9, 2002226.	7.3	66
58	Spectrally Selective Nanoparticle Mixture Coating for Passive Daytime Radiative Cooling. ACS Applied Materials & Interfaces, 2021, 13, 21119-21126.	8.0	71
59	Holographic metasurface gas sensors for instantaneous visual alarms. Science Advances, 2021, 7, .	10.3	149
60	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
61	Nanophotonics for light detection and ranging technology. Nature Nanotechnology, 2021, 16, 508-524.	31.5	213
62	Geometric and physical configurations of metaâ€atoms for advanced metasurface holography. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 739-754.	17.3	56
63	Angular selection of transmitted light and enhanced spontaneous emission in grating-coupled hyperbolic metamaterials. Optics Express, 2021, 29, 21458-21472.	3.4	4
64	Inducing and Probing Localized Excitons in Atomically Thin Semiconductors via Tipâ€Enhanced Cavityâ€Spectroscopy. Advanced Functional Materials, 2021, 31, 2102893.	14.9	22
65	Dualâ€Band Operating Metaholograms with Heterogeneous Metaâ€Atoms in the Visible and Nearâ€Infrared. Advanced Optical Materials, 2021, 9, 2100609.	7.3	40
66	Inverse design of ultra-narrowband selective thermal emitters designed by artificial neural networks. Optical Materials Express, 2021, 11, 1863.	3.0	22
67	Charge Recycling Mechanism Through a Triplet Charge-Transfer State in Ternary-Blend Organic Solar Cells Containing a Nonfullerene Acceptor. ACS Energy Letters, 2021, 6, 2610-2618.	17.4	9
68	Spin Hall Effect under Arbitrarily Polarized or Unpolarized Light. Laser and Photonics Reviews, 2021, 15, 2100138.	8.7	32
69	Pixelated bifunctional metasurface-driven dynamic vectorial holographic color prints for photonic security platform. Nature Communications, 2021, 12, 3614.	12.8	176
70	Design of a transmissive metasurface antenna using deep neural networks. Optical Materials Express, 2021, 11, 2310.	3.0	24
71	Chiroptical Metasurfaces: Principles, Classification, and Applications. Sensors, 2021, 21, 4381.	3.8	40
72	Atomically Conformal Metal Laminations on Plasmonic Nanocrystals for Efficient Catalysis. Journal of the American Chemical Society, 2021, 143, 10582-10589.	13.7	12

#	Article	IF	Citations
73	Unlocking the future of optical security with metasurfaces. Light: Science and Applications, 2021, 10, 144.	16.6	15
74	Recent progress on metasurfaces: applications and fabrication. Journal Physics D: Applied Physics, 2021, 54, 383002.	2.8	42
75	Biocompatible Nanotransfer Printing Based on Water Bridge Formation in Hyaluronic Acid and Its Application to Smart Contact Lenses. ACS Applied Materials & Interfaces, 2021, 13, 35069-35078.	8.0	10
76	Tunable Metasurfaces: The Path to Fully Active Nanophotonics. Advanced Photonics Research, 2021, 2, 2000205.	3.6	57
77	MAXIM: Metasurfaces-oriented electromagnetic wave simulation software with intuitive graphical user interfaces. Computer Physics Communications, 2021, 264, 107846.	7.5	21
78	Giant chiro-optical responses in multipolar-resonances-based single-layer dielectric metasurfaces. Photonics Research, 2021, 9, 1667.	7.0	71
79	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
80	Electrically Tunable Bifocal Metalens with Diffractionâ€Limited Focusing and Imaging at Visible Wavelengths. Advanced Science, 2021, 8, e2102646.	11.2	89
81	Dynamic Optical Spin Hall Effect in Chitosan-Coated All-Dielectric Metamaterials for a Biosensing Platform. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-8.	2.9	17
82	Next-Generation Imaging Techniques: Functional and Miniaturized Optical Lenses Based on Metamaterials and Metasurfaces. Micromachines, 2021, 12, 1142.	2.9	7
83	Artificial Intelligence Meets Engineered Photonic Materials: introduction to special issue. Optical Materials Express, 2021, 11, 3431.	3.0	0
84	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
85	Total Reflection-Induced Efficiency Enhancement of the Spin Hall Effect of Light. ACS Photonics, 2021, 8, 2705-2712.	6.6	24
86	Experimental demonstration of broadband negative refraction at visible frequencies by critical layer thickness analysis in a vertical hyperbolic metamaterial. Nanophotonics, 2021, 10, 3871-3877.	6.0	22
87	Metasurface-Driven Optically Variable Devices. Chemical Reviews, 2021, 121, 13013-13050.	47.7	125
88	Printable Nanocomposite Metalens for High-Contrast Near-Infrared Imaging. ACS Nano, 2021, 15, 698-706.	14.6	89
89	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
90	Pixelated Microsized Quantum Dot Arrays Using Surface-Tension-Induced Flow. ACS Applied Materials & Interfaces, 2021, 13, 51718-51725.	8.0	0

#	Article	IF	Citations
91	Artificial chirality evolution in micro-/nano-scale three-dimensional plasmonic metamaterials. , 2021, , .		0
92	Bulk Metamaterials Exhibiting Chemically Tunable Hyperbolic Responses. Journal of the American Chemical Society, 2021, 143, 20725-20734.	13.7	13
93	Realizing Spin-Conserved and Spin-Encrypted Hologram using Multipolar-modulated Meta-platform. Journal of Physics: Conference Series, 2021, 2015, 012060.	0.4	5
94	Dynamic Flat Optical Devices Realized by Doped Semiconductors and Functional Liquid Crystals. , 2021, , .		0
95	Engineering spin and antiferromagnetic resonances to realize an efficient direction-multiplexed visible meta-hologram. Nanoscale Horizons, 2020, 5, 57-64.	8.0	68
96	Emerging advanced metasurfaces: Alternatives to conventional bulk optical devices. Microelectronic Engineering, 2020, 220, 111146.	2.4	28
97	Design of high transmission color filters for solar cells directed by deep Q-learning. Solar Energy, 2020, 195, 670-676.	6.1	28
98	Biomimetic ultra-broadband perfect absorbers optimised with reinforcement learning. Physical Chemistry Chemical Physics, 2020, 22, 2337-2342.	2.8	56
99	Critical Layer Thickness Analysis of Vertically Stacked Hyperbolic Metamaterials for Effective Negative Refraction Generation. Advanced Theory and Simulations, 2020, 3, 2000138.	2.8	11
100	Recent Progress in Metamaterials-Based Imaging. , 2020, , .		1
101	Capillary-force-induced collapse lithography for controlled plasmonic nanogap structures. Microsystems and Nanoengineering, 2020, 6, 65.	7.0	34
102	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
103	Recent advances in 2D, 3D and higher-order topological photonics. Light: Science and Applications, 2020, 9, 130.	16.6	254
104	Cascade domino lithography for extreme photon squeezing. Materials Today, 2020, 39, 89-97.	14.2	29
105	Chemo-Mechanically Operating Palladium-Polymer Nanograting Film for a Self-Powered H₂ Gas Sensor. ACS Nano, 2020, 14, 16813-16822.	14.6	40
106	Scalable and High-Throughput Top-Down Manufacturing of Optical Metasurfaces. Sensors, 2020, 20, 4108.	3.8	22
107	Development of Artificial Neural Network System to Recommend Process Conditions of Injection Molding for Various Geometries. Advanced Intelligent Systems, 2020, 2, 2000037.	6.1	16
108	Full and gradient structural colouration by lattice amplified gallium nitride Mie-resonators. Nanoscale, 2020, 12, 21392-21400.	5.6	37

#	Article	IF	Citations
109	Spectral Modulation through the Hybridization of Mie-Scatterers and Quasi-Guided Mode Resonances: Realizing Full and Gradients of Structural Color. ACS Nano, 2020, 14, 15317-15326.	14.6	98
110	Electromagnetic chirality: from fundamentals to nontraditional chiroptical phenomena. Light: Science and Applications, 2020, 9, 139.	16.6	231
111	Complex-amplitude metasurface-based orbital angular momentum holography in momentum space. Nature Nanotechnology, 2020, 15, 948-955.	31.5	386
112	Augmented Photoluminescence in a Conjugated Polymer by the Incorporation of CdSe/CdS Quantum Dots. Journal of Physical Chemistry C, 2020, 124, 20605-20613.	3.1	3
113	Metaâ€Holographic Displays: Stimuliâ€Responsive Dynamic Metaholographic Displays with Designer Liquid Crystal Modulators (Adv. Mater. 50/2020). Advanced Materials, 2020, 32, 2070378.	21.0	4
114	Stimuliâ€Responsive Dynamic Metaholographic Displays with Designer Liquid Crystal Modulators. Advanced Materials, 2020, 32, e2004664.	21.0	116
115	Tunable Resonator: Selfâ€Powered Humidity Sensor Using Chitosanâ€Based Plasmonic Metalâ€“Hydrogelâ€“Metal Filters (Advanced Optical Materials 9/2020). Advanced Optical Materials, 2020, 8, 2070038.	7.3	3
116	Quantum Hall phase and chiral edge states simulated by a coupled dipole method. Physical Review B, 2020, 101, .	3.2	7
117	Single-step manufacturing of hierarchical dielectric metalens in the visible. Nature Communications, 2020, 11, 2268.	12.8	172
118	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
119	Diffraction-induced enhancement of optical spin Hall effect in a dielectric grating. APL Photonics, 2020, 5, .	5.7	30
120	Electrically focus-tuneable ultrathin lens for high-resolution square subpixels. Light: Science and Applications, 2020, 9, 98.	16.6	29
121	Moth-eye shaped on-demand broadband and switchable perfect absorbers based on vanadium dioxide. Scientific Reports, 2020, 10, 4522.	3.3	40
122	Describing Meta-Atoms Using the Exact Higher-Order Polarizability Tensors. ACS Photonics, 2020, 7, 1153-1162.	6.6	36
123	Metasurfaces: Subwavelength nanostructure arrays for ultrathin flat optics and photonics. MRS Bulletin, 2020, 45, 180-187.	3.5	19
124	Self-Powered Gas Sensor Based on a Photovoltaic Cell and a Colorimetric Film with Hierarchical Micro/Nanostructures. ACS Applied Materials & Interfaces, 2020, 12, 39024-39032.	8.0	24
125	Deep learning enabled inverse design in nanophotonics. Nanophotonics, 2020, 9, 1041-1057.	6.0	295
126	Selfâ€Powered Humidity Sensor Using Chitosanâ€Based Plasmonic Metalâ€“Hydrogelâ€“Metal Filters. Advanced Optical Materials, 2020, 8, 1901932.	7.3	85

#	Article	IF	Citations
127	Metasurfaces-based imaging and applications: from miniaturized optical components to functional imaging platforms. Nanoscale Advances, 2020, 2, 605-625.	4.6	52
128	Recent Advances in Non-Traditional Elastic Wave Manipulation by Macroscopic Artificial Structures. Applied Sciences (Switzerland), 2020, 10, 547.	2.5	29
129	Cysteine-encoded chirality evolution in plasmonic rhombic dodecahedral gold nanoparticles. Nature Communications, 2020, 11, 263.	12.8	145
130	Reconfigurable all-dielectric Fano metasurfaces for strong full-space intensity modulation of visible light. Nanoscale Horizons, 2020, 5, 1088-1095.	8.0	27
131	Optical characterizations and thermal analyses of HfO₂/SiO₂ multilayered diffraction gratings for high-power continuous wave laser. JPhys Photonics, 2020, 2, 025004.	4.6	7
132	Nanocatalosomes as Plasmonic Bilayer Shells with Interlayer Catalytic Nanospaces for Solarâ€Lightâ€Induced Reactions. Angewandte Chemie, 2020, 132, 9547-9556.	2.0	1
133	Nanocatalosomes as Plasmonic Bilayer Shells with Interlayer Catalytic Nanospaces for Solarâ€Lightâ€Induced Reactions. Angewandte Chemie - International Edition, 2020, 59, 9460-9469.	13.8	14
134	Ultraâ€Sharp Circular Dichroism Induced by Twisted Layered C4 Oligomers. Advanced Theory and Simulations, 2020, 3, 1900229.	2.8	13
135	Recent Progress on Ultrathin Metalenses for Flat Optics. IScience, 2020, 23, 101877.	4.1	55
136	Planar Achiral Metasurfaces-Induced Anomalous Chiroptical Effect of Optical Spin Isolation. ACS Applied Materials & Interfaces, 2020, 12, 48899-48909.	8.0	35
137	Spin-valley locked topological edge states in a staggered chiral photonic crystal. New Journal of Physics, 2020, 22, 113022.	2.9	18
138	Employing vanadium dioxide nanoparticles for flexible metasurfaces with switchable absorption properties at near-infrared frequencies. Journal of Optics (United Kingdom), 2020, 22, 114002.	2.2	26
139	Laser digital patterning of conductive electrodes using metal oxide nanomaterials. Nano Convergence, 2020, 7, 23.	12.1	39
140	Deep Q-network to produce polarization-independent perfect solar absorbers: a statistical report. Nano Convergence, 2020, 7, 26.	12.1	16
141	Multipole decomposition for interactions between structured optical fields and meta-atoms. Optics Express, 2020, 28, 36756.	3.4	12
142	Structural color switching with a doped indium-gallium-zinc-oxide semiconductor. Photonics Research, 2020, 8, 1409.	7.0	46
143	Topological edge and corner states in a two-dimensional photonic Su-Schrieffer-Heeger lattice. Nanophotonics, 2020, 9, 3227-3234.	6.0	62
144	New trends in nanophotonics. Nanophotonics, 2020, 9, 983-985.	6.0	10

#	Article	IF	Citations
145	Near-zero reflection of all-dielectric structural coloration enabling polarization-sensitive optical encryption with enhanced switchability. Nanophotonics, 2020, 10, 919-926.	6.0	55
146	Flexible high-performance graphene hybrid photodetectors functionalized with gold nanostars and perovskites. NPG Asia Materials, 2020, 12, .	7.9	21
147	Low-cost scalable manufacturing of dielectric metalenses for commercialization of high-end ultrathin lenses. , 2020, , .		0
148	The tailored complex refractive index of hydrogenated amorphous silicon for dielectric metasurfaces. , 2020, , .		0
149	A Pragmatic Metasurface with Asymmetric Spin Interactions. , 2020, , .		9
150	Three-dimensional nonlinear plasmonic metamaterials. , 2020, , .		0
151	Demonstration of Spin-Multiplexed and Direction-Multiplexed All-Dielectric Visible Metaholograms. Journal of Visualized Experiments, 2020, , .	0.3	1
152	Kerkerâ€Conditioned Dynamic Cryptographic Nanoprints. Advanced Optical Materials, 2019, 7, 1801070.	7.3	50
153	Surface-enhanced spectroscopy: Toward practical analysis probe. Applied Spectroscopy Reviews, 2019, 54, 142-175.	6.7	19
154	Double-deep Q-learning to increase the efficiency of metasurface holograms. Scientific Reports, 2019, 9, 10899.	3.3	64
155	A finite element method towards acoustic phononic crystals by weak formulation. Journal of Physics Condensed Matter, 2019, 31, 375901.	1.8	9
156	Designing nanophotonic structures using conditional deep convolutional generative adversarial networks. Nanophotonics, 2019, 8, 1255-1261.	6.0	175
157	Extremely Broadband Topological Surface States in a Photonic Topological Metamaterial. Advanced Optical Materials, 2019, 7, 1900900.	7.3	28
158	Finding the optical properties of plasmonic structures by image processing using a combination of convolutional neural networks and recurrent neural networks. Microsystems and Nanoengineering, 2019, 5, 27.	7.0	115
159	Facile Nanocasting of Dielectric Metasurfaces with Sub-100 nm Resolution. ACS Applied Materials & Interfaces, 2019, 11, 26109-26115.	8.0	57
160	Wavelength-decoupled geometric metasurfaces by arbitrary dispersion control. Communications Physics, 2019, 2, .	5.3	44
161	Spectrally Sharp Plasmon Resonances in the Near Infrared: Subwavelength Core-shell Nanoparticles. Physical Review Applied, 2019, 12, .	3.8	6
162	Effect of Hot-Electron Injection on the Excited-State Dynamics of a Hybrid Plasmonic System Containing Poly(3-hexylthiophene)-Coated Gold Nanoparticles. Journal of Physical Chemistry C, 2019, 123, 26564-26570.	3.1	3

#	Article	IF	Citations
163	Accurate and instant frequency estimation from noisy sinusoidal waves by deep learning. Nano Convergence, 2019, 6, 27.	12.1	15
164	Resolution enhancement of fluorescence microscopy using encoded patterns from all-dielectric metasurfaces. Applied Physics Letters, 2019, 115, .	3.3	16
165	Observation of Enhanced Optical Spin Hall Effect in a Vertical Hyperbolic Metamaterial. ACS Photonics, 2019, 6, 2530-2536.	6.6	96
166	Realization of broadband negative refraction in visible range using vertically stacked hyperbolic metamaterials. Scientific Reports, 2019, 9, 14093.	3.3	36
167	Topologically nontrivial photonic nodal surface in a photonic metamaterial. Physical Review B, 2019, 99, .	3.2	33
168	Simultaneous Inverse Design of Materials and Structures via Deep Learning: Demonstration of Dipole Resonance Engineering Using Coreâ€“Shell Nanoparticles. ACS Applied Materials & Interfaces, 2019, 11, 24264-24268.	8.0	183
169	Importance of higher-order multipole transitions on chiral nearfield interactions. Nanophotonics, 2019, 8, 941-948.	6.0	28
170	Length-controlled and selective growth of individual indium nitride nanowires by localized laser heating. Applied Physics Express, 2019, 12, 056501.	2.4	4
171	Retrieving continuously varying effective properties of non-resonant acoustic metamaterials. Applied Physics Express, 2019, 12, 052008.	2.4	4
172	Dual-Functional Nanoscale Devices Using Phase-Change Materials: A Reconfigurable Perfect Absorber with Nonvolatile Resistance-Change Memory Characteristics. Applied Sciences (Switzerland), 2019, 9, 564.	2.5	27
173	Fabrication and characterization of zeolitic imidazolate framework-embedded cellulose acetate membranes for osmotically driven membrane process. Scientific Reports, 2019, 9, 5779.	3.3	13
174	Geometrically flat hyperlens designed by transformation optics. Journal Physics D: Applied Physics, 2019, 52, 194003.	2.8	23
175	A Spinâ€Encoded Allâ€Dielectric Metahologram for Visible Light. Laser and Photonics Reviews, 2019, 13, 1900065.	8.7	95
176	Tunable Metasurfaces: Kerkerâ€Conditioned Dynamic Cryptographic Nanoprints (Advanced Optical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	7.3	58
177	Demonstration of Equal-Intensity Beam Generation by Dielectric Metasurfaces. Journal of Visualized Experiments, 2019, , .	0.3	9
178	Twisted non-diffracting beams through all dielectric meta-axicons. Nanoscale, 2019, 11, 20571-20578.	5.6	57
179	A Single-Layer Dielectric Metasurface Enabling Wave Incidence Direction Control. , 2019, , .		3
180	Seismic phononic crystals by elastodynamic Navier equation. Physical Review E, 2019, 100, 063002.	2.1	8

#	Article	IF	Citations
181	Metasurface zone plate for light manipulation in vectorial regime. Communications Physics, 2019, 2, .	5.3	35
182	Metamaterial-Based Radiative Cooling: Towards Energy-Free All-Day Cooling. Energies, 2019, 12, 89.	3.1	85
183	Optimisation of colour generation from dielectric nanostructures using reinforcement learning. Optics Express, 2019, 27, 5874.	3.4	112
184	All-dielectric metasurface imaging platform applicable to laser scanning microscopy with enhanced axial resolution and wavelength selection. Optical Materials Express, 2019, 9, 3248.	3.0	18
185	Artificial Chirality Evloution in Micro-/Nano-scale 3D Plasmonic Metamaterials. , 2019, , .		0
186	Helicity-Multiplexed Hologram via All-dielectric Metasurface in the Visible Domain. , 2019, , .		4
187	Manipulating twisted light beam through all-dielectric metasurfaces. , 2019, , .		4
188	Photodeposited metal-semiconductor nanocomposites and their applications. Journal of Materiomics, 2018, 4, 83-94.	5.7	32
189	Smart SERS Hot Spots: Single Molecules Can Be Positioned in a Plasmonic Nanojunction Using Hostâ€“Guest Chemistry. Journal of the American Chemical Society, 2018, 140, 4705-4711.	13.7	102
190	Amino-acid- and peptide-directed synthesis of chiral plasmonic gold nanoparticles. Nature, 2018, 556, 360-365.	27.8	785
191	Accordion-like plasmonic silver nanorod array exhibiting multiple electromagnetic responses. NPG Asia Materials, 2018, 10, 190-196.	7.9	11
192	Tungsten-based Ultrathin Absorber for Visible Regime. Scientific Reports, 2018, 8, 2443.	3.3	96
193	Frequency-domain modelling of gain in pump-probe experiment by an inhomogeneous medium. Journal of Physics Condensed Matter, 2018, 30, 064003.	1.8	1
194	Understanding carbon nanotube channel formation in the lipid membrane. Nanotechnology, 2018, 29, 115702.	2.6	6
195	Complete amplitude and phase control of light using broadband holographic metasurfaces. Nanoscale, 2018, 10, 4237-4245.	5.6	299
196	Pragmatic Metasurface Hologram at Visible Wavelength: The Balance between Diffraction Efficiency and Fabrication Compatibility. ACS Photonics, 2018, 5, 1643-1647.	6.6	87
197	Overcoming diffraction limit: From microscopy to nanoscopy. Applied Spectroscopy Reviews, 2018, 53, 290-312.	6.7	30
198	Realization of Wafer-Scale Hyperlens Device for Sub-diffractional Biomolecular Imaging. ACS Photonics, 2018, 5, 2549-2554.	6.6	50

#	Article	IF	Citations
199	Ultra-Broadband Tungsten Absorber. , 2018, , .		1
200	Experimental verification of asymmetric transmission in continuous omega-shaped metamaterials. RSC Advances, 2018, 8, 38556-38561.	3.6	21
201	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
202	Light Manipulation at Compact Scale via allâ€“Dielectric Metasurfaces. , 2018, , .		2
203	Demonstration of steering acoustic waves by generalized Eaton lens. Applied Physics Letters, 2018, 113, .	3.3	15
204	Recent Advances in Tunable and Reconfigurable Metamaterials. Micromachines, 2018, 9, 560.	2.9	52
205	Thermally robust ring-shaped chromium perfect absorber of visible light. Nanophotonics, 2018, 7, 1827-1833.	6.0	88
206	Highly Efficient Visible Hologram through Dielectric Metasurface. Journal of Physics: Conference Series, 2018, 1092, 012003.	0.4	9
207	Full-space Cloud of Random Points with a Scrambling Metasurface. Light: Science and Applications, 2018, 7, 63.	16.6	112
208	Outfitting Next Generation Displays with Optical Metasurfaces. ACS Photonics, 2018, 5, 3876-3895.	6.6	118
209	Polarisation insensitive multifunctional metasurfaces based on all-dielectric nanowaveguides. Nanoscale, 2018, 10, 18323-18330.	5.6	98
210	Plasmonic metasurface cavity for simultaneous enhancement of optical electric and magnetic fields in deep subwavelength volume. Optics Express, 2018, 26, 13340.	3.4	8
211	Plasmonic-enhanced chirality examined by generalized wavenumber eigenvalue simulation. Optics Express, 2018, 26, 14051.	3.4	8
212	Surface-enhanced circular dichroism by multipolar radiative coupling. Optics Letters, 2018, 43, 2856.	3.3	10
213	Active Color Control in a Metasurface by Polarization Rotation. Applied Sciences (Switzerland), 2018, 8, 982.	2.5	42
214	Geometric metasurface enabling polarization independent beam splitting. Scientific Reports, 2018, 8, 9468.	3.3	53
215	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. Scientific Reports, 2018, 8, 10639.	3.3	59
216	Reliable Ge₂Sb₂Te₅â€Integrated Highâ€Density Nanoscale Conductive Bridge Random Access Memory using Facile Nitrogenâ€Doping Strategy. Advanced Electronic Materials, 2018, 4, 1800360.	5.1	27

#	Article	IF	Citations
217	Tuning the optical and electrical properties of MoS2 by selective Ag photo-reduction. Applied Physics Letters, 2018, 113, .	3.3	17
218	Plasmonic- and dielectric-based structural coloring: from fundamentals to practical applications. Nano Convergence, 2018, 5, 1.	12.1	170
219	Polarization-sensitive tunable absorber in visible and near-infrared regimes. Scientific Reports, 2018, 8, 12393.	3.3	48
220	Visualization and Investigation of Charge Transport in Mixedâ€Halide Perovskite via Lateralâ€Structured Photovoltaic Devices. Advanced Functional Materials, 2018, 28, 1804067.	14.9	27
221	Polarization-controlled coherent phonon generation in acoustoplasmonic metasurfaces. Physical Review B, 2018, 97, .	3.2	20
222	â€œCrypto-Displayâ€•in Dual-Mode Metasurfaces by Simultaneous Control of Phase and Spectral Responses. ACS Nano, 2018, 12, 6421-6428.	14.6	130
223	Dynamic Cryptographic Nanoprints Mediated by Kerkerâ€™s Conditions. , 2018, , .		0
224	Biodegradable MIOM resonator for wide plasmonic coloring using chitosan film. , 2018, , .		0
225	Peptide encoded gigantic chirality evolution in 3D plasmonic helicoids. , 2018, , .		0
226	Micron-scale light structuring via flat nanodevices. , 2018, , .		5
227	Acoustic wave science realized by metamaterials. Nano Convergence, 2017, 4, 3.	12.1	43
228	Photonic spin Hall effect by the spin-orbit interaction in a metasurface with elliptical nano-structures. Applied Physics Letters, 2017, 110, .	3.3	23
229	Demonstration of nanoimprinted hyperlens array for high-throughput sub-diffraction imaging. Scientific Reports, 2017, 7, 46314.	3.3	40
230	The role of current loop in harmonic generation from magnetic metamaterials in two polarizations. Optics Communications, 2017, 401, 66-70.	2.1	3
231	High efficiency second and third harmonic generation from magnetic metamaterials by using a grating. Optics Communications, 2017, 397, 17-21.	2.1	5
232	Demonstration of a Hyperlens-integrated Microscope and Super-resolution Imaging. Journal of Visualized Experiments, 2017, , .	0.3	8
233	Dielectric Meta-Holograms Enabled with Dual Magnetic Resonances in Visible Light. ACS Nano, 2017, 11, 9382-9389.	14.6	157
234	Optical and acoustic metamaterials: superlens, negative refractive index and invisibility cloak. Journal of Optics (United Kingdom), 2017, 19, 084007.	2.2	94

#	Article	IF	Citations
235	Fabrication of three-dimensional suspended, interlayered and hierarchical nanostructures by accuracy-improved electron beam lithography overlay. Scientific Reports, 2017, 7, 6668.	3.3	61
236	A Broadband Optical Diode for Linearly Polarized Light Using Symmetryâ€Breaking Metamaterials. Advanced Optical Materials, 2017, 5, 1700600.	7.3	52
237	High Refractive Index Ti 3 O 5 Films for Dielectric Metasurfaces. Chinese Physics Letters, 2017, 34, 088102.	3.3	7
238	Singlet Exciton Delocalization in Gold Nanoparticle-Tethered Poly(3-hexylthiophene) Nanofibers with Enhanced Intrachain Ordering. Macromolecules, 2017, 50, 8487-8496.	4.8	12
239	Control of light absorbance using plasmonic grating based perfect absorber at visible and near-infrared wavelengths. Scientific Reports, 2017, 7, 2611.	3.3	75
240	Electrically tunable metasurface perfect absorber for infrared frequencies. Nano Convergence, 2017, 4, 36.	12.1	47
241	Development of a hemispherical rotational modulation collimator system for imaging spatial distribution of radiation sources. Journal of Instrumentation, 2017, 12, C12050-C12050.	1.2	3
242	Metasurfaces Based on Phase-Change Material as a Reconfigurable Platform for Multifunctional Devices. Materials, 2017, 10, 1046.	2.9	122
243	Realization of 3D Metamaterial and Plasmonic Devices at Optical Frequencies. , 2017, , .		0
244	Metasurfaces-Based Absorption and Reflection Control: Perfect Absorbers and Reflectors. Journal of Nanomaterials, 2017, 2017, 1-18.	2.7	65
245	Sensitive method for measuring third order nonlinearities in compact dielectric and hybrid plasmonic waveguides. Optics Express, 2016, 24, 545.	3.4	19
246	Nanophotonic modal dichroism: mode-multiplexed modulators. Optics Letters, 2016, 41, 4394.	3.3	13
247	Deep sub-wavelength nanofocusing of UV-visible light by hyperbolic metamaterials. Scientific Reports, 2016, 6, 38645.	3.3	33
248	Challenges in fabrication towards realization of practical metamaterials. Microelectronic Engineering, 2016, 163, 7-20.	2.4	66
249	Towards 3D metamaterials at optical frequencies. , 2016, , .		0
250	Metamaterials and imaging. Nano Convergence, 2015, 2, 22.	12.1	56
251	Predicting nonlinear properties of metamaterials from the linear response. Nature Materials, 2015, 14, 379-383.	27.5	243
252	Ultrafast acousto-plasmonic control and sensing in complex nanostructures. Nature Communications, 2014, 5, 4042.	12.8	84

#	Article	IF	Citations
253	Resonating Metasurface Photon and its Spin Manipulation. , 2014, , .		0
254	Photonic Spin Hall Effect at Metasurfaces. Science, 2013, 339, 1405-1407.	12.6	1,026
255	Mode Matched Harmonic Generation in Plasmonic Nanostructures. , 2013, , .		0
256	Three-dimensional Indefinite Metamaterial Nanocavities with Anomalous Scaling Law. , 2013, , .		0
257	Optical toroidal dipolar response by an asymmetric double-bar metamaterial. Applied Physics Letters, 2012, 101, 144105.	3.3	107
258	Experimental realization of three-dimensional indefinite cavities at the nanoscale with anomalous scaling laws. Nature Photonics, 2012, 6, 450-454.	31.4	316
259	Photoinduced handedness switching in terahertz chiral metamolecules. Nature Communications, 2012, 3, 942.	12.8	407
260	Three-Dimensional Nanoscale Optical Cavities of Indefinite Metamaterial. , 2012, , .		0
261	10.1063/1.4757613.1. , 2012, , .		0
262	Maskless Plasmonic Lithography at 22â€...nm Resolution. Scientific Reports, 2011, 1, 175.	3.3	158
263	Spherical hyperlens for two-dimensional sub-diffractional imaging at visible frequencies. Nature Communications, 2010, 1, 143.	12.8	366