Metallic nanostructures for light trapping in energy-ha

Light: Science and Applications
3, e161-e161
DOI: 10.1038/lsa.2014.42

Citation Report

#	Article	IF	Citations
1	The role of Au nanorods in highly efficient inverted low bandgap polymer solar cells. Applied Physics Letters, 2014, 105, 223305.	1.5	12
2	Hybrid CuO/SnO2 nanocomposites: Towards cost-effective and high performance binder free lithium ion batteries anode materials. Applied Physics Letters, 2014, 105, .	1.5	53
3	Improving charge transport property and energy transfer with carbon quantum dots in inverted polymer solar cells. Applied Physics Letters, 2014, 105, .	1.5	42
4	Light absorption enhancement of â¼100â€‰nm thick poly(3-hexylthiophene) thin-film by embedding silver nanoparticles. Applied Physics Letters, 2014, 105, .	1.5	4
5	A broadband solar absorber with 12â€‰nm thick ultrathin a-Si layer by using random metallic nanomeshes. Applied Physics Letters, 2014, 104, .	1.5	28
6	A low-temperature processed environment-friendly full-organic carrier collection layer for polymer solar cells. Applied Physics Letters, 2014, 105, 053305.	1.5	5
7	Tailoring characteristic thermal stability of Ni-Au binary nanocrystals via structure and composition engineering: theoretical insights into structural evolution and atomic inter-diffusion. AIP Advances, 2014, 4, .	0.6	3
8	Resonant tunneling diodes as energy-selective contacts used in hot-carrier solar cells. Journal of Applied Physics, 2015, 118, .	1.1	32
9	Optimal design of bandpass filters to reduce emission from photovoltaic cells under monochromatic illumination. Japanese Journal of Applied Physics, 2015, 54, 08KA05.	0.8	0
10	Plasmon resonance and perfect light absorption in subwavelength trench arrays etched in gallium-doped zinc oxide film. Applied Physics Letters, 2015, 107, .	1.5	11
11	Improvement in the photocurrent collection due to enhanced absorption of light by synthesizing staggered layers of silver nanoclusters in silicon. AIP Conference Proceedings, 2015, , .	0.3	7
12	Nano Sensing and Energy Conversion Using Surface Plasmon Resonance (SPR). Materials, 2015, 8, 4332-4343.	1.3	12
13	Chalcopyrite Nanoparticles as a Sustainable Thermoelectric Material. Nanomaterials, 2015, 5, 1820-1830.	1.9	8
14	Hierarchic random nanosphere model for broadband solar energy absorbers. Optical Materials Express, 2015, 5, 2777.	1.6	5
15	Enhanced spatial near-infrared modulation of graphene-loaded perfect absorbers using plasmonic nanoslits. Optics Express, 2015, 23, 32318.	1.7	53
16	Nanomaterials for Energy-Efficient Applications. Journal of Nanomaterials, 2015, 2015, 1-2.	1.5	3
17	Tunable plasmonic enhancement of light scattering and absorption in graphene-coated subwavelength wires. Journal of Optics (United Kingdom), 2015, 17, 075001.	1.0	54
18	Controllable assembly of silver nanoparticles induced by femtosecond laser direct writing. Science and Technology of Advanced Materials, 2015, 16, 024805.	2.8	25

#	Article	IF	Citations
19	Highly Conductive Transparent Organic Electrodes with Multilayer Structures for Rigid and Flexible Optoelectronics. Scientific Reports, 2015, 5, 10569.	1.6	77
20	Polarisation-dependent generation of fs-laser induced periodic surface structures. Applied Surface Science, 2015, 331, 150-155.	3.1	78
21	Surface textured Sm0.5Sr0.5CoO3â^'Î´ as light absorber for solar thermoelectric generator. Journal of the European Ceramic Society, 2015, 35, 1343-1348.	2.8	16
22	Improving the efficiency of inverted polymer solar cells by introducing inorganic dopants. Physical Chemistry Chemical Physics, 2015, 17, 7960-7965.	1.3	20
23	Large-Area Plasmonic-Crystalâ€“Hot-Electron-Based Photodetectors. ACS Photonics, 2015, 2, 950-957.	3.2	63
24	Transforming the cost of solar-to-electrical energy conversion: Integrating thin-film GaAs solar cells with non-tracking mini-concentrators. Light: Science and Applications, 2015, 4, e288-e288.	7.7	78
25	Efficiency Improvement of Inverted Organic Solar Cells via Introducing a Series of Polyfluorene Dots in Electron Transport Layer. Journal of Physical Chemistry C, 2015, 119, 16462-16467.	1.5	2
26	Polarization-independent and omnidirectional nearly perfect absorber with ultra-thin 2D subwavelength metal grating in the visible region. Optics Express, 2015, 23, A413.	1.7	74
27	Unraveling the effect of polymer dots doping in inverted low bandgap organic solar cells. Physical Chemistry Chemical Physics, 2015, 17, 16086-16091.	1.3	6
28	The role of phosphor nanoparticles in high efficiency organic solar cells. Synthetic Metals, 2015, 204, 65-69.	2.1	9
29	Enhancing the light-harvesting and charge transport properties of polymer solar cells by embedding NaLuF₄:Yb,Tm nanorods. RSC Advances, 2015, 5, 32891-32896.	1.7	8
30	Plasmonic Thermometer Based on Thermotropic Liquid Crystals. Molecular Crystals and Liquid Crystals, 2015, 614, 93-99.	0.4	11
31	Elucidating the band structure and free charge carrier dynamics of pure and impurities doped CH₃NH₃PbI_{3â^'x}Cl_x perovskite thin films. Physical Chemistry Chemical Physics, 2015, 17, 30084-30089.	1.3	14
32	Ultrathin amorphous silicon thin-film solar cells by magnetic plasmonic metamaterial absorbers. RSC Advances, 2015, 5, 81866-81874.	1.7	22
33	The Performance Enhancement of Polymer Solar Cells by Introducing Cadmium-Free Quantum Dots. Journal of Physical Chemistry C, 2015, 119, 26747-26752.	1.5	25
34	High-performance perovskite solar cells fabricated by vapor deposition with optimized PbI₂ precursor films. RSC Advances, 2015, 5, 95847-95853.	1.7	18
35	Light trapping for silicon photovoltaic cells illuminated by solar-pumped lasersemitting at 1064 nm. Japanese Journal of Applied Physics, 2015, 54, 08KD13.	0.8	1
36	The operation mechanism of poly(9,9-dioctylfluorenyl-2,7-diyl) dots in high efficiency polymer solar cells. Applied Physics Letters, 2015, 106, .	1.5	4

#	Article	IF	Citations
37	Understanding the Thermal Stability of Silver Nanoparticles Embedded in a-Si. Journal of Physical Chemistry C, 2015, 119, 23767-23773.	1.5	16
38	Plasmonic nanopillar coupled two-dimensional random medium for broadband light trapping and harvesting. Journal of Nanophotonics, 2015, 9, 093061.	0.4	8
39	Surface Plasmon Resonance Enhanced Polymer Solar Cells by Thermally Evaporating Au into Buffer Layer. ACS Applied Materials & Interfaces, 2015, 7, 18866-18871.	4.0	45
40	New concept ultraviolet photodetectors. Materials Today, 2015, 18, 493-502.	8.3	661
41	Flexible transparent conductors based on metal nanowire networks. Materials Today, 2015, 18, 143-154.	8.3	209
42	Electrically driven plasmon mediated energy transfer between ZnO microwires and Au nanoparticles. Nanoscale, 2015, 7, 1081-1089.	2.8	18
43	Bio-Inspired Functional Surfaces Based on Laser-Induced Periodic Surface Structures. Materials, 2016, 9, 476.	1.3	178
44	Near perfect light trapping in a 2D gold nanotrench grating at oblique angles of incidence and its application for sensing. Optics Express, 2016, 24, 17259.	1.7	25
45	Silicon-based multilayer gratings with a designable narrowband absorption in the short-wave infrared. Optics Express, 2016, 24, 25103.	1.7	5
46	Novel aluminum plasmonic absorber enhanced by extraordinary optical transmission. Optics Express, 2016, 24, 25885.	1.7	16
47	Large-scale cauliflower-shaped hierarchical copper nanostructures for efficient photothermal conversion. Nanoscale, 2016, 8, 14617-14624.	2.8	106
48	A New Insight of the Photothermal Effect on the Highly Efficient Visible-Light-Driven Photocatalytic Performance of Novel-Designed TiO₂ Rambutan-Like Microspheres Decorated by Au Nanorods. Particle and Particle Systems Characterization, 2016, 33, 140-149.	1.2	25
49	Peptideâ€Modulated Selfâ€Assembly of Chromophores toward Biomimetic Lightâ€Harvesting Nanoarchitectonics. Advanced Materials, 2016, 28, 1031-1043.	11.1	253
50	Enhanced thermal stability and spectral selectivity of SS/TiC-Y/Al 2 O 3 spectrally selective solar absorber by thermal annealing. Solar Energy, 2016, 140, 199-205.	2.9	17
51	Periodic molybdenum disc array for light trapping in amorphous silicon layer. AIP Advances, 2016, 6, 055305.	0.6	2
52	Cobalt stabilization of silver extraordinary optical transmission sensing platforms. Applied Physics Letters, 2016, 108, 043101.	1.5	6
53	Construction of Hierarchical Ni(OH)₂@CoMoO₄ Nanoflake Composite for High-Performance Supercapacitors. Nano, 2016, 11, 1650050.	0.5	9
54	An organosilane self-assembled monolayer incorporated into polymer solar cells enabling interfacial coherence to improve charge transport. Physical Chemistry Chemical Physics, 2016, 18, 16005-16012.	1.3	5

#	Article	IF	Citations
55	Enhanced electron extraction capability of polymer solar cells via modifying the cathode buffer layer with inorganic quantum dots. Physical Chemistry Chemical Physics, 2016, 18, 11435-11442.	1.3	9
56	Colored dual-functional photovoltaic cells. Journal of Optics (United Kingdom), 2016, 18, 064003.	1.0	17
57	Perfect narrow band absorber for sensing applications. Optics Express, 2016, 24, 9288.	1.7	153
58	Versatile dual organic interface layer for performance enhancement of polymer solar cells. Journal of Power Sources, 2016, 333, 99-106.	4.0	17
59	Surface plasmon enhancement of spontaneous emission in graphene waveguides. Journal of Optics (United Kingdom), 2016, 18, 105003.	1.0	22
60	Filtering light with nanoparticles: a review of optically selective particles and applications. Advances in Optics and Photonics, 2016, 8, 541.	12.1	57
61	Broadband perfect light trapping in the thinnest monolayer graphene-MoS2 photovoltaic cell: the new application of spectrum-splitting structure. Scientific Reports, 2016, 6, 20955.	1.6	23
62	An Analytical Formulation Enabling Analysis of Resonance Eigenmodes and Their Interferences in Scattering From Plasmonic Nanostructures, Applications in Engineering the Radiation Loss. IEEE Journal of Quantum Electronics, 2016, 52, 1-9.	1.0	1
63	Spectrally Selective Midâ€Infrared Thermal Emission from Molybdenum Plasmonic Metamaterial Operated up to 1000 Â°C. Advanced Optical Materials, 2016, 4, 1987-1992.	3.6	79
64	Ultrathin continuous lossy metal film for broadband light absorption and hot electron collection. Journal of Photonics for Energy, 2016, 6, 042503.	0.8	2
65	Toward a Highâ€Efficient Utilization of Solar Radiation by Quadâ€Band Solar Spectral Splitting. Advanced Materials, 2016, 28, 10659-10663.	11.1	25
66	Infrared Perfect Ultra-narrow Band Absorber as Plasmonic Sensor. Nanoscale Research Letters, 2016, 11, 483.	3.1	61
67	Electrochemical deposition of Ni-Fe alloys into porous alumina for solar selective absorbers. Superlattices and Microstructures, 2016, 100, 973-982.	1.4	9
68	The Role of Trap-assisted Recombination in Luminescent Properties of Organometal Halide CH3NH3PbBr3 Perovskite Films and Quantum Dots. Scientific Reports, 2016, 6, 27286.	1.6	85
69	Stabilized and Improved Photoelectrochemical Responses of Silicon Nanowires Modified with Ag@SiO₂ Nanoparticles and Crystallized TiO₂ Film. ACS Applied Materials & Interfaces, 2016, 8, 30072-30078.	4.0	14
70	Color tunable low cost transparent heat reflector using copper and titanium oxide for energy saving application. Scientific Reports, 2016, 6, 20182.	1.6	75
71	Organic holographic polymer dispersed liquid crystal distributed feedback laser from different diffraction orders. Journal Physics D: Applied Physics, 2016, 49, 465102.	1.3	16
72	Zeolite Crystals Embedded Nanotextured Coating with Hydrophobic Surface: An Innovation Toward Next Generation Solar Cover Glass for Efficient Lightâ€Harvesting. Advanced Materials Interfaces, 2016, 3, 1500848.	1.9	6

#	Article	IF	Citations
73	Employing inorganic/organic hybrid interface layer to improve electron transfer for inverted polymer solar cells. Electrochimica Acta, 2016, 210, 874-879.	2.6	4
74	Effect of urchin-like gold nanoparticles in organic thin-film solar cells. Physical Chemistry Chemical Physics, 2016, 18, 18500-18506.	1.3	18
75	Solar selective absorbers with foamed nanostructure prepared by hydrothermal method on stainless steel. Solar Energy Materials and Solar Cells, 2016, 146, 99-106.	3.0	36
76	Enhanced Electron Extraction Capability of Polymer Solar Cells via Employing Electrostatically Self-Assembled Molecule on Cathode Interfacial Layer. ACS Applied Materials & Interfaces, 2016, 8, 8224-8231.	4.0	29
77	Performance Improvement of Polymer Solar Cells by Surface-Energy-Induced Dual Plasmon Resonance. ACS Applied Materials & Interfaces, 2016, 8, 6183-6189.	4.0	46
78	Electrodeposition of gold templated by patterned thiol monolayers. Applied Surface Science, 2016, 373, 51-60.	3.1	21
79	Plasmonic nanostructures based on block copolymer templates for efficient organic solar cells. Journal of the Korean Physical Society, 2016, 68, 257-263.	0.3	1
80	Photodynamic assembly of nanoparticles towards designable patterning. Nanoscale Horizons, 2016, 1, 201-211.	4.1	16
81	The role of polymer dots on efficiency enhancement of organic solar cells: Improving charge transport property. Optics Communications, 2017, 395, 127-132.	1.0	6
82	Tunable Salisbury Screen Absorber Using Square Lattice of Plasmonic Nanodisk. Plasmonics, 2017, 12, 257-262.	1.8	29
83	An easily prepared carbon quantum dots and employment for inverted organic photovoltaic devices. Chemical Engineering Journal, 2017, 315, 621-629.	6.6	33
84	Densely packed aluminum-silver nanohelices as an ultra-thin perfect light absorber. Scientific Reports, 2017, 7, 39791.	1.6	18
85	Infrared Plasmonic Refractive Index Sensor with Ultra-High Figure of Merit Based on the Optimized All-Metal Grating. Nanoscale Research Letters, 2017, 12, 1.	3.1	626
86	Boosted Electron Transport and Enlarged Built-In Potential by Eliminating the Interface Barrier in Organic Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 8830-8837.	4.0	25
87	Onâ€¢chip laser processing for the development of multifunctional microfluidic chips. Laser and Photonics Reviews, 2017, 11, 1600116.	4.4	57
88	Improved Optical Field Distribution and Charge Extraction through an Interlayer of Carbon Nanospheres in Polymer Solar Cells. Chemistry of Materials, 2017, 29, 2961-2968.	3.2	8
89	Plasmonic nanomeshes: their ambivalent role as transparent electrodes in organic solar cells. Scientific Reports, 2017, 7, 42530.	1.6	202
90	Backside absorbing layer microscopy: Watching graphene chemistry. Science Advances, 2017, 3, e1601724.	4.7	18

#	Article	IF	Citations
91	Combining light-harvesting with detachability in high-efficiency thin-film silicon solar cells. Nanoscale, 2017, 9, 7169-7178.	2.8	2
92	Graphene Oxide Shells on Plasmonic Nanostructures Lead to High-Performance Photovoltaics: A Model Study Based on Dye-Sensitized Solar Cells. ACS Energy Letters, 2017, 2, 117-123.	8.8	17
93	High-temperature tolerance in WTi-Al 2 O 3 cermet-based solar selective absorbing coatings with low thermal emissivity. Nano Energy, 2017, 37, 232-241.	8.2	108
94	Interface passivation and electron transport improvement of polymer solar cells through embedding a polyfluorene layer. Physical Chemistry Chemical Physics, 2017, 19, 15207-15214.	1.3	8
95	Sunlightâ€Reduced Graphene Oxides as Sensitive Moisture Sensors for Smart Device Design. Advanced Materials Technologies, 2017, 2, 1700045.	3.0	45
96	Effects of amount of benzyl ether and reaction time on the shape and magnetic properties of Fe3O4 nanocrystals. Powder Technology, 2017, 319, 53-59.	2.1	24
97	Plasmon-exciton coupling of monolayer MoS2-Ag nanoparticles hybrids for surface catalytic reaction. Materials Today Energy, 2017, 5, 72-78.	2.5	169
98	Absorption enhancement in nanostructured silicon fabricated by self-assembled nanosphere lithography. Optical Materials, 2017, 70, 165-170.	1.7	19
99	Effect of Cd content and sulfurization on structures and properties of Cd doped Cu2SnS3 thin films. Journal of Alloys and Compounds, 2017, 721, 92-99.	2.8	14
100	Cooperative plasmon enhanced organic solar cells with thermal coevaporated Au and Ag nanoparticles. Organic Electronics, 2017, 48, 336-341.	1.4	20
102	Metamaterial absorber comprising chromiumâ€“gold nanorods-based columnar thin films. Journal of Nanophotonics, 2017, 11, 043505.	0.4	30
103	Dual Roles of the Fullerene Interlayer on Light Harvesting and Electron Transfer for Highly Efficient Polymer Solar Cells. Journal of Physical Chemistry C, 2017, 121, 8722-8730.	1.5	4
104	Mechanism investigation of a narrow-band super absorber using an asymmetric Fabryâ€“Perot cavity. Optical and Quantum Electronics, 2017, 49, 1.	1.5	4
105	Efficient light-trapping with quasi-periodic uniaxial nanowrinkles for thin-film silicon solar cells. Nano Energy, 2017, 35, 341-349.	8.2	16
106	An easily prepared Ag 8 GeS 6 nanocrystal and its role on the performance enhancement of polymer solar cells. Organic Electronics, 2017, 45, 247-255.	1.4	10
107	In situ self-assembly of gold nanoparticles on hydrophilic and hydrophobic substrates for influenza virus-sensing platform. Scientific Reports, 2017, 7, 44495.	1.6	97
108	Waterâ€Resonatorâ€Based Metasurface: An Ultrabroadband and Nearâ€Unity Absorption. Advanced Optical Materials, 2017, 5, 1601103.	3.6	112
109	Shrinkage Control of Photoresist for Largeâ€Area Fabrication of Subâ€30 nm Periodic Nanocolumns. Advanced Materials Technologies, 2017, 2, 1600238.	3.0	23

#	Article	IF	Citations
110	High performance Alâ€“AlN solar spectrally selective coatings with a self-assembled nanostructure AlN anti-reflective layer. Journal of Materials Chemistry A, 2017, 5, 2852-2860.	5.2	40
111	Aqueousâ€Processed Polymer/Nanocrystals Hybrid Solar Cells: The Effects of Chlorine on the Synthesis of CdTe Nanocrystals, Crystal Growth, Defect Passivation, Photocarrier Dynamics, and Device Performance. Solar Rrl, 2017, 1, 1600020.	3.1	24
112	Inverted organic solar cells enhanced by grating-coupled surface plasmons and waveguide modes. Physical Chemistry Chemical Physics, 2017, 19, 2791-2796.	1.3	21
113	Orienting the Microstructure Evolution of Copper Phthalocyanine as an Anode Interlayer in Inverted Polymer Solar Cells for High Performance. ACS Applied Materials & Interfaces, 2017, 9, 32044-32053.	4.0	6
114	Scalable, â€œDipâ€•andâ€Dryâ€•Fabrication of a Wideâ€Angle Plasmonic Selective Absorber for Highâ€Efficiency Solarâ€“Thermal Energy Conversion. Advanced Materials, 2017, 29, 1702156.	11.1	119
115	Hybrid Plasmonic Modes in Multilayer Trench Grating Structures. Advanced Optical Materials, 2017, 5, 1700496.	3.6	16
116	Investigation of Gold Quantum Dot Enhanced Organic Thin Film Solar Cells. Particle and Particle Systems Characterization, 2017, 34, 1700133.	1.2	10
117	Impedance investigation of the highly efficient polymer solar cells with composite CuBr₂/MoO₃hole transport layer. Physical Chemistry Chemical Physics, 2017, 19, 20839-20846.	1.3	25
118	Fractal to monolayer growth of AgCl and Ag/AgCl nanoparticles on vanadium oxides (VO_x) for visible-light photocatalysis. Journal of Materials Chemistry A, 2017, 5, 16953-16963.	5.2	23
119	Nanostructures induced light harvesting enhancement in organic photovoltaics. Nanophotonics, 2017, 7, 371-391.	2.9	32
120	Greatly enhanced light emission of MoS2 using photonic crystal heterojunction. Scientific Reports, 2017, 7, 16391.	1.6	18
121	Exact long-wavelength plasmon dispersion on a ring with soft Coulomb interactions. Physica Scripta, 2017, 92, 095802.	1.2	2
122	Upconversion manipulation by local electromagnetic field. Nano Today, 2017, 17, 54-78.	6.2	103
123	Electrooptical Synergy on Plasmonâ€“Excitonâ€Codriven Surface Reduction Reactions. Advanced Materials Interfaces, 2017, 4, 1700869.	1.9	91
125	General Strategy toward Dual-Scale-Controlled Metallic Microâ€“Nano Hybrid Structures with Ultralow Reflectance. ACS Nano, 2017, 11, 7401-7408.	7.3	117
126	Sputter-deposited low reflectance vanadium oxide-molybdenum oxide thin films on silicon. Infrared Physics and Technology, 2017, 85, 273-279.	1.3	3
127	Effects of the size of NiO nanoparticles on the catalytic oxidation of Quinolin-65 as an asphaltene model compound. Fuel, 2017, 207, 423-437.	3.4	27
128	Improving the charge carrier transport of organic solar cells by incorporating a deep energy level molecule. Physical Chemistry Chemical Physics, 2017, 19, 245-250.	1.3	22

#	Article	IF	Citations
129	Features of electronic and lattice mechanisms of transboundary heat transfer in multilayer nanolaminate TiAlN/Ag coatings. Scientific Reports, 2017, 7, 17078.	1.6	3
130	Light modulation in phase change disordered metamaterial - A smart cermet concept. Materials Today Physics, 2017, 3, 41-47.	2.9	6
131	Boosting electron extraction of inverted polymer solar cells using solution-processed nanocrystals as cathode interlayer. Electrochimica Acta, 2017, 258, 477-484.	2.6	0
132	Broadband absorber with periodically sinusoidally-patterned graphene layer in terahertz range. Optics Express, 2017, 25, 11223.	1.7	191
133	Au nanostructure fabrication by pulsed laser deposition in open air: Influence of the deposition geometry. Beilstein Journal of Nanotechnology, 2017, 8, 2438-2445.	1.5	21
134	Light trapping for photovoltaic cells using polarization-insensitive angle-selective filters under monochromatic illumination. Applied Optics, 2017, 56, 5761.	0.9	6
135	Fabrication of an anti-reflective microstructure on sapphire by femtosecond laser direct writing. Optics Letters, 2017, 42, 543.	1.7	57
136	Plasmonic Thin Film Solar Cells. , 2017, , .		5
137	High-order optical nonlinearities in plasmonic nanocompositesâ€"a review. Advances in Optics and Photonics, 2017, 9, 720.	12.1	83
138	Electrophoretic Coating of Octahedral Molybdenum Metal Clusters for UV/NIR Light Screening. Coatings, 2017, 7, 114.	1.2	13
139	Dual-band plasmonic perfect absorber based on all-metal nanostructure for refractive index sensing application. Materials Letters, 2018, 219, 123-126.	1.3	84
140	Analysis of localized surface plasmon resonances in gold nanoparticles surrounded by copper oxides. Journal of Applied Physics, 2018, 123, .	1.1	6
141	Performances Enhancement of aâ€Si:H Thin Film Photovoltaic Cells by Incorporating Silver Nanoparticles. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700953.	0.8	0
142	Transparent heat regulating (THR) materials and coatings for energy saving window applications: Impact of materials design, micro-structural, and interface quality on the THR performance. Progress in Materials Science, 2018, 95, 42-131.	16.0	128
143	Grapheneâ€"Silver Hybrid Metamaterial for Tunable and High Absorption at Mid-Infrared Waveband. IEEE Photonics Technology Letters, 2018, 30, 475-478.	1.3	17
144	Broad-spectrum enhanced absorption of graphene-molybdenum disulfide photovoltaic cells in metal-mirror microcavity. Nanotechnology, 2018, 29, 144001.	1.3	12
145	Plasmon dispersion in a multilayer solid torus in terms of three-term vector recurrence relations and matrix continued fractions. Journal of Physics Communications, 2018, 2, 015031.	0.5	4
146	Additive manufacturing of 3D nano-architected metals. Nature Communications, 2018, 9, 593.	5.8	372

#	Article	IF	Citations
147	Broadband Plasmonic Antenna Enhanced Upconversion and Its Application in Flexible Fingerprint Identification. Advanced Optical Materials, 2018, 6, 1701119.	3.6	32
148	Insight on agglomerates of gold nanoparticles in glass based on surface plasmon resonance spectrum: study by multi-spheres T-matrix method. Journal of Physics Condensed Matter, 2018, 30, 045901.	0.7	12
149	Simple Inverted Annealing Process to Improve Charge Transport Capability of Organic Photovoltaic Devices with Thick Active Layers. Journal of Physical Chemistry C, 2018, 122, 10706-10713.	1.5	4
150	Boosting Terahertz Photoconductive Antenna Performance with Optimised Plasmonic Nanostructures. Scientific Reports, 2018, 8, 6624.	1.6	69
151	Ultrathin solar cells with Ag meta-material nanostructure for light absorption enhancement. Solar Energy, 2018, 166, 98-102.	2.9	22
152	Two step synthesis of ZnO/Ag and ZnO/Au core/shell nanocomposites: Structural, optical and electrical property analysis. Journal of Alloys and Compounds, 2018, 750, 171-181.	2.8	65
153	Structure, optical and electrical properties of (Cu1-xAgx)2ZnSn(S,Se)4 alloy thin films for photovoltaic application. Materials Science in Semiconductor Processing, 2018, 81, 54-59.	1.9	17
154	Enhanced Nonlinear Optical Response of Resonantly Coupled Silver Nanoparticleâ€“Organic Dye Complexes. Plasmonics, 2018, 13, 749-755.	1.8	3
155	Actuator and generator based on moisture-responsive PEDOT: PSS/PVDF composite film. Sensors and Actuators B: Chemical, 2018, 255, 1415-1421.	4.0	52
156	Gradient metasurfaces: a review of fundamentals and applications. Reports on Progress in Physics, 2018, 81, 026401.	8.1	374
157	The PVDF-HFP gel polymer electrolyte for Li-O 2 battery. Solid State Ionics, 2018, 318, 88-94.	1.3	93
158	Boosting Electron Extraction in Polymer Solar Cells by Introducing a N-Type Organic Semiconductor Interface Layer. Journal of Physical Chemistry C, 2018, 122, 207-215.	1.5	8
159	Solar Photothermal Disinfection using Broadband-Light Absorbing Gold Nanoparticles and Carbon Black. Environmental Science & Technology, 2018, 52, 205-213.	4.6	107
160	A solution-processed binary cathode interfacial layer facilitates electron extraction for inverted polymer solar cells. Journal of Colloid and Interface Science, 2018, 514, 328-337.	5.0	6
161	Quantifying Parasitic Losses From Metal Scattering Structures in Solar Cells: How Uncertainty in Optical Constants Affects Simulation Results. , 2018, , .		0
162	Performances of a metamaterial based on semiconductors for solar cell applications. , 2018, , .		0
163	Thermodynamic stability, half-metallic and optical nature of graphene-like Mn2 ZrZ (Z = Ge, Si): Ab initio study. International Journal of Modern Physics B, 2018, 32, 1850324.	1.0	2
164	Ultra-narrow-band multi-channel perfect absorber based on optical Tamm states in metal-dielectric-metal waveguid. , 2018, , .		0

#	Article	IF	Citations
165	Plasmonic Metasurface Absorber Based on Electro-Optic Substrate for Energy Harvesting. Materials, 2018, 11, 2315.	1.3	32
166	Structurally tunable plasmonic absorption bands in a self-assembled nano-hole array. Nanoscale, 2018, 10, 19117-19124.	2.8	22
167	Optical and Electrical Properties of Copper Zinc Tin Sulfide Films As Solar Cell Absorber Materials Prepared by a Compacting Process. Russian Journal of Physical Chemistry A, 2018, 92, 2086-2091.	0.1	1
168	Increased Optical Absorption and Lightâ€“Matter Interaction in Silicon Thin-Film Solar Cell Nanostructure Using Graphene and 2-D Au/Ag Nanograting. IEEE Journal of Quantum Electronics, 2018, 54, 1-12.	1.0	12
169	Numerical Study on the Absorption Characteristics of Subwavelength Metallic Gratings Covered with a Lossy Dielectric Layer. Applied Sciences (Switzerland), 2018, 8, 1445.	1.3	0
170	Toward Efficient Carbon-Dots-Based Electron-Extraction Layer Through Surface Charge Engineering. ACS Applied Materials & Interfaces, 2018, 10, 40255-40264.	4.0	12
171	Strong Lightâ€“Matter Interaction in Lithography-Free Planar Metamaterial Perfect Absorbers. ACS Photonics, 2018, 5, 4203-4221.	3.2	96
172	Surface plasmon modes of nanomesh-on-mirror nanocavities prepared by nanosphere lithography. Nanoscale, 2018, 10, 17983-17989.	2.8	14
173	Novel structure of AgInS2 compound under high pressure: First principles calculations. Solid State Communications, 2018, 284-286, 20-24.	0.9	4
174	Passivation effect of composite organic interlayer on polymer solar cells. Organic Electronics, 2018, 63, 129-136.	1.4	4
175	Crystalline silicon photovoltaic cells used for power transmission from solar-pumped lasers: I. Light trapping concepts. Japanese Journal of Applied Physics, 2018, 57, 08RF05.	0.8	1
176	Formation and dynamics of Au nanoparticles in a silica-glass: synergistic effects of temperature and fluences of ion irradiations. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	2
177	A review of gap-surface plasmon metasurfaces: fundamentals and applications. Nanophotonics, 2018, 7, 1129-1156.	2.9	250
178	Eliminating light soaking effect of inverted polymer solar cells functionalized with a conjugated macroelectrolyte electron-collecting interlayer. Electrochimica Acta, 2018, 281, 218-226.	2.6	3
179	Reducing charge recombination of polymer solar cells by introducing composite anode buffer layer. Solar Energy, 2018, 171, 8-15.	2.9	12
180	Multilayered metal-dielectric film structure for highly efficient solar selective absorption. Materials Research Express, 2018, 5, 066428.	0.8	24
181	Dual-band nearly perfect absorber at visible frequencies. Optical Materials Express, 2018, 8, 463.	1.6	46
182	Plasmonic Black Metasurface by Transfer Printing. Advanced Materials Technologies, 2018, 3, 1800124.	3.0	8

#	Article	IF	Citations
183	Light Harvesting in Organic Solar cells. , 2018, , 292-308.		0
184	Thermoplasmonic and Photothermal Metamaterials for Solar Energy Applications. Advanced Optical Materials, 2018, 6, 1800317.	3.6	48
185	Self-doped Wâ€“WO_x nanocermet multilayer films fabricated by single tungsten target reactive sputtering for selective solar absorption. Journal of Materials Chemistry A, 2018, 6, 15690-15700.	5.2	41
186	Patternable fabrication of hyper-hierarchical metal surface structures for ultrabroadband antireflection and self-cleaning. Applied Surface Science, 2018, 457, 991-999.	3.1	30
187	Low-temperature hydrothermal fabrication of Fe3O4 nanostructured solar selective absorption films. Applied Surface Science, 2018, 458, 629-637.	3.1	21
188	Optically Graded Ultra Dark Absorber for Visible and Near-infrared Wavelength Range. Scientific Reports, 2018, 8, 12312.	1.6	9
189	An easily prepared self-assembled interface layer upon active layer doping facilitates charge transfer in polymer solar cells. Electrochimica Acta, 2018, 285, 365-372.	2.6	5
190	Broadband light absorption of an Al semishell-MIM nanostrucure in the UV to near-infrared regions. Optics Letters, 2018, 43, 2981.	1.7	12
191	Half-metallic carbon nitride nanosheets with micro grid mode resonance structure for efficient photocatalytic hydrogen evolution. Nature Communications, 2018, 9, 3366.	5.8	219
192	Green mediated synthesis of plasmonic nanoparticle (Ag) for antireflection coating in bare mono silicon solar cell. Journal of Materials Science: Materials in Electronics, 2018, 29, 12744-12753.	1.1	22
193	A Broadband Plasmonic Metasurface Superabsorber at Optical Frequencies: Analytical Design Framework and Demonstration. Advanced Optical Materials, 2018, 6, 1800253.	3.6	29
194	An active metamaterials controlled by structured light illumination. Optik, 2018, 171, 204-209.	1.4	2
195	Design and simulation of a novel nano-plasmonic split-ring resonator filter. Journal of Electromagnetic Waves and Applications, 2018, 32, 1925-1938.	1.0	15
196	Design of a broadband infrared metamaterial absorber. Optik, 2018, 170, 535-539.	1.4	11
197	Upconversion enhancement of NaYF4:Yb3+, Tm3+ by coupling with broadband plasmonic Ag nanowires antenna. Journal of Luminescence, 2019, 215, 116682.	1.5	2
198	Active Plasmonic Metamaterial Absorbers Using Graphene. , 2019, , .		0
199	Microlens array enhanced upconversion luminescence at low excitation irradiance. Nanoscale, 2019, 11, 14070-14078.	2.8	41
200	The power conversion efficiency optimization of the solar cells by doping of (Au:Ag) nanoparticles into P3HT:PCBM active layer prepared with chlorobenzene and chloroform solvents. Materials Research Express, 2019, 6, 095104.	0.8	19

#	Article	IF	Citations
201	Polarization-Independent Perfect Optical Metamaterial Absorber as a Glucose Sensor in Food Industry Applications. IEEE Transactions on Nanobioscience, 2019, 18, 622-627.	2.2	107
202	Hybrid Nanostructured Antireflection Coating by Self-Assembled Nanosphere Lithography. Coatings, 2019, 9, 453.	1.2	15
203	Alkali metal salts doped ZnO interfacial layers facilitate charge transport for organic solar cells. Organic Electronics, 2019, 74, 258-264.	1.4	11
204	Tunable Perfect Narrow-Band Absorber Based on a Metal-Dielectric-Metal Structure. Coatings, 2019, 9, 393.	1.2	21
205	Photonic Metamaterial Absorbers: Morphology Engineering and Interdisciplinary Applications. Advanced Materials, 2020, 32, e1903787.	11.1	116
206	Improved LSPR Properties of Agâ€“Pt and Pt Nanoparticles: A Systematic Study on Various Configurations and Compositions of NPs via the Solid-State Dewetting of Agâ€“Pt Bilayers. Metals, 2019, 9, 1011.	1.0	6
207	Investigation of phase transformations and corrosion resistance in Co/CoCo2O4 nanowires and their potential use as a basis for lithium-ion batteries. Scientific Reports, 2019, 9, 16646.	1.6	43
208	Design and Fabrication of a Multifunctional Flexible Absorber (Flexorb) in the UVâ€“Visâ€“NIR Wavelength Range. Advanced Materials Technologies, 2019, 4, 1900513.	3.0	7
209	Preparation of BiFeO3-overcoated TiO2 nanorod arrays for the enhanced visible-light activity. Materials Research Express, 2019, 6, 1050c6.	0.8	5
210	Efficient perovskite solar cells enabled by ion-modulated grain boundary passivation with a fill factor exceeding 84%. Journal of Materials Chemistry A, 2019, 7, 22359-22365.	5.2	33
211	A high-performance cupric oxide photocatalyst with palladium light trapping nanostructures and a hole transporting layer for photoelectrochemical hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 22332-22345.	5.2	20
212	Fullerene derivative layer induced phase separation and charge transport improvement for inverted polymer solar cells. Thin Solid Films, 2019, 690, 137559.	0.8	3
213	Highly Flexible and Voltage Based Wavelength Tunable Biosensor. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800633.	0.8	6
214	Spiers Memorial Lecture : Introductory lecture: Hot-electron science and microscopic processes in plasmonics and catalysis. Faraday Discussions, 2019, 214, 13-33.	1.6	27
215	Biomass-derived solar-to-thermal materials: promising energy absorbers to convert light to mechanical motion. Journal of Materials Chemistry A, 2019, 7, 4002-4008.	5.2	32
216	Vanadium Oxide as a Key Constituent in Reconfigurable Metamaterials. , 2019, , .		1
217	Size and shape control of a variety of metallic nanostructures using tilted, rotating evaporation and lithographic lift-off techniques. Scientific Reports, 2019, 9, 7682.	1.6	16
218	Fabrication of Functional Nanophotonic Devices via Multiphoton Polymerization. ACS Symposium Series, 2019, , 151-171.	0.5	3

#	Article	IF	Citations
219	Metal nanostructures for solar cells. , 2019, , 447-511.		2
220	Stimuli-Responsive DNA-Linked Nanoparticle Arrays as Programmable Surfaces. Nano Letters, 2019, 19, 4535-4542.	4.5	12
221	Multiple Epsilon-Near-Zero Resonances in Multilayered Cadmium Oxide: Designing Metamaterial-Like Optical Properties in Monolithic Materials. ACS Photonics, 2019, 6, 1139-1145.	3.2	33
222	Anti-reflective and anticorrosive properties of laser-etched titanium sheet in different media. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	13
223	Largeâ€Area Lowâ€Cost Dielectric Perfect Absorber by Oneâ€Step Sputtering. Advanced Optical Materials, 2019, 7, 1801596.	3.6	19
225	Overcoming intrinsic defects of the hole transport layer with optimized carbon nanorods for perovskite solar cells. Nanoscale, 2019, 11, 8776-8784.	2.8	9
226	Absorption Enhancement of GaAs Thin-Film Solar Cells Using Tapered Metal Nanoantenna Structures. Wireless Personal Communications, 2019, 106, 1659-1667.	1.8	5
227	Solution-Based Fast Fabrication of a High-Performance Unlimited Area Au Nanostructure/Si Heterojunction Photodetector. ACS Applied Electronic Materials, 2019, 1, 577-584.	2.0	10
228	Facilitating electron extraction of inverted polymer solar cells by using organic/inorganic/organic composite buffer layer. Organic Electronics, 2019, 68, 187-192.	1.4	7
229	Reactive magnetron sputter-deposited TiNxOy multilayered solar selective coatings. Solar Energy, 2019, 181, 178-186.	2.9	16
230	Highly efficient and tunable selective absorber design based on metallic nanoparticles in a graded index dielectric. EPJ Applied Metamaterials, 2019, 6, 7.	0.8	0
231	Strategies for Modifying TiO₂ Based Electron Transport Layers to Boost Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 4586-4618.	3.2	83
232	Chalcogenide Glass for Infrared Meta-Absorber. , 2019, , .		0
233	Nanoplasmonic Quasi Crystal Metascreen Optimized for Efficient Light Absorption. , 2019, , .		0
234	Improved localized surface plasmon resonance responses of multi-metallic Ag/Pt/Au/Pd nanostructures: systematic study on the fabrication mechanism and localized surface plasmon resonance properties by solid-state dewetting. New Journal of Physics, 2019, 21, 113049.	1.2	9
235	Enhanced Localized Surface Plasmon Resonance of Fully Alloyed AgAuPdPt, AgAuPt, AuPt, AgPt, and Pt Nanocrystals: Systematical Investigation on the Morphological and LSPR Properties of Mono-, Bi-, Tri-, and Quad-Metallic Nanoparticles. ACS Omega, 2019, 4, 17340-17351.	1.6	17
236	Study of photovoltaic solar materials development trend by deductive logic method using big data. IOP Conference Series: Materials Science and Engineering, 2019, 628, 012013.	0.3	0
237	Photorealistic modelling of metals from first principles. Npj Computational Materials, 2019, 5, .	3.5	21

#	Article	IF	Citations
238	Broadband absorption enhancement of graphene in the ultraviolet range based on metal-dielectric-metal configuration. Journal of Applied Physics, 2019, 126, .	1.1	11
239	An In-situ Transmission X-ray Microscope to Observe the Dewetting Process of Au Thin Films induced by Nanosecond Pulsed Laser Irradiation. Journal of the Korean Physical Society, 2019, 75, 523-527.	0.3	0
240	Free-standing SnO₂@C/MWCNTs paper as anode for lithium-ion batteries. Materials Research Express, 2019, 6, 125511.	0.8	0
241	Stretchable and colorless freestanding microwire arrays for transparent solar cells with flexibility. Light: Science and Applications, 2019, 8, 121.	7.7	51
242	Nanomaterials for the water-energy nexus. MRS Bulletin, 2019, 44, 59-66.	1.7	39
243	Plasmonic absorber and nanosensor assisted by metal films coupled with hexagonal holes array. Optik, 2019, 181, 115-122.	1.4	3
244	Laser dewetting behaviors of Ag and Au thin films on glass and Si substrates: Experiments and theoretical considerations. Applied Surface Science, 2019, 475, 740-747.	3.1	25
245	Microstructure and plasmonic behavior of self-assembled silver nanoparticles and nanorings. Journal of Applied Physics, 2019, 125, .	1.1	9
246	Ultra-black superhydrophobic multilayer broadband optical absorber. MRS Advances, 2019, 4, 163-168.	0.5	7
247	Facile preparation of broadband absorbers based on patternable candle soot for applications of optical sensors. Sensors and Actuators A: Physical, 2019, 285, 111-117.	2.0	13
248	A potential photovoltaic material for dye sensitized solar cells based BaCe2(MoO4)4 doped Er3+/Yb3+ nanostructures. Journal of Cleaner Production, 2019, 209, 762-768.	4.6	6
249	Synthetical dispersion engineering in plasmonic metamaterial absorber for broadband absorption enhancement. Journal Physics D: Applied Physics, 2019, 52, 085103.	1.3	15
250	The Hydrogen Effect on the Electronic and Optical Behavior of SiC:Mn(5,0) NT: by DFT. Silicon, 2020, 12, 339-346.	1.8	0
251	Cations Functionalized Carbon Nanoâ€Dots Enabling Interfacial Passivation and Crystallization Control for Inverted Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900369.	3.1	16
252	Realizing efficiency improvement of polymer solar cells by using multi-functional cascade electron transport layers. Organic Electronics, 2020, 76, 105482.	1.4	5
253	Three-dimensional macroporous photonic crystal enhanced photon collection for quantum dot-based luminescent solar concentrator. Nano Energy, 2020, 67, 104217.	8.2	29
254	Nanoplasmonic Light Trapping Metascreen Encompassing Spectrally Dense Region of Solar Spectrum. Plasmonics, 2020, 15, 861-867.	1.8	2
255	Ultra-broadband metamaterial absorber in long wavelength Infrared band based on resonant cavity modes. Optics Communications, 2020, 459, 124948.	1.0	26

#	Article	IF	Citations
256	Direct Z-Scheme WO₃/Graphitic Carbon Nitride Nanocomposites for the Photoreduction of CO₂. ACS Applied Nano Materials, 2020, 3, 1298-1306.	2.4	104
257	Near perfect thin film flexible broadband optical absorber with high thermal/electrical conductivity. Journal of Applied Polymer Science, 2020, 137, 48855.	1.3	8
258	Performance improvement of planar perovskite solar cells with cobalt-doped interface layer. Applied Surface Science, 2020, 507, 145081.	3.1	22
259	Improving the performance of perovskite solar cells by surface passivation. Journal of Energy Chemistry, 2020, 46, 202-207.	7.1	31
260	Template- and Magnetic Field-Free Chemical Reduction of Ni Nanochains for Niâ€“Al₂O₃ Cermet Films: Growth Control, Characterization, and Application. ACS Omega, 2020, 5, 24584-24591.	1.6	3
261	Photonic Fractal Metamaterials: A Metalâ€“Semiconductor Platform with Enhanced Volatileâ€Compound Sensing Performance. Advanced Materials, 2020, 32, e2002471.	11.1	27
262	Thermo-optical performance of iron-doped gold nanoshells-based nanofluid on direct absorption solar collectors. Solar Energy, 2020, 208, 1181-1188.	2.9	31
263	Solar thermal harvesting based on self-doped nanocermet: Structural merits, design strategies and applications. Renewable and Sustainable Energy Reviews, 2020, 134, 110277.	8.2	56
264	Advances in piezoelectric halide perovskites for energy harvesting applications. Journal of Materials Chemistry A, 2020, 8, 24353-24367.	5.2	45
265	Design of Transparent Metasurfaces Based on Asymmetric Nanostructures for Directional and Selective Absorption. Materials, 2020, 13, 3751.	1.3	9
266	Synthesized Z-scheme photocatalyst ZnO/g-C3N4 for enhanced photocatalytic reduction of CO2. New Journal of Chemistry, 2020, 44, 16390-16399.	1.4	26
267	Gold Nano-Island Platforms for Localized Surface Plasmon Resonance Sensing: A Short Review. Molecules, 2020, 25, 4661.	1.7	26
268	Light trapping for photovoltaic cells used for optical power transmission. Applied Physics Express, 2020, 13, 054001.	1.1	3
269	Magnetic force assisted thermal nanoimprint lithography (MF-TNIL) for cost-effective fabrication of 2D nanosquare array. Nano Express, 2020, 1, 010039.	1.2	2
270	Using Synergy Approach To investigate the developmental trends of Solar Energy. IOP Conference Series: Materials Science and Engineering, 2020, 720, 012003.	0.3	0
271	Preparation and characterization of nanocomposite of Co:CuO by radio-frequency sputtering for solar selective absorber application. Thin Solid Films, 2020, 709, 138199.	0.8	16
272	Carbon-based absorbers for solar evaporation: Steam generation and beyond. Sustainable Materials and Technologies, 2020, 25, e00182.	1.7	35
273	Color Gamut Behavior in Epsilon Nearâ€Zero Nanocavities during Propagation of Gap Surface Plasmons. Advanced Optical Materials, 2020, 8, 2000487.	3.6	29

#	Article	IF	Citations
274	Nanomolded buried light-scattering (BLiS) back-reflectors using dielectric nanoparticles for light harvesting in thin-film silicon solar cells. EPJ Photovoltaics, 2020, 11, 2.	0.8	2
275	Bioinspired One-Step Synthesis of Pomegranate-like Silica@Gold Nanoparticles with Surface-Enhanced Raman Scattering Activity. Langmuir, 2020, 36, 2553-2562.	1.6	8
276	Plasmon-Assisted Crystalline Silicon Solar Cell with TiO2 as Anti-Reflective Coating. Plasmonics, 2020, 15, 1091-1101.	1.8	8
277	Direct Crystallization of Proteins from Impure Sources. Crystal Growth and Design, 2020, 20, 1694-1705.	1.4	11
278	Incorporating self-assembled silane-crosslinked carbon dots into perovskite solar cells to improve efficiency and stability. Journal of Materials Chemistry A, 2020, 8, 5629-5637.	5.2	23
279	Reactions of titanium alkoxide with SiH containing polymers as a route to titanium/siloxane hybrid materials with enhanced refractive index. Applied Organometallic Chemistry, 2020, 34, e5571.	1.7	8
280	Broadband Visible and Near-Infrared Absorbers Implemented with Planar Nanolayered Stacks. ACS Applied Nano Materials, 2020, 3, 2978-2986.	2.4	25
281	Broad spectrum light-trapping ternary polymer solar cells based on self-assembled nano-ridged active layer. Solar Energy, 2020, 198, 1-7.	2.9	4
282	Optical Metasurfaces Are Coming of Age: Short- and Long-Term Opportunities for Commercial Applications. ACS Photonics, 2020, 7, 1323-1354.	3.2	35
283	Thermo-responsive functionalized PNIPAM@Ag/Ag3PO4/CN-heterostructure photocatalyst with switchable photocatalytic activity. Chinese Journal of Catalysis, 2020, 41, 1573-1588.	6.9	21
284	Improving light harvesting and charge extraction of polymer solar cells upon buffer layer doping. Solar Energy, 2020, 202, 80-85.	2.9	10
285	Recent process of plasma effect in organic solar cells. Journal of Energy Chemistry, 2021, 52, 181-190.	7.1	6
286	Wellâ€Đefined Nanostructures for Electrochemical Energy Conversion and Storage. Advanced Energy Materials, 2021, 11, 2001537.	10.2	102
287	Understanding the Electrical Behavior of Pyrolyzed Threeâ€Đimensionalâ€Printed Microdevices. Advanced Engineering Materials, 2021, 23, 2001027.	1.6	4
288	Reactively sputtered cobalt oxide coatings for solar selective absorber applications. Materials Today: Proceedings, 2021, 39, 1157-1162.	0.9	2
289	Spectrally Selective Absorbers/Emitters for Solar Steam Generation and Radiative Coolingâ€Enabled Atmospheric Water Harvesting. Global Challenges, 2021, 5, 2000058.	1.8	34
290	Relaxation Dynamics of Enhanced Hot-Electron Flow on Perovskite-Coupled Plasmonic Silver Schottky Nanodiodes. Journal of Physical Chemistry C, 2021, 125, 2575-2582.	1.5	7
291	Active Tuning from Narrowband to Broadband Absorbers Using a Sub-wavelength VO2 Embedded Layer. Plasmonics, 2021, 16, 1013-1021.	1.8	32

#	Article	IF	Citations
292	Nanomaterials in renewable energy: UV-Visible spectroscopy characterization and applications. , 2021, , 103-120.		1
293	A Triple-Mode Midinfrared Modulator for Radiative Heat Management of Objects with Various Emissivity. Nano Letters, 2021, 21, 4106-4114.	4.5	36
294	Nanomaterials and Essential Oils as Candidates for Developing Novel Treatment Options for Bovine Mastitis. Animals, 2021, 11, 1625.	1.0	14
295	A review of spectral controlling for renewable energy harvesting and conserving. Materials Today Physics, 2021, 18, 100388.	2.9	31
296	Efficient Photothermal Generation by Nanoscale Light Trapping in a Forest of Silicon Nanowires. Journal of Physical Chemistry C, 2021, 125, 14134-14140.	1.5	14
297	Broadband long-wave infrared metamaterial absorber based on single-sized cut-wire resonators. Optics Express, 2021, 29, 20275.	1.7	28
298	Metamaterial perfect absorber with morphology-engineered meta-atoms using deep learning. Optics Express, 2021, 29, 19955.	1.7	24
299	Ultraviolet-Printing-Assisted Surface-Confined Growth of Silver Nanoparticles on Flexible Polymer Films for Cu²⁺ and H₂S Sensing. ACS Applied Nano Materials, 2021, 4, 8200-8216.	2.4	1
300	On the Localized Surface Plasmonic Resonances of AgPd Alloy Nanoparticles by Experiment and Theory. Coatings, 2021, 11, 893.	1.2	3
301	Robust and Scalable Flatâ€Optics on Flexible Substrates via Evolutionary Neural Networks. Advanced Intelligent Systems, 2021, 3, 2100105.	3.3	13
302	Polarization-dependent broadband absorber based on composite metamaterials in the long-wavelength infrared range. Optics Express, 2021, 29, 36111.	1.7	10
303	Biosynthesis and Cytotoxic Properties of Ag, Au, and Bimetallic Nanoparticles Synthesized Using Lithospermum erythrorhizon Callus Culture Extract. International Journal of Molecular Sciences, 2021, 22, 9305.	1.8	18
304	Easily Prepared Transparent Electrodes for Low-Cost Semitransparent Inverted Polymer Solar Cells. Energies, 2021, 14, 5837.	1.6	0
305	Effects of nanoparticle structural features on the light-matter interactions in nanocermet layers and cermet-based solar absorbers. Journal of Materiomics, 2021, 7, 1103-1111.	2.8	7
306	Copperâ€“zinc oxide heterojunction catalysts exhibiting enhanced photocatalytic activity prepared by a hybrid deposition method. RSC Advances, 2021, 11, 10224-10234.	1.7	9
307	A near infrared plasmonic perfect absorber as a sensor for hemoglobin concentration detection. Optical and Quantum Electronics, 2021, 53, 1.	1.5	21
308	Broadband refractory plasmonic absorber without refractory metals for solar energy conversion. Journal Physics D: Applied Physics, 2021, 54, 094001.	1.3	8
309	Theory of electron energy-loss spectroscopy in atomically thin metallic films. Physical Review Research, 2020, 2, .	1.3	6

#	Article	IF	Citations
310	Cavity-driven hybrid plasmonic ultra-narrow bandpass filter. Optics Express, 2019, 27, 20397.	1.7	16
311	Interaction and hybridization of orthogonal Fabry-PÃ©rot like surface plasmon modes in metal-dielectric grating structures. Optics Express, 2020, 28, 3541.	1.7	8
312	Linewidth reduction effect of a cavity-coupled dual-passband plasmonic filter. Optics Express, 2020, 28, 8753.	1.7	6
313	Structural and optical properties of monocrystalline and polycrystalline gold plasmonic nanorods. Optics Express, 2020, 28, 34960.	1.7	7
314	Infrared metamaterial absorber by using chalcogenide glass material with a cyclic ring-disk structure. OSA Continuum, 2018, 1, 573.	1.8	19
315	Triple narrow-band plasmonic perfect absorber for refractive index sensing applications of optical frequency. OSA Continuum, 2019, 2, 2113.	1.8	78
316	Tunable and scalable broadband metamaterial absorber involving VO₂-based phase transition. Photonics Research, 2019, 7, 734.	3.4	78
317	Photonic nanostructure design for high efficiency light absorber. , 2017, , .		0
318	Gold-black phosphorus nanostructured absorbers for efficient light trapping in the mid-infrared. Optics Express, 2020, 28, 19562.	1.7	10
319	Nanowire-based metamaterial for antireflective applications. Applied Optics, 2020, 59, 6992.	0.9	1
320	Ultrafast Laser Enabling Versatile Fabrication of Surface Micro-nano Structures. Springer Series in Materials Science, 2020, , 75-112.	0.4	0
321	Bio-inspired self-assembly of large area 3D Ag@SiO2 plasmonic nanostructures with tunable broadband light harvesting. Applied Materials Today, 2021, 25, 101238.	2.3	9
323	A new strategy towards spectral selectivity: Selective leaching alloy to achieve selective plasmonic solar absorption and infrared suppression. Nano Energy, 2022, 92, 106717.	8.2	18
324	Upconversion lanthanide nanomaterials: basics introduction, synthesis approaches, mechanism and application in photodetector and photovoltaic devices. Nanotechnology, 2022, 33, 082001.	1.3	11
325	Enhanced performance of tripleâ€junction tandem organic solar cells due to the presence of plasmonic nanoparticles. Energy Science and Engineering, 2022, 10, 230-242.	1.9	1
326	Multifunctional manipulation of red blood cells using optical tweezers. Journal of Biophotonics, 2022, 15, e202100315.	1.1	4
327	Multi-resonant absorptions in asymmetric step-shaped plasmonic metamaterials for versatile sensing application scenarios. Optics Express, 2022, 30, 2006.	1.7	8
328	Omnidirectional, Frequency Selective Metasurface Absorber based on Quasi-Bound States in the Continuum. , 2020, , .		0

#	Article	IF	Citations
329	Using a Simple Optical Management Layer to Solve the Contradiction between Efficiency and Transmittance for Semitransparent Organic Solar Cells. ACS Sustainable Chemistry and Engineering, 2022, 10, 2241-2247.	3.2	2
330	Calculation of the Localized Surface Plasmon Resonances of Au Nanoparticles Embedded in NiO. Solids, 2022, 3, 55-65.	1.1	3
331	Optical Performance, Thermal Stability, and Failure Analysis of the WN_x-Si₃N₄ Multilayer Solar Selective Absorbing Coatings. ACS Applied Energy Materials, 2022, 5, 1883-1893.	2.5	7
332	Optical properties and application potential of a hybrid cavity compound grating structure. Optics Express, 2022, 30, 7737.	1.7	2
333	Functional gradient films on aluminum alloy with high absorption efficiencies and damage thresholds for inertial confinement fusion applications. Ceramics International, 2022, 48, 19180-19190.	2.3	4
334	Predicting the eigenstructures of metamaterials with QR-code meta-atoms by deep learning. Optics Letters, 2022, 47, 1863.	1.7	4
335	Highly band-selective meta-surfaces exhibiting perfect near infrared absorption and concurrent visible band sensing: A numerical study. Science China Technological Sciences, 2022, 65, 809-816.	2.0	1
336	Nanorod-textured Sb2(S,Se)3 bilayer with enhanced light harvesting and accelerated charge extraction for high-efficiency Sb2(S,Se)3 solar cells. Chemical Engineering Journal, 2022, 437, 135341.	6.6	11
337	Plasmonic excitations in nanorings: Thickness dependent unusual coupling effects. Optik, 2022, 260, 169114.	1.4	0
338	Feasibility of p-Doped Molecular Crystals as Transparent Conductive Electrodes via Virtual Screening. Chemistry of Materials, 2022, 34, 4050-4061.	3.2	0
339	Propagation of broadband coherent light through LIPSS-based metasurfaces in diamond. Optical Materials Express, 2022, 12, 2415.	1.6	1
340	Metamaterial wide-angle dual-band absorber with graphene surface. Surfaces and Interfaces, 2022, 32, 102118.	1.5	5
341	Flexible Color Tunability and High Transmittance Semitransparent Organic Solar Cells. Solar Rrl, 2022, 6, .	3.1	9
342	Femtosecond Laser Processing Technology for Anti-Reflection Surfaces of Hard Materials. Micromachines, 2022, 13, 1084.	1.4	7
343	Nanoporous Anodic Alumina Photonic Crystals for Sunlight Harvesting Applications: A Perspective. Solar Rrl, 2022, 6, .	3.1	1
344	Design of multilayer planar film structures for near-perfect absorption in the visible to near-infrared. Optics Express, 2022, 30, 35219.	1.7	11
345	Perfect terahertz absorber with dynamically tunable peak and bandwidth using graphene-based metamaterials. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 2313.	0.9	3
346	Simultaneous optical resonances at visible and mid-infrared frequencies with epitaxial TiN/Al0.72Sc0.28N/TiN metal/polar-dielectric/metal multilayers. Materials Today Physics, 2022, 27, 100797.	2.9	2

#	Article	IF	Citations
347	Wearable and flexible electrodes in nanogenerators for energy harvesting, tactile sensors, and electronic textiles: novel materials, recent advances, and future perspectives. Materials Today Sustainability, 2022, 20, 100233.	1.9	16
348	Oxidative stressâ€“mediated nanotoxicity. , 2022, , 179-218.		0
349	Water Harvesting Strategies through Solar Steam Generator Systems. ChemSusChem, 2022, 15, .	3.6	13
350	Multiband-switchability and high-absorptivity of a metamaterial perfect absorber based on a plasmonic resonant structure in the near-infrared region. RSC Advances, 2022, 12, 30871-30878.	1.7	4
351	A Study of Magnetic Properties in a 2D Ferromagnetic Nanolattice through Computer Simulation. Nanomaterials, 2022, 12, 3705.	1.9	0
352	A Method of Improving the Structural Color Quality of HfO2 Grating Based on Thin Film Filter. Coatings, 2022, 12, 1657.	1.2	1
353	Synthesis of Silver, Gold, and Platinum Doped Zinc Oxide Nanoparticles by Pulsed Laser Ablation in Water. Nanomaterials, 2022, 12, 3484.	1.9	19
354	Broadband nanoplasmonic photodetector fabricated in ambient condition. Nano Express, 0, , .	1.2	0
355	Spectrally selective single layered Ag@CuO nanocermet coatings for photothermal application: Green synthesis method. Optical Materials, 2023, 135, 113247.	1.7	8
356	Copper oxide coatings deposited by reactive radio-frequency sputtering for solar absorber applications. Materials Chemistry and Physics, 2023, 296, 127196.	2.0	1
357	Broadband antireflection metasurface based on quasi-random dielectric Mie resonators. , 2022, , .		0
358	Enhanced Photon Harvesting in Wedge Tandem Solar Cell. Advanced Theory and Simulations, 0, , 2200632.	1.3	0
359	Large-scale fabrication of ultrathin broadband absorber using quasi-random dielectric Mie resonators. Optics Express, 0, , .	1.7	0
360	Ultrahigh Extinction Ratio Longâ€Wave Infrared Polarizationâ€Selective Broadband Metamaterial Absorber. Advanced Photonics Research, 0, , 2200269.	1.7	0
361	Surface plasmon-enhanced AlGaN heterojunction nanorod array photocathode. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 289, 116277.	1.7	1
362	2D-Nanolayer (2D-NL)-Based Hybrid Materials: A Next-Generation Material for Dye-Sensitized Solar Cells. Electronics (Switzerland), 2023, 12, 570.	1.8	9
363	Parallel metalâ€“insulatorâ€“metal diode with an ultrathin spin-coated hydrogen silsesquioxane insulating layer. Japanese Journal of Applied Physics, 2023, 62, SG1006.	0.8	1
364	Ultra-narrow band perfect absorber for sensing applications in the visible region. European Physical Journal D, 2023, 77, .	0.6	1

#	Article	IF	Citations
365	Photon up-conversion in Er3+ ion-doped ZnO-Al2O3-BaO-B2O3 glass for enhancing the performance of dye-sensitized solar cells. Journal of Alloys and Compounds, 2023, 954, 170163.	2.8	4
366	Thermal-Assisted Laser Fabrication of Broadband Ultralow Reflectance Surface by Combining Marangoni Flow with In Situ Deposition. Nanomaterials, 2023, 13, 480.	1.9	1
367	Single-pulse real-time billion-frames-per-second planar imaging of ultrafast nanoparticle-laser dynamics and temperature in flames. Light: Science and Applications, 2023, 12, .	7.7	6
368	The impact of plasmonic electrodes on the photocarrier extraction of inverted organic bulk heterojunction solar cells. Applied Physics A: Materials Science and Processing, 2023, 129, .	1.1	1
369	Integrated Plasmonic Gold Nanoparticle Dimer Array for Sustainable Solar Water Disinfection. ACS Applied Nano Materials, 2023, 6, 5568-5577.	2.4	3
370	Plasmonic Nanostructuring by Means of Industrial-Friendly Laser Techniques. Photonics, 2023, 10, 384.	0.9	2
371	Interpretation of Localized Surface Plasmonic Resonances of Gold Nanoparticles Covered by Polymeric Coatings. Photonics, 2023, 10, 408.	0.9	2
385	Slow Release-Formulations for Weed and Pest Control by Clay Composites. Advances in Material Research and Technology, 2023, , 511-527.	0.3	0
394	Nanophotonics for Energy Applications. , 0, , .		0