Xiaoshan Liu

List of Publications by Year in Descending Order

140 papers	2,438 citations	28 h-index	44 g-index
147 ext. papers	3,027 ext. citations	3.5 avg, IF	5.49 L-index

#	Paper	IF	Citations
140	The Light Absorption Enhancement in Graphene Monolayer Resulting from the Diffraction Coupling of Surface Plasmon Polariton Resonance.. *Nanomaterials*, **2022**, 12,	5.4	3
139	Selective Light Absorption and Spectral Manipulation via an Electro-Optical Nano-Cavity. *IEEE Photonics Journal*, **2022**, 1-1	1.8	
138	Multi-functional polarization conversion manipulation via graphene-based metasurface reflectors. *Optics Express*, **2021**, 29, 70-81	3.3	28
137	Rapid and sensitive detection of 4-ethylbenzaldehyde by a plasmonic nose. *Journal Physics D: Applied Physics*, **2021**, 54, 255306	3	1
136	Asymmetric plasmonic-semiconductor cavities for angle-adjusted dual-band differential absorption responses. *Optics Communications*, **2021**, 485, 126722	2	1
135	High-Performance Electro-Optic Manipulation by Plasmonic Light Absorber With Nano-Cavity Field Confinement. *IEEE Photonics Journal*, **2021**, 13, 1-9	1.8	
134	Silicon Antennas Metasurface Based Light Absorber With Quantitatively Adjustable Operating Frequency and Intensity. *IEEE Journal of Selected Topics in Quantum Electronics*, **2021**, 27, 1-6	3.8	6
133	High Sensing Properties of Magnetic Plasmon Resonance by Strong Coupling in Three-Dimensional Metamaterials. *Journal of Lightwave Technology*, **2021**, 39, 562-565	4	16
132	Recent progresses on metamaterials for optical absorption and sensing: a review. *Journal Physics D: Applied Physics*, **2021**, 54, 113002	3	19
131	Nano-slit assisted high-Q photonic resonant perfect absorbers. *Optics Express*, **2021**, 29, 5270-5278	3.3	3
130	Cross-Shaped Titanium Resonators Based Metasurface for Ultra-Broadband Solar Absorption. *IEEE Photonics Journal*, **2021**, 13, 1-8	1.8	0
129	Strong Magnetic Plasmon Resonance in a Simple Metasurface for High-Quality Sensing. *Journal of Lightwave Technology*, **2021**, 39, 4525-4528	4	11
128	Solar energy full-spectrum perfect absorption and efficient photo-thermal generation*. *Chinese Physics B*, **2021**, 30, 084206	1.2	1
127	Ultra-narrowband resonant light absorber for high-performance thermal-optical modulators. *Optics Express*, **2021**, 29, 31048-31057	3.3	1
126	Super-Absorbers by Randomly Distributed Titanium Spheres. *IEEE Photonics Technology Letters*, **2021**, 1-1	2.2	1
125	DVD assisted titanium metasurface for solar energy perfect absorption and potential applications for local thermal antibacterial treatment. *Journal Physics D: Applied Physics*, **2021**, 54, 115106	3	0
124	Narrowband Light Reflection Resonances from Waveguide Modes for High-Quality Sensors. *Nanomaterials*, **2020**, 10,	5.4	3

123	Broadband, wide-angle, and polarization-insensitive enhancement of light absorption in monolayer graphene over whole visible spectrum. *Results in Physics*, **2020**, 18, 103134	3.7	9
122	Silicon-Au nanowire resonators for high-Q multiband near-infrared wave absorption. *Nanotechnology*, **2020**, 31, 375201	3.4	3
121	High-performance plasmonic oblique sensors for the detection of ions. *Nanotechnology*, **2020**, 31, 285501	3.4	9
120	Metamaterial and nanomaterial electromagnetic wave absorbers: structures, properties and applications. *Journal of Materials Chemistry C*, **2020**, 8, 12768-12794	7.1	25
119	Electrically modulating and switching infrared absorption of monolayer graphene in metamaterials. *Carbon*, **2020**, 162, 187-194	10.4	43
118	Simultaneously achieved narrowband and ultra-broadband perfect absorption via plasmonic refractory-colloid crystals. *Optics Communications*, **2020**, 475, 126255	2	1
117	Silicon multi-resonant metasurface for full-spectrum perfect solar energy absorption. *Solar Energy*, **2020**, 199, 360-365	6.8	9
116	Large-scale reflective optical Janus color materials. *Nanotechnology*, **2020**, 31, 225301	3.4	4
115	Polarization and angle insensitive ultra-broadband mid-infrared perfect absorber. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2020**, 384, 126288	2.3	13
114	Colloid templated semiconductor meta-surface for ultra-broadband solar energy absorber. *Solar Energy*, **2020**, 198, 194-201	6.8	17
113	Ultra-narrowband light absorption enhancement of monolayer graphene from waveguide mode. *Optics Express*, **2020**, 28, 24908-24917	3.3	6
112	Plasmonic wavy surface for ultrathin semiconductor black absorbers. *Optics Express*, **2020**, 28, 27764-27773	3.3	10
111	Multi-resonant refractory prismoid for full-spectrum solar energy perfect absorbers. *Optics Express*, **2020**, 28, 31763-31774	3.3	7
110	Ultra-broadband solar absorbers for high-efficiency thermophotovoltaics. *Optics Express*, **2020**, 28, 36476-36486	3.3	13
109	Ultra-high quality graphene perfect absorbers for high performance switching manipulation. *Optics Express*, **2020**, 28, 37294-37306	3.3	9
108	Metal-free plasmonic refractory core-shell nanowires for tunable all-dielectric broadband perfect absorbers. *Optics Express*, **2020**, 28, 37049-37057	3.3	1
107	Perfect Absorption and Refractive-Index Sensing by Metasurfaces Composed of Cross-Shaped Hole Arrays in Metal Substrate. *Nanomaterials*, **2020**, 11,	5.4	10
106	Refractory Ti/TiN resonators based meta-surface for perfect light absorption. *Journal Physics D: Applied Physics*, **2020**, 53, 485101	3	1

105	High-Q plasmonic graphene absorbers for electrical switching and optical detection. *Carbon*, **2020**, 166, 256-264	10.4	22
104	Ultra-narrow multi-band polarization-insensitive plasmonic perfect absorber for sensing. *Nanotechnology*, **2020**, 31, 465501	3.4	18
103	Beehive-Inspired Macroporous SERS Probe for Cancer Detection through Capturing and Analyzing Exosomes in Plasma. *ACS Applied Materials & Interfaces*, **2020**, 12, 5136-5146	9.5	54
102	An ultra-broadband, polarization and angle-insensitive metamaterial light absorber. *Journal Physics D: Applied Physics*, **2020**, 53, 095106	3	8
101	Plasmonic sensors with an ultra-high figure of merit. *Nanotechnology*, **2020**, 31, 115208	3.4	16
100	Thermal-stability resonators for visible light full-spectrum perfect absorbers. *Solar Energy*, **2020**, 208, 445-450	6.8	8
99	Semiconductor-nanoantenna-assisted solar absorber for ultra-broadband light trapping. *Nanoscale Research Letters*, **2020**, 15, 76	5	6
98	Ultra-sharp Plasmonic Super-cavity Resonance and Light Absorption. *Plasmonics*, **2020**, 15, 11-19	2.4	3
97	Refractory Materials and Plasmonics Based Perfect Absorbers. *Nanotechnology*, **2020**,	3.4	7
96	Titanium nanoholes meta-surface for ultra-broadband infrared absorption. *Results in Physics*, **2019**, 15, 102578	3.7	4
95	Volume-Enhanced Raman Scattering Detection of Viruses. *Small*, **2019**, 15, e1805516	11	104
94	Split graphene nano-disks with tunable, multi-band, and high-Q plasmon modes. *Optical Materials*, **2019**, 89, 18-24	3.3	16
93	Grating-assisted ultra-narrow multispectral plasmonic resonances for sensing application. *Applied Physics Express*, **2019**, 12, 072002	2.4	22
92	Ultra-thin Semiconductor/Metal Resonant Superabsorbers. *Plasmonics*, **2019**, 14, 1427-1433	2.4	1
91	Truncated titanium/semiconductor cones for wide-band solar absorbers. *Nanotechnology*, **2019**, 30, 305203	3.4	71
90	A Novel SERS Substrate Platform: Spatially Stacking Plasmonic Hotspots Films. *Nanoscale Research Letters*, **2019**, 14, 94	5	12
89	Silicon nano-cavity coupled metallo-dielectric colloidal crystals for narrow-band absorbers. *Optical Materials*, **2019**, 91, 58-61	3.3	4
88	High-quality Temperature Sensor Based on the Plasmonic Resonant Absorber. *Plasmonics*, **2019**, 14, 279-283	2.4	8

87	Tunable, large-scale and low-cost Si infrared absorbers. *Journal Physics D: Applied Physics*, **2019**, 52, 465107	3	1
86	Si nano-cavity enabled surface-enhanced Raman scattering signal amplification. *Nanotechnology*, **2019**, 30, 465204	3.4	6
85	Semiconductor-enhanced Raman scattering sensors via quasi-three-dimensional Au/Si/Au structures. *Nanophotonics*, **2019**, 8, 1095-1107	6.3	42
84	Ultra-broadband perfect absorber utilizing refractory materials in metal-insulator composite multilayer stacks. *Optics Express*, **2019**, 27, 11809-11818	3.3	69
83	Broadband perfect metamaterial absorber based on the gallium arsenide grating complex structure. *Results in Physics*, **2019**, 15, 102760	3.7	6
82	Frequency-region quantitatively adjustable Si perfect absorbers. *Applied Physics Express*, **2019**, 12, 102001	2.4	1
81	Silicon-based light absorbers with unique polarization-adjusting effects. *Journal Physics D: Applied Physics*, **2019**, 52, 505109	3	7
80	Efficient Optical Reflection Modulation by Coupling Interband Transition of Graphene to Magnetic Resonance in Metamaterials. *Nanoscale Research Letters*, **2019**, 14, 391	5	2
79	Tunable dual-band plasmonic perfect absorber and its sensing applications. *Journal of the Optical Society of America B: Optical Physics*, **2019**, 36, 2750	1.7	12
78	Ultra-broadband electromagnetic wave absorber based on split-ring resonators. *Journal of the Optical Society of America B: Optical Physics*, **2019**, 36, 3573	1.7	4
77	Ultrawideband midinfrared refractory absorbers. *Optical Engineering*, **2019**, 58, 1	1.1	2
76	Hybrid Metal-Semiconductor Meta-Surface Based Photo-Electronic Perfect Absorber. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-7	3.8	20
75	All-Metal Resonant Metamaterials for One-, Two-, Three-Band Perfect Light Absorbers and Sensors. *Plasmonics*, **2019**, 14, 967-971	2.4	10
74	Near-unity, full-spectrum, nanoscale solar absorbers and near-perfect blackbody emitters. *Solar Energy Materials and Solar Cells*, **2019**, 190, 20-29	6.4	83
73	Annealed gold nanoshells with highly-dense hotspots for large-area efficient Raman scattering substrates. *Sensors and Actuators B: Chemical*, **2018**, 262, 845-851	8.5	28
72	Ultra-broadband perfect solar absorber by an ultra-thin refractory titanium nitride meta-surface. *Solar Energy Materials and Solar Cells*, **2018**, 179, 346-352	6.4	97
71	A Facile Strategy for All-Optical Controlling Platform by Using Plasmonic Perfect Absorbers. *Plasmonics*, **2018**, 13, 797-801	2.4	3
70	Titanium resonators based ultra-broadband perfect light absorber. *Optical Materials*, **2018**, 83, 118-123	3.3	37

69	Durable Broadband and Omnidirectional Ultra-antireflective Surfaces. *ACS Applied Materials & Interfaces*, **2018**, 10, 40180-40188	9.5	16
68	Quantitatively optical and electrical-adjusting high-performance switch by graphene plasmonic perfect absorbers. *Carbon*, **2018**, 140, 362-367	10.4	65
67	Large-area, low-cost, ultra-broadband, infrared perfect absorbers by coupled plasmonic-photonic micro-cavities. *Solar Energy Materials and Solar Cells*, **2018**, 186, 142-148	6.4	29
66	High-Quality Plasmon Sensing with Excellent Intensity Contrast by Dual Narrow-Band Light Perfect absorbers. *Plasmonics*, **2017**, 12, 65-68	2.4	9
65	Multi-Band Ultra-Sharp Transmission Response in All-Dielectric Resonant Structures Containing Kerr Nonlinear Media. *Plasmonics*, **2017**, 12, 577-582	2.4	1
64	Multispectral subtractive filtering and optical hotspots by dielectric resonators. *Materials Letters*, **2017**, 190, 198-200	3.3	3
63	Ultra-broadband Tunable Resonant Light Trapping in a Two-dimensional Randomly Microstructured Plasmonic-photonic Absorber. *Scientific Reports*, **2017**, 7, 43803	4.9	28
62	Aluminum and silicon hybrid nano-cavities for four-band, near-perfect light absorbers. *Materials Letters*, **2017**, 194, 13-15	3.3	4
61	All-dielectric resonant cavity-enabled metals with broadband optical transparency. *Nanotechnology*, **2017**, 28, 235202	3.4	1
60	Semiconductor meta-surface based perfect light absorber. *Nanotechnology*, **2017**, 28, 165202	3.4	22
59	High-quality multispectral bio-sensing with asymmetric all-dielectric meta-materials. *Journal Physics D: Applied Physics*, **2017**, 50, 165106	3	10
58	III-V semiconductor resonators: A new strategy for broadband light perfect absorbers. *Applied Physics Express*, **2017**, 10, 111201	2.4	5
57	Hybrid metal-semiconductor cavities for multi-band perfect light absorbers and excellent electric conducting interfaces. *Journal Physics D: Applied Physics*, **2017**, 50, 335106	3	4
56	Metallic Metasurfaces for Light Absorbers. *IEEE Photonics Technology Letters*, **2017**, 29, 47-50	2.2	10
55	Multi-Band High Refractive Index Susceptibility of Plasmonic Structures with Network-Type Metasurface. *Plasmonics*, **2016**, 11, 677-682	2.4	16
54	Subradiant, Superradiant Plasmon Modes and Fano Resonance in a Multilayer Nanocylinder Array Standing on a Thin Metal Film. *Plasmonics*, **2016**, 11, 683-688	2.4	3
53	Improving Plasmon Sensing Performance by Exploiting the Spatially Confined Field. *Plasmonics*, **2016**, 11, 29-36	2.4	8
52	Polarization-Induced Tunability of Plasmonic Light Absorption in Arrays of Sub-Wavelength Elliptical Disks. *Plasmonics*, **2016**, 11, 79-86	2.4	1

51	All-metal meta-surfaces for narrowband light absorption and high performance sensing. *Journal Physics D: Applied Physics*, **2016**, 49, 445104	3	23
50	Monochromatic filter with multiple manipulation approaches by the layered all-dielectric patch array. *Nanotechnology*, **2016**, 27, 125202	3.4	11
49	Multi-band light perfect absorption by a metal layer-coupled dielectric metamaterial. *Optics Express* , **2016**, 24, 5020-5025	3.3	70
48	Polarization-Adjusting Ultra-Narrow Multi-Band Color Filtering by Dielectric Metamaterials. *IEEE Photonics Technology Letters*, **2016**, 1-1	2.2	1
47	A strategy for polarization-independent ultra-narrowband filters by sub-wavelength all-dielectric meta-materials. *Materials Letters*, **2016**, 168, 44-47	3.3	2
46	Common Metal-Dielectric-Metal Nanocavities for Multispectral Narrowband Light Absorption. *Plasmonics*, **2016**, 11, 781-786	2.4	2
45	Optical Magnetic Field Enhancement via Coupling Magnetic Plasmons to Optical Cavity Modes. *IEEE Photonics Technology Letters*, **2016**, 28, 1529-1532	2.2	45
44	Dielectric metamolecules with ultra-narrowband light transparency behaviors. *Materials Letters*, **2016**, 178, 227-230	3.3	1
43	Partially hollowed ultra-thin dielectric meta-surface for transmission manipulation. *Optics Express*, **2016**, 24, 20580-5	3.3	4
42	Plasmonic crystals with sharp optical transmission behaviors. *Materials Letters*, **2016**, 185, 519-522	3.3	
41	Dielectric shell modulated plasmonic crystal for novel light absorption meta-surface. *Materials Letters*, **2015**, 158, 262-265	3.3	2
40	Optical cavity-assisted broadband optical transparency of a plasmonic metal film. *Nanotechnology*, **2015**, 26, 185701	3.4	10
39	One-process fabrication of metal hierarchical nanostructures with rich nanogaps for highly-sensitive surface-enhanced Raman scattering. *Nanotechnology*, **2015**, 26, 185702	3.4	32
38	Multispectral spatial and frequency selective sensing with ultra-compact cross-shaped antenna plasmonic crystals. *Sensors and Actuators B: Chemical*, **2015**, 215, 480-488	8.5	56
37	Making a Conducting Metal with Optical Transparency via Coupled Plasmonic-Photonic Nanostructures. *Plasmonics*, **2015**, 10, 1195-1200	2.4	3
36	Effects of Compound Rectangular Subwavelength Hole Arrays on Enhancing Optical Transmission. *IEEE Photonics Journal*, **2015**, 7, 1-8	1.8	10
35	Enabling Access to the Confined Optical Field to Achieve High-Quality Plasmon Sensing. *IEEE Photonics Technology Letters*, **2015**, 1-1	2.2	8
34	A simple strategy for tuning the opaque metal film to BE optical transparency by the dielectric cavity. *Materials Letters*, **2015**, 160, 518-521	3.3	8

33	Refractometric sensing of silicon layer coupled plasmonic□colloidal crystals. *Materials Letters*, **2015**, 140, 9-11	3.3	11
32	Continuous copper film structures with broadband optical transparency. *Materials Letters*, **2015**, 139, 12-14	3.3	1
31	Enhanced Optical Transmission and Sensing of a Thin Metal Film Perforated with a Compound Subwavelength Circular Hole Array. *Plasma Science and Technology*, **2015**, 17, 1027-1031	1.5	
30	Enhancing refractive index sensing capability with hybrid plasmonic□photonic absorbers. *Journal of Materials Chemistry C*, **2015**, 3, 4222-4226	7.1	75
29	Achieving an ultra-narrow multiband light absorption meta-surface via coupling with an optical cavity. *Nanotechnology*, **2015**, 26, 235702	3.4	33
28	Multispectral Sharp Plasmon Resonances for Polarization-Manipulated Subtractive Polychromatic Filtering and Sensing. *Plasmonics*, **2015**, 10, 821-830	2.4	9
27	Extraordinary Optical Transmission in Metallic Nanostructures with a Plasmonic Nanohole Array of Two Connected Slot Antennas. *Plasmonics*, **2015**, 10, 483-488	2.4	13
26	Automatically acquired broadband plasmonic-metamaterial black absorber during the metallic film-formation. *ACS Applied Materials & Interfaces*, **2015**, 7, 4962-8	9.5	196
25	Multispectral Broadband Light Transparency of a Seamless Metal Film Coated with Plasmonic Crystals. *Plasmonics*, **2014**, 9, 615-622	2.4	5
24	Optical properties of silicon nanocavity-coupled hybrid plasmonic□photonic crystals in the optical region. *Materials Letters*, **2014**, 118, 134-136	3.3	12
23	Robust Optical Transparency of a Continuous Metal Film Sandwiched by Plasmonic Crystals. *IEEE Photonics Technology Letters*, **2014**, 26, 1738-1741	2.2	3
22	Strain-gradient facilitated formation of confined Ge/GeO2 nanoparticles with a cracked shell and enhanced two-photon absorption. *Journal of Materials Chemistry C*, **2014**, 2, 8768-8772	7.1	9
21	Robust multispectral transparency in continuous metal film structures via multiple near-field plasmon coupling by a finite-difference time-domain method. *Physical Chemistry Chemical Physics*, **2014**, 16, 4320-8	3.6	71
20	Double-spectral enhanced optical transmission via the hybridization of plasmon modes in nanohole and nanocube arrays. *Laser Physics*, **2014**, 24, 125901	1.2	
19	Fabrication and optical properties of novel plasmonic cone-shell crystal. *Materials Letters*, **2014**, 134, 165-167	3.3	4
18	Tunable extraordinary optical transmission of dielectric film-coupled metallo-dielectric crystals. *Materials Letters*, **2014**, 126, 224-227	3.3	6
17	Tunable Extraordinary Optical Transmission in a Metal Film Perforated with Two-Level Subwavelength Cylindrical Holes. *Plasmonics*, **2014**, 9, 1149-1153	2.4	13
16	Multispectral optical enhanced transmission of a continuous metal film coated with a plasmonic core-shell nanoparticle array. *Optics Communications*, **2014**, 316, 111-119	2	7

15	/20000 plasmonic nanocavities with multispectral ultra-narrowband absorption for high-quality sensing. *Applied Physics Letters*, **2014**, 104, 081116	3.4	86
14	Improved Multispectral Antireflection and Sensing of Plasmonic Slits by Silver Mirror. *IEEE Photonics Technology Letters*, **2014**, 26, 2111-2114	2.2	10
13	Near-field plasmon effects in extraordinary optical transmission through periodic triangular hole arrays. *Optical Engineering*, **2014**, 53, 107108	1.1	6
12	Broadband enhanced transmission in a film-array plasmonic structure through the plasmon coupling effects. *Optics Communications*, **2014**, 315, 47-54	2	5
11	Narrowband Light Total Antireflection and Absorption in Metal Film Array Structures by Plasmonic Near-Field Coupling. *Plasmonics*, **2014**, 9, 17-25	2.4	9
10	Multi-Band Near-Unity Absorption and Near-Zero Reflection of Optical Field in Metal-Dielectric-Metal Hybrid Crystals. *Science of Advanced Materials*, **2014**, 6, 1099-1105	2.3	10
9	Geometric Phase of Two-Level Mixed State and Bloch Sphere Structure. *International Journal of Theoretical Physics*, **2013**, 52, 3132-3140	1.1	7
8	Fabrication and infrared-transmission properties of monolayer hexagonal-close-packed metallic nanoshells. *Optics Communications*, **2013**, 297, 194-197	2	8
7	Tunable Plasmon-Induced Transparency of Double Continuous Metal Films Sandwiched with a Plasmonic Array. *Plasmonics*, **2013**, 8, 1285-1292	2.4	30
6	. *IEEE Photonics Technology Letters*, **2013**, 25, 1157-1160	2.2	35
5	Near-unity transparency of a continuous metal film via cooperative effects of double plasmonic arrays. *Nanotechnology*, **2013**, 24, 155203	3.4	53
4	Dual broadband near-infrared perfect absorber based on a hybrid plasmonic-photonic microstructure. *Optics Express*, **2013**, 21, 3021-30	3.3	35
3	Improved Broadband Near-Unity Light Transparency of a Metal Layer With Film-Coupled Dual Plasmonic Arrays. *IEEE Photonics Journal*, **2013**, 5, 4809011-4809011	1.8	8
2	Optical transmission of corrugated metal films on a two-dimensional hetero-colloidal crystal. *Optics Express*, **2012**, 20, 9215-25	3.3	37
1	Face features extraction based on multi-scale LBP **2010**,		8