

Sanshui Xiao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/731755/publications.pdf>

Version: 2024-02-01

147
papers

4,321
citations

117571

34
h-index

123376

61
g-index

149
all docs

149
docs citations

149
times ranked

4722
citing authors

#	ARTICLE	IF	CITATIONS
1	Realization of broadband truly rainbow trapping in gradient-index metamaterials. <i>Optics Express</i> , 2022, 30, 3941.	1.7	9
2	Quantitative near-field characterization of surface plasmon polaritons on monocrystalline gold platelets. <i>Optics Express</i> , 2022, 30, 11181.	1.7	6
3	Realization of tunable index-near-zero modes in nonreciprocal magneto-optical heterostructures. <i>Optics Express</i> , 2022, 30, 27259.	1.7	3
4	Recent advances and prospects of persistent luminescent materials as inner secondary self-luminous light source for photocatalytic applications. <i>Chemical Engineering Journal</i> , 2021, 403, 126099.	6.6	84
5	High-performance Silicon/Graphene Photodetector Employing Double Slot Structure. , 2021, , .		0
6	Controlled generation of luminescent centers in hexagonal boron nitride by irradiation engineering. <i>Science Advances</i> , 2021, 7, .	4.7	51
7	Polaritons in Two-Dimensional Parabolic Waveguides. <i>ACS Photonics</i> , 2021, 8, 1840-1846.	3.2	4
8	Planar refraction and lensing of highly confined polaritons in anisotropic media. <i>Nature Communications</i> , 2021, 12, 4325.	5.8	48
9	Broadband energy squeezing and tunneling based on unidirectional modes. <i>Optical Materials Express</i> , 2021, 11, 2975.	1.6	4
10	Ultra-compact integrated graphene plasmonic photodetector with bandwidth above 110 GHz. <i>Nanophotonics</i> , 2020, 9, 317-325.	2.9	113
11	Ultra-subwavelength focusing and giant magnetic-field enhancement in a low-loss one-way waveguide based on remanence. <i>Journal of Optics (United Kingdom)</i> , 2020, 22, 025003.	1.0	6
12	Silicon Photonic Polarization Multiplexing Sensor with Both Large Range and High Resolution. <i>Sensors</i> , 2020, 20, 5870.	2.1	2
13	Ti ₃ C ₂ T _x MXene Quantum Dots with Enhanced Stability for Ultrafast Photonics. <i>ACS Applied Nano Materials</i> , 2020, 3, 11850-11860.	2.4	38
14	Luminescence in external dopant-free scandium-phosphorus vanadate solid solution: a spectroscopic and theoretical investigation. <i>Materials Advances</i> , 2020, 1, 2467-2482.	2.6	2
15	Mechanically scanned leaky-wave antenna based on a topological one-way waveguide. <i>Frontiers of Physics</i> , 2020, 15, 1.	2.4	3
16	Trapping and releasing bidirectional rainbow at terahertz frequencies. <i>Optics Communications</i> , 2020, 473, 125999.	1.0	6
17	Strong Light-Matter Interactions Enabled by Polaritons in Atomically Thin Materials. <i>Advanced Optical Materials</i> , 2020, 8, 1901473.	3.6	56
18	Double-layer graphene on photonic crystal waveguide electro-absorption modulator with 12 GHz bandwidth. <i>Nanophotonics</i> , 2020, 9, 2377-2385.	2.9	32

#	ARTICLE	IF	CITATIONS
19	2D materials integrated with metallic nanostructures: fundamentals and optoelectronic applications. Nanophotonics, 2020, 9, 1877-1900.	2.9	36
20	Tuning the Bi ³⁺ -photoemission color over the entire visible region by manipulating secondary cations modulation in the ScV _x P _{1-x} O ₄ :Bi ³⁺ (0 ≤ x ≤ 1) solid solution. Journal of Materials Chemistry C, 2019, 7, 9865-9877.	2.7	48
21	Single-Crystalline Gold Nanodisks on WS ₂ Mono- and Multilayers for Strong Coupling at Room Temperature. ACS Photonics, 2019, 6, 994-1001.	3.2	80
22	Anderson Localized Plasmon in Graphene with Random Tensile Strain Distribution. Advanced Science, 2019, 6, 1801974.	5.6	4
23	Magnetic field assisted beam-scanning leaky-wave antenna utilizing one-way waveguide. Scientific Reports, 2019, 9, 16777.	1.6	6
24	Tunable terahertz broadband absorber based on a composite structure of graphene multilayer and silicon strip array. Optics Communications, 2019, 431, 199-202.	1.0	31
25	Broadband one-way propagation and rainbow trapping of terahertz radiations. Optics Express, 2019, 27, 10659.	1.7	19
26	Magnetoplasmons in monolayer black phosphorus structures. Optics Letters, 2019, 44, 554.	1.7	15
27	Fast and large-area fabrication of plasmonic reflection color filters by achromatic Talbot lithography. Optics Letters, 2019, 44, 1031.	1.7	9
28	Hybridization-induced dual-band tunable graphene metamaterials for sensing. Optical Materials Express, 2019, 9, 35.	1.6	20
29	Unidirectional-propagating surface magnetoplasmon based on remanence and its application for subwavelength isolators. Optical Materials Express, 2019, 9, 2415.	1.6	8
30	Trapping a magnetic rainbow by using a one-way magnetostatic-like mode. Optical Materials Express, 2019, 9, 4399.	1.6	10
31	Design of terahertz reconfigurable devices by locally controlling topological phases of square gyro-electric rod arrays. Optical Materials Express, 2019, 9, 544.	1.6	6
32	Large Modulation Depth Photonic Crystal Waveguide Electro-Absorption Modulator. , 2019, , .		0
33	Plasmon-exciton polaritons in two-dimensional semiconductor/metal interfaces. Physical Review B, 2018, 97, .	1.1	67
34	High-efficiency tunable T-shaped beam splitter based on one-way waveguide. Journal of Optics (United Kingdom), 2018, 16, 1801006.	1.0	6
35	Efficient Thermal Tuning Employing Metallic Microheater With Slow-Light Effect. IEEE Photonics Technology Letters, 2018, 30, 1151-1154.	1.3	6
36	Tunable optical delay line based on integrated grating-assisted contradirectional couplers. Photonics Research, 2018, 6, 880.	3.4	35

#	ARTICLE	IF	CITATIONS
37	Tunable THz perfect absorber with two absorption peaks based on graphene microribbons. <i>Micro and Nano Letters</i> , 2018, 13, 631-635.	0.6	14
38	Advances on silicon-based integrated microwave photonics. , 2018, , .		0
39	Slow-light-enhanced energy efficiency for graphene microheaters on silicon photonic crystal waveguides. <i>Nature Communications</i> , 2017, 8, 14411.	5.8	153
40	Absorption enhancement in graphene with an efficient resonator. <i>Optical and Quantum Electronics</i> , 2017, 49, 1.	1.5	10
41	Hybridized Plasmons in 2D Nanoslits: From Graphene to Anisotropic 2D Materials. <i>ACS Photonics</i> , 2017, 4, 3045-3054.	3.2	33
42	Efficient electro-optic modulation in low-loss graphene-plasmonic slot waveguides. <i>Nanoscale</i> , 2017, 9, 15576-15581.	2.8	94
43	Optical reconfiguration and polarization control in semi-continuous gold films close to the percolation threshold. <i>Nanoscale</i> , 2017, 9, 12014-12024.	2.8	11
44	Advances on integrated microwave photonics. , 2017, , .		0
45	Broadband, wide-angle and tunable terahertz absorber based on cross-shaped graphene arrays. <i>Applied Optics</i> , 2017, 56, 5458.	2.1	73
46	Experimental demonstration of graphene plasmons working close to the near-infrared window. <i>Optics Letters</i> , 2016, 41, 5345.	1.7	28
47	Spoof surface plasmon polaritons based notch filter for ultra-wideband microwave waveguide. <i>Optics Communications</i> , 2016, 374, 13-17.	1.0	19
48	Graphene-based THz modulator analysed by equivalent circuit model. <i>Micro and Nano Letters</i> , 2016, 11, 439-442.	0.6	4
49	Localized plasmons in bilayer graphene nanodisks. <i>Physical Review B</i> , 2016, 93, .	1.1	19
50	Graphene nanophotonics: From fundamentals to applications. , 2016, , .		1
51	Graphene Plasmons in Triangular Wedges and Grooves. <i>ACS Photonics</i> , 2016, 3, 2176-2183.	3.2	26
52	Graphene-plasmon polaritons: From fundamental properties to potential applications. <i>Frontiers of Physics</i> , 2016, 11, 1.	2.4	147
53	Effective Electro-Optical Modulation with High Extinction Ratio by a Graphene-Silicon Microring Resonator. <i>Nano Letters</i> , 2015, 15, 4393-4400.	4.5	196
54	Equivalent conductivity method: straightforward analytical solution for metasurface-based structures. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 385106.	1.3	27

#	ARTICLE	IF	CITATIONS
55	Metal-loaded graphene surface plasmon waveguides working in the terahertz regime. Optics Communications, 2015, 355, 602-606.	1.0	8
56	Nanofocusing in a tapered graphene plasmonic waveguide. Journal of Optics (United Kingdom), 2015, 17, 065002.	1.0	20
57	Plasmon resonances of Ag capped Si nanopillars fabricated using mask-less lithography. Optics Express, 2015, 23, 12965.	1.7	52
58	Ultrathin 90-degree sharp bends for spoof surface plasmon polaritons. Optics Express, 2015, 23, 19074.	1.7	16
59	Plasmon resonance optical tuning based on photosensitive composite structures. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 360.	0.9	3
60	Phase study of the generated surface plasmon waves in light transmission through a subwavelength aperture. Journal of Nanophotonics, 2014, 8, 083094.	0.4	0
61	Plasmon-Phonon Coupling in Large-Area Graphene Dot and Antidot Arrays Fabricated by Nanosphere Lithography. Nano Letters, 2014, 14, 2907-2913.	4.5	111
62	Broadband Antireflection and Light Extraction Enhancement in Fluorescent SiC with Nanodome Structures. Scientific Reports, 2014, 4, 4662.	1.6	18
63	Enhanced Plasmonic Light Absorption for Silicon Schottky-Barrier Photodetectors. Plasmonics, 2013, 8, 1059-1064.	1.8	12
64	Experimental observation of plasmons in a graphene monolayer resting on a two-dimensional subwavelength silicon grating. Applied Physics Letters, 2013, 102, .	1.5	109
65	Propagation and excitation of graphene plasmon polaritons. , 2013, , .		0
66	Enhanced Light-Matter Interactions in Graphene-Covered Gold Nanovoid Arrays. Nano Letters, 2013, 13, 4690-4696.	4.5	204
67	Broadband antireflection nanodome structures on SiC substrate. , 2013, , .		2
68	Enhanced absorption of graphene in the visible region by use of plasmonic nanostructures. Journal of Optics (United Kingdom), 2013, 15, 055003.	1.0	60
69	Bends and splitters in graphene nanoribbon waveguides. Optics Express, 2013, 21, 3486.	1.7	123
70	Excitation of plasmon modes in a graphene monolayer supported on a 2D subwavelength silicon grating. , 2013, , .		0
71	Nonlocal response in plasmonic waveguiding with extreme light confinement. Nanophotonics, 2013, 2, 161-166.	2.9	63
72	Ultrathin silicon solar cells with enhanced photocurrents assisted by plasmonic nanostructures. Journal of Nanophotonics, 2012, 6, 061503.	0.4	29

#	ARTICLE	IF	CITATIONS
73	Surface-enhanced Raman spectroscopy: nonlocal limitations. Optics Letters, 2012, 37, 2538.	1.7	48
74	Nanoplasmonics beyond Ohm's law. , 2012, , .		4
75	Broadband enhancement of spontaneous emission in a photonic-plasmonic structure. Optics Letters, 2012, 37, 2037.	1.7	17
76	Enhanced light absorption in an ultrathin silicon solar cell utilizing plasmonic nanostructures. Proceedings of SPIE, 2012, , .	0.8	0
77	Active resonance tuning of stretchable plasmonic structures. , 2012, , .		0
78	Evaporation of Water Droplets on "Lock-and-Key" Structures with Nanoscale Features. Langmuir, 2012, 28, 9201-9205.	1.6	9
79	A stretch-tunable plasmonic structure with a polarization-dependent response. Optics Express, 2012, 20, 5237.	1.7	32
80	Broadband light-extraction enhanced by arrays of whispering gallery resonators. Applied Physics Letters, 2012, 101, .	1.5	13
81	Geometrical and fluidic tuning of periodically modulated thin metal films. Photonics and Nanostructures - Fundamentals and Applications, 2012, 10, 177-182.	1.0	4
82	Plasmonic Nanostructures: Tailoring Light-matter Interaction. , 2012, , .		0
83	Surface Plasmon Wave Adapter Designed with Transformation Optics. ACS Nano, 2011, 5, 4359-4364.	7.3	46
84	Arbitrarily thin metamaterial structure for perfect absorption and giant magnification. Optics Express, 2011, 19, 11114.	1.7	60
85	Surface-plasmon-polariton-induced suppressed transmission through ultrathin metal disk arrays. Optics Letters, 2011, 36, 37.	1.7	50
86	Extended verification of scaling behavior in split-ring resonators. Optics Communications, 2011, 284, 799-801.	1.0	9
87	Quenched transmission of light through ultrathin metal films. Proceedings of SPIE, 2011, , .	0.8	0
88	Waveguide-based optofluidics. Proceedings of SPIE, 2010, , .	0.8	3
89	Geometrical tuning of nanoscale split-ring resonators. , 2010, , .		0
90	Group index limitations in slow-light photonic crystals. Photonics and Nanostructures - Fundamentals and Applications, 2010, 8, 56-61.	1.0	21

#	ARTICLE	IF	CITATIONS
91	Plasmonic nanostructures: local versus nonlocal response. Proceedings of SPIE, 2010, , .	0.8	12
92	Antenna-assisted enhanced transmission through subwavelength nanoholes. , 2010, , .		0
93	Nanoimprinted polymer photonic crystal dye lasers. , 2010, , .		1
94	Enhanced transmission of transverse electric waves through periodic arrays of structured subwavelength apertures. Optics Express, 2010, 18, 6040.	1.7	26
95	Slow-light enhanced absorption in a hollow-core fiber. Optics Express, 2010, 18, 14270.	1.7	16
96	Electromagnetically induced transparency in metamaterials at near-infrared frequency. Optics Express, 2010, 18, 17187.	1.7	168
97	Metamaterial localized resonance sensors: prospects and limitations. Optics Express, 2010, 18, 25075.	1.7	21
98	Nearly zero transmission through periodically modulated ultrathin metal films. Applied Physics Letters, 2010, 97, 071116.	1.5	50
99	Capacitance tuning of nanoscale split-ring resonators. Proceedings of SPIE, 2010, , .	0.8	0
100	Thermo-Optic Stabilization of Optofluidic Photonic Crystal Resonators. , 2009, , .		0
101	Reply to "Comment on "Stability and quality factor of a one-dimensional subwavelength cavity resonator containing a left-handed material"™™™. Physical Review B, 2009, 79, .	1.1	0
102	Temperature stabilization of optofluidic photonic crystal cavities. Applied Physics Letters, 2009, 94, 231114.	1.5	32
103	Material Limitations on the Detection Limit in Refractometry. Sensors, 2009, 9, 8382-8390.	2.1	9
104	Thin film Ag superlens towards lab-on-a-chip integration. Optics Express, 2009, 17, 22543.	1.7	21
105	Experimental investigation of Fang's Ag superlens suitable for integration. , 2009, , .		0
106	Enhancement of Polymer Dye Lasers by Multifunctional Photonic Crystal Lattice. , 2009, , .		0
107	Liquid-infiltrated photonic crystals: enhanced light-matter interactions for lab-on-a-chip applications. Microfluidics and Nanofluidics, 2008, 4, 117-127.	1.0	153
108	Limits of slow light in photonic crystals. Physical Review B, 2008, 78, .	1.1	59

#	ARTICLE	IF	CITATIONS
109	Resonant-tunnelling-assisted crossing for subwavelength plasmonic slot waveguides. Optics Express, 2008, 16, 14997.	1.7	22
110	Photonic integration in k-space: Enhancing the performance of photonic crystal dye lasers. Applied Physics Letters, 2008, 93, .	1.5	25
111	Guided plasmon polaritons for triangular metallic waveguides. , 2008, , .		0
112	Effect of loss on slow-light enhanced absorption in liquid-infiltrated photonic crystals. , 2008, , .		0
113	Low-loss intersection of subwavelength plasmonic slot waveguides. Proceedings of SPIE, 2008, , .	0.8	0
114	Theoretical study of the transmission properties of a metallic film with surface corrugations. Journal of Optics, 2007, 9, 348-351.	1.5	8
115	Optical filter based on two-dimensional photonic crystal surface-mode cavity in amorphous silicon-on-silica structure. Applied Physics Letters, 2007, 90, 041108.	1.5	28
116	Experimental demonstration of 2D photonic crystal surface cavity in amorphous silicon on silica structure. , 2007, , .		1
117	Slow-light enhancement of Beer-Lambert-Bouguer absorption. Applied Physics Letters, 2007, 90, 141108.	1.5	126
118	Proposal of highly sensitive optofluidic sensors based on dispersive photonic crystal waveguides. Journal of Optics, 2007, 9, S463-S467.	1.5	19
119	Liquid-infiltrated photonic crystals for lab-on-a-chip applications. Proceedings of SPIE, 2007, , .	0.8	1
120	Optical microcavities based on surface modes in two-dimensional photonic crystals and silicon-on-insulator photonic crystals. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 1225.	0.9	15
121	Enhanced transmission through arrays of subwavelength holes in gold films coated by a finite dielectric layer. Journal of the European Optical Society-Rapid Publications, 2007, 2, .	0.9	11
122	Slow-light enhanced optical detection in liquid-infiltrated photonic crystals. Optical and Quantum Electronics, 2007, 39, 903-911.	1.5	4
123	Resonator channel drop filters in a plasmon-polaritons metal. Optics Express, 2006, 14, 2932.	1.7	161
124	Highly dispersive photonic band-gap-edge optofluidic biosensors. Journal of the European Optical Society-Rapid Publications, 2006, 1, .	0.9	15
125	Mesoscopic magnetism in dielectric photonic crystal meta materials: topology and inhomogeneous broadening. Journal of the European Optical Society-Rapid Publications, 2006, 1, .	0.9	10
126	Liquid-infiltrated photonic crystals: Ohmic dissipation and broadening of modes. Journal of the European Optical Society-Rapid Publications, 2006, 1, .	0.9	7

#	ARTICLE	IF	CITATIONS
127	Channel drop filters realized in a surface plasmon-polaritons metal. , 2006, , .		0
128	Negative refraction in semiconductor photonic crystals. , 2005, , .		0
129	Optical microcavity based on zero-group-velocity surface modes in photonic crystals. , 2005, , .		0
130	Study of transmission properties for waveguide bends by use of a circular photonic crystal. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 340, 474-479.	0.9	34
131	High-Q microcavities realized in a circular photonic crystal slab. Photonics and Nanostructures - Fundamentals and Applications, 2005, 3, 134-138.	1.0	14
132	Doppler effects in a left-handed material: A first-principles theoretical study. Microwave and Optical Technology Letters, 2005, 47, 76-79.	0.9	2
133	Negative refraction in two-dimensional photonic crystals. Applied Physics A: Materials Science and Processing, 2005, 80, 1231-1236.	1.1	4
134	Coupling between plane waves and Bloch waves in photonic crystals with negative refraction. Physical Review B, 2005, 71, .	1.1	49
135	Surface-mode microcavity. Applied Physics Letters, 2005, 87, 111102.	1.5	24
136	Stability and quality factor of a one-dimensional subwavelength cavity resonator containing a left-handed material. Physical Review B, 2004, 69, .	1.1	31
137	A Novel Directional Coupler Utilizing a Left-Handed Material. IEEE Photonics Technology Letters, 2004, 16, 171-173.	1.3	35
138	Influence of the surface termination to the point imaging by a photonic crystal slab with negative refraction. Applied Physics Letters, 2004, 85, 4269.	1.5	98
139	A plane-wave expansion method based on the effective medium theory for calculating the band structure of a two-dimensional photonic crystal. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 313, 132-138.	0.9	26
140	Large absolute band gaps in two-dimensional photonic crystals formed by large dielectric pixels. Physical Review B, 2002, 66, .	1.1	28
141	FDTD method for computing the off-plane band structure in a two-dimensional photonic crystal consisting of nearly free-electron metals. Physica B: Condensed Matter, 2002, 324, 403-408.	1.3	7
142	A finite-difference eigenvalue algorithm for calculating the band structure of a photonic crystal. Computer Physics Communications, 2002, 143, 213-221.	3.0	23
143	A new finite-difference time-domain method for photonic crystals consisting of nearly-free-electron metals. Journal of Physics A, 2001, 34, 9713-9721.	1.6	14
144	Analysis of channel-dropping tunnelling processes in photonic crystals with multiple vertical multi-mode cavities. Journal of Physics A, 2000, 33, 7761-7771.	1.6	5

#	ARTICLE	IF	CITATIONS
145	Slow-light enhanced absorption for bio-chemical sensing applications: potential of low-contrast lossy materials. Journal of the European Optical Society-Rapid Publications, 0, 3, .	0.9	9
146	Nanostructure design for surface-enhanced Raman spectroscopy -- prospects and limits. Journal of the European Optical Society-Rapid Publications, 0, 3, .	0.9	13
147	Coupled-resonator optical waveguides: Q-factor influence on slow-light propagation and the maximal group delay. Journal of the European Optical Society-Rapid Publications, 0, 5, .	0.9	5