Zheyu Fang

List of Publications by Year in Descending Order

119 papers	10,017 citations	42 h-index	100 g-index
130 ext. papers	11,314 ext. citations	9.3 avg, IF	6.21 L-index

#	Paper	IF	Citations
119	Field distribution of the <i>Z</i>₂ topological edge state revealed by cathodoluminescence nanoscopy. *Opto-Electronic Advances*, **2022**, 5, 210015-210015	6.5	
118	Phonon scattering and exciton localization: molding exciton flux in two dimensional disorder energy landscape. *ELight*, **2021**, 1,		15
117	Plasmonic Modulation of Valleytronic Emission in Two-Dimensional Transition Metal Dichalcogenides. *Advanced Functional Materials*, **2021**, 31, 2010234	15.6	10
116	Selectively steering photon spin angular momentum via electron-induced optical spin Hall effect. *Science Advances*, **2021**, 7,	14.3	4
115	Self-Assembly of N,N?-Di(n-butyl)-1,3,8,10-tetramethylquinacridone Governed by Metallic Surface Features of a Ag(110) Substrate. *Journal of Physical Chemistry C*, **2021**, 125, 10151-10158	3.8	0
114	Programmable Self-Assembly of Gold Nanoarrows via Regioselective Adsorption. *Research*, **2021**, 2021, 9762095	7.8	1
113	Exotic physical properties of 2D materials modulated by moir□superlattices. *Materials Advances*, **2021**, 2, 5542-5559	3.3	1
112	Deep subwavelength control of valley polarized cathodoluminescence in h-BN/WSe/h-BN heterostructure. *Nature Communications*, **2021**, 12, 291	17.4	9
111	Helically Grooved Gold Nanoarrows: Controlled Fabrication, Superhelix, and Transcribed Chiroptical Switching. *CCS Chemistry*, **2021**, 3, 2473-2484	7.2	2
110	Remote Lightening and Ultrafast Transition: Intrinsic Modulation of Exciton Spatiotemporal Dynamics in Monolayer MoS. *ACS Nano*, **2020**, 14, 6897-6905	16.7	8
109	Efficient Raman Enhancement in Molybdenum Disulfide by Tuning the Interlayer Spacing. *ACS Applied Materials & Interfaces*, **2020**, 12, 28474-28483	9.5	11
108	Controllable inversion symmetry breaking in single layer graphene induced by sub-lattice contrasted charge polarization. *Carbon*, **2020**, 163, 63-69	10.4	1
107	Tailoring ZnO Spontaneous Emission with Plasmonic Radiative Local Density of States Using Cathodoluminescence Microscopy. *Journal of Physical Chemistry C*, **2020**, 124, 13886-13893	3.8	4
106	Ultrathin circular polarimeter based on chiral plasmonic metasurface and monolayer MoSe. *Nanoscale*, **2020**, 12, 5906-5913	7.7	14
105	Bi-channel near- and far-field optical vortex generator based on a single plasmonic metasurface. *Photonics Research*, **2020**, 8, 986	6	9
104	Graphene Acoustic Phonon-Mediated Pseudo-Landau Levels Tailoring Probed by Scanning Tunneling Spectroscopy. *Small*, **2020**, 16, e1905202	11	2
103	Spontaneous Emission of Plasmon-Exciton Polaritons Revealed by Ultrafast Nonradiative Decays. *Laser and Photonics Reviews*, **2020**, 14, 2000233	8.3	5

102	Light-Controlled Near-Field Energy Transfer in Plasmonic Metasurface Coupled MoS Monolayer. *Small*, **2020**, 16, e2003539	11	6
101	Photoluminescence enhancement of MoS/CdSe quantum rod heterostructures induced by energy transfer and exciton-exciton annihilation suppression. *Nanoscale Horizons*, **2020**, 5, 971-977	10.8	4
100	Electron transfer and cascade relaxation dynamics of graphene quantum dots/MoS2 monolayer mixed-dimensional van der Waals heterostructures. *Materials Today*, **2019**, 24, 10-16	21.8	40
99	Self-Healing Originated van der Waals Homojunctions with Strong Interlayer Coupling for High-Performance Photodiodes. *ACS Nano*, **2019**, 13, 3280-3291	16.7	43
98	Improving the Water Oxidation Efficiency with a Light-Induced Electric Field in Nanograting Photoanodes. *Nano Letters*, **2019**, 19, 6133-6139	11.5	10
97	Multiplasmon modes for enhancing the photocatalytic activity of Au/Ag/CuO core-shell nanorods. *Nanoscale*, **2019**, 11, 16445-16454	7.7	28
96	Plasmonic-modulated dissipative-driven multiqubit entanglement under asymmetric detuning. *Physical Review B*, **2019**, 100,	3.3	2
95	Plasmonic Circular Dichroism of Gold Nanoparticle Based Nanostructures. *Advanced Optical Materials*, **2019**, 7, 1801590	8.1	23
94	Self-Learning Perfect Optical Chirality via a Deep Neural Network. *Physical Review Letters*, **2019**, 123, 213902	7.4	44
93	Imaging of Plasmonic Chiral Radiative Local Density of States with Cathodoluminescence Nanoscopy. *Nano Letters*, **2019**, 19, 775-780	11.5	24
92	Direct observation of ultrafast plasmonic hot electron transfer in the strong coupling regime. *Light: Science and Applications*, **2019**, 8, 9	16.7	109
91	Mode Controlling of Surface Plasmon Polaritons by Geometric Phases. *Plasmonics*, **2019**, 14, 785-790	2.4	0
90	Deep-Subwavelength Resolving and Manipulating of Hidden Chirality in Achiral Nanostructures. *ACS Nano*, **2018**, 12, 3908-3916	16.7	35
89	Plasmonic-Functionalized Broadband Perovskite Photodetector. *Advanced Optical Materials*, **2018**, 6, 1701271	8.1	63
88	Spin-Controlled Integrated Near- and Far-Field Optical Launcher. *Advanced Functional Materials*, **2018**, 28, 1705503	15.6	30
87	Reveal and Control of Chiral Cathodoluminescence at Subnanoscale. *Nano Letters*, **2018**, 18, 567-572	11.5	37
86	Hybrid Au-Ag Nanostructures for Enhanced Plasmon-Driven Catalytic Selective Hydrogenation through Visible Light Irradiation and Surface-Enhanced Raman Scattering. *Journal of the American Chemical Society*, **2018**, 140, 864-867	16.4	153
85	Enantiomorphing Chiral Plasmonic Nanostructures: A Counterintuitive Sign Reversal of the Nonlinear Circular Dichroism. *Advanced Optical Materials*, **2018**, 6, 1800153	8.1	12

84	Tailoring MoS Valley-Polarized Photoluminescence with Super Chiral Near-Field. *Advanced Materials*, **2018**, 30, e1801908	24	66
83	Chiral Nanomaterials: Enantiomorphing Chiral Plasmonic Nanostructures: A Counterintuitive Sign Reversal of the Nonlinear Circular Dichroism (Advanced Optical Materials 14/2018). *Advanced Optical Materials*, **2018**, 6, 1870057	8.1	1
82	Scanning cathodoluminescence microscopy: applications in semiconductor and metallic nanostructures. *Opto-Electronic Advances*, **2018**, 1, 18000701-18000711	6.5	9
81	Highly Efficient and Stable Self-Powered Ultraviolet and Deep-Blue Photodetector Based on Cs2AgBiBr6/SnO2 Heterojunction. *Advanced Optical Materials*, **2018**, 6, 1800811	8.1	88
80	Plasmonics of 2D Nanomaterials: Properties and Applications. *Advanced Science*, **2017**, 4, 1600430	13.6	108
79	Light□matter interaction of 2D materials: Physics and device applications. *Chinese Physics B*, **2017**, 26, 036802	1.2	14
78	Excitonic localization at macrostep edges in AlGaN/AlGaN multiple quantum wells. *Superlattices and Microstructures*, **2017**, 104, 397-401	2.8	14
77	. *IEEE Photonics Journal*, **2017**, 9, 1-6	1.8	3
76	Valley Pseudospin with a Widely Tunable Bandgap in Doped Honeycomb BN Monolayer. *Nano Letters*, **2017**, 17, 2079-2087	11.5	29
75	Revealing the spin optics in conic-shaped metasurfaces. *Physical Review B*, **2017**, 95,	3.3	37
74	Self-Assembled Au/CdSe Nanocrystal Clusters for Plasmon-Mediated Photocatalytic Hydrogen Evolution. *Advanced Materials*, **2017**, 29, 1700803	24	258
73	Tailoring MoS Exciton-Plasmon Interaction by Optical Spin-Orbit Coupling. *ACS Nano*, **2017**, 11, 1165-1171	16.7	88
72	Plasmonic Chiral Nanostructures: Chiroptical Effects and Applications. *Advanced Optical Materials*, **2017**, 5, 1700040	8.1	97
71	Temperature dependent Raman and photoluminescence of vertical WS2/MoS2 monolayer heterostructures. *Science Bulletin*, **2017**, 62, 16-21	10.6	25
70	Plasmonic hot electron tunneling photodetection in vertical Au□graphene hybrid nanostructures. *Laser and Photonics Reviews*, **2017**, 11, 1600148	8.3	45
69	Near-Field Raman Spectroscopy with Aperture Tips. *Chemical Reviews*, **2017**, 117, 5095-5109	68.1	42
68	Controlled growth and shape-directed self-assembly of gold nanoarrows. *Science Advances*, **2017**, 3, e1701183	14.3	51
67	Radiative energy transfer from MoS2excitons to surface plasmons. *Journal of Optics (United Kingdom)*, **2017**, 19, 124009	1.7	6

66	Single-Nanoparticle Plasmonic Electro-optic Modulator Based on MoS Monolayers. *ACS Nano*, **2017**, 11, 9720-9727	16.7	68
65	Plasmonic silicon quantum dots extend photodetection into mid-infrared range. *Science Bulletin*, **2017**, 62, 1430-1431	10.6	3
64	Enhanced optical performance of multifocal metalens with conic shapes. *Light: Science and Applications*, **2017**, 6, e17071	16.7	35
63	Electron Transfer: Ultrafast Plasmonic Hot Electron Transfer in Au Nanoantenna/MoS2 Heterostructures (Adv. Funct. Mater. 35/2016). *Advanced Functional Materials*, **2016**, 26, 6393-6393	15.6	
62	Ultrafast Plasmonic Hot Electron Transfer in Au Nanoantenna/MoS2 Heterostructures. *Advanced Functional Materials*, **2016**, 26, 6394-6401	15.6	136
61	Planar plasmonic chiral nanostructures. *Nanoscale*, **2016**, 8, 3900-5	7.7	87
60	Performance Boosting of Flexible ZnO UV Sensors with Rational Designed Absorbing Antireflection Layer and Humectant Encapsulation. *ACS Applied Materials & Interfaces*, **2016**, 8, 381-9	9.5	21
59	Active Control of Plasmon–Exciton Coupling in MoS2–Ag Hybrid Nanostructures. *Advanced Optical Materials*, **2016**, 4, 1463-1469	8.1	55
58	Spin-controlled directional launching of surface plasmons at the subwavelength scale. *Chinese Physics B*, **2016**, 25, 087302	1.2	0
57	Active Control of Graphene-Based Unidirectional Surface Plasmon Launcher. *ACS Photonics*, **2015**, 2, 1135-1140	6.3	42
56	Plasmonic Toroidal Dipolar Response under Radially Polarized Excitation. *Scientific Reports*, **2015**, 5, 11793	4.9	58
55	Surface plasmon resonance enhanced light absorption of Au decorated composition-tuned ZnO/ZnxCd1−xSeyTe1−y core/shell nanowires for efficient H2 production. *Applied Physics Letters*, **2015**, 106, 123904	3.4	13
54	Plasmon-enhanced photodetection in nanostructures. *Nanotechnology Reviews*, **2015**, 4,	6.3	2
53	Well-oriented epitaxial gold nanotriangles and bowties on MoS2 for surface-enhanced Raman scattering. *Nanoscale*, **2015**, 7, 9153-7	7.7	29
52	Broadband photodetection in a microfiber-graphene device. *Optics Express*, **2015**, 23, 25209-16	3.3	15
51	Plasmonic circular polarization analyzer formed by unidirectionally controlling surface plasmon propagation. *Applied Physics Letters*, **2015**, 106, 161106	3.4	14
50	Active Light Control of the MoS2 Monolayer Exciton Binding Energy. *ACS Nano*, **2015**, 9, 10158-64	16.7	153
49	Plasmonics: Magnetic Plasmonic Fano Resonance at Optical Frequency (Small 18/2015). *Small*, **2015**, 11, 2102-2102	11	1

48	Metasurfaces: Terahertz Broadband Low-Reflection Metasurface by Controlling Phase Distributions (Advanced Optical Materials 10/2015). *Advanced Optical Materials*, **2015**, 3, 1478-1478	8.1	1
47	Substrate-induced interfacial plasmonics for photovoltaic conversion. *Scientific Reports*, **2015**, 5, 14497	4.9	21
46	Graphene Quantum Dots Doping of MoS2 Monolayers. *Advanced Materials*, **2015**, 27, 5235-40	24	135
45	Terahertz Broadband Low-Reflection Metasurface by Controlling Phase Distributions. *Advanced Optical Materials*, **2015**, 3, 1405-1410	8.1	82
44	Plasmonic hot electron enhanced MoS2 photocatalysis in hydrogen evolution. *Nanoscale*, **2015**, 7, 4482-8	7.7	142
43	Magnetic plasmonic Fano resonance at optical frequency. *Small*, **2015**, 11, 2177-81	11	61
42	Focusing surface plasmon polaritons in archimedesRspiral nanostructure. *Wuli Xuebao/Acta Physica Sinica*, **2015**, 64, 194201	0.6	4
41	Active tunable absorption enhancement with graphene nanodisk arrays. *Nano Letters*, **2014**, 14, 299-304	11.5	477
40	Two-dimensional heterostructures: fabrication, characterization, and application. *Nanoscale*, **2014**, 6, 12250-72	7.7	266
39	Plasmonic hot electron induced structural phase transition in a MoS2 monolayer. *Advanced Materials*, **2014**, 26, 6467-71	24	429
38	Plasmon hybridization model generalized to conductively bridged nanoparticle dimers. *Journal of Chemical Physics*, **2013**, 139, 064310	3.9	26
37	Solar vapor generation enabled by nanoparticles. *ACS Nano*, **2013**, 7, 42-9	16.7	882
36	Gated tunability and hybridization of localized plasmons in nanostructured graphene. *ACS Nano*, **2013**, 7, 2388-95	16.7	534
35	Evolution of light-induced vapor generation at a liquid-immersed metallic nanoparticle. *Nano Letters*, **2013**, 13, 1736-42	11.5	346
34	Narrowband photodetection in the near-infrared with a plasmon-induced hot electron device. *Nature Communications*, **2013**, 4, 1643	17.4	425
33	Exfoliated graphitic carbon nitride nanosheets as efficient catalysts for hydrogen evolution under visible light. *Advanced Materials*, **2013**, 25, 2452-6	24	1859
32	Plasmonic properties and device in nanostructures. *Applied Physics A: Materials Science and Processing*, **2013**, 112, 15-22	2.6	1
31	Plasmonics in nanostructures. *Advanced Materials*, **2013**, 25, 3840-56	24	105

30	Substrate-mediated charge transfer plasmons in simple and complex nanoparticle clusters. *Nanoscale*, **2013**, 5, 9897-901	7.7	42
29	Plasmon-induced doping of graphene. *ACS Nano*, **2012**, 6, 10222-8	16.7	317
28	Graphene-antenna sandwich photodetector. *Nano Letters*, **2012**, 12, 3808-13	11.5	540
27	Tunable wide-angle plasmonic perfect absorber at visible frequencies. *Physical Review B*, **2012**, 85,	3.3	114
26	Plasmonic focusing in symmetry broken nanocorrals. *Nano Letters*, **2011**, 11, 893-7	11.5	124
25	Removing a wedge from a metallic nanodisk reveals a fano resonance. *Nano Letters*, **2011**, 11, 4475-9	11.5	181
24	Self-assembly of tetrapod-shaped CdS nanostructures into 3D networks by a transverse growth process. *Nanotechnology*, **2011**, 22, 175601	3.4	15
23	Plasmonic coupling of bow tie antennas with Ag nanowire. *Nano Letters*, **2011**, 11, 1676-80	11.5	122
22	PLASMONIC FOCUSING BASED ON CdS NANORIBBON. *Journal of Nonlinear Optical Physics and Materials*, **2010**, 19, 729-735	0.8	
21	Color-changeable properties of plasmonic waveguides based on Se-doped CdS nanoribbons. *Physical Review B*, **2010**, 82,	3.3	16
20	Planar plasmonic focusing and optical transport using CdS nanoribbon. *ACS Nano*, **2010**, 4, 75-82	16.7	53
19	Near-field nanofocusing through a combination of plasmonic Bragg reflector and converging lens. *Optics Express*, **2010**, 18, 14762-7	3.3	19
18	Antenna-mediated coupling of light into Ag nanowire. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 7171-4	1.3	
17	Homogeneous epitaxial growth of N,N′-di(n-butyl)quinacridone thin films on Ag(110). *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 7162-6	1.3	
16	Surface Plasmon Polariton Enhancement in Silver Nanowire–Nanoantenna Structure. *Plasmonics*, **2010**, 5, 57-62	2.4	25
15	Hybrid Plasmonic Waveguide Based on Tapered Dielectric Nanoribbon: Excitation and Focusing. *Plasmonics*, **2010**, 5, 207-212	2.4	22
14	Applications of Surface Plasmon Polariton in the Au Nanocircuit. *Journal of the Korean Physical Society*, **2010**, 56, 1725-1728	0.6	3
13	Focusing surface plasmon polariton trapping of colloidal particles. *Applied Physics Letters*, **2009**, 94, 063306	3.4	24

12	DFT Study of Structural and Thermodynamic Properties for Polybrominated 5,10-Dihydrophenazines. *International Journal of Thermophysics*, **2009**, 30, 1875-1890	2.1	5
11	Optical waveguide behavior of Se-doped and undoped CdS one-dimensional nanostructures using near-field optical microscopy **2009**, 52, 26-30		
10	Surface plasmon-enhanced micro-cylinder mode in photonic quasi-crystal. *Journal of Microscopy*, **2009**, 235, 138-43	1.9	8
9	Influence of Mn doping on the microstructure and optical properties of CdS. *Journal of Alloys and Compounds*, **2009**, 486, 702-705	5.7	50
8	Color-tuning and switching optical transport through CdS hybrid plasmonic waveguide. *Optics Express*, **2009**, 17, 20327-32	3.3	17
7	Excitation of dielectric-loaded surface plasmon polariton observed by using near-field optical microscopy. *Applied Physics Letters*, **2008**, 93, 073306	3.4	24
6	Characterization and catalysis studies of CuO/CeO2 model catalysts. *Catalysis Communications*, **2006**, 7, 701-704	3.2	26
5	NEAR-FIELD SCANNING OPTICAL MICROSCOPE WITH THE APPLICATION OF SURFACE PLASMA RESONANCE (SPR). *Surface Review and Letters*, **2005**, 12, 489-492	1.1	
4	THE INFLUENCE OF HUMIDITY ON THE SHEAR FORCE BETWEEN TIP AND SAMPLE IN NSOM USING PIEZOELECTRIC FORK. *Surface Review and Letters*, **2005**, 12, 355-358	1.1	
3	Molding 2D Exciton Flux toward Room Temperature Excitonic Devices. *Advanced Materials Technologies*,2200032	6.8	0
2	Abnormal intensity and polarization of Raman scattered light at edges of layered MoS2. *Nano Research*,1	10	0
1	Inverse Design of Unidirectional Transmission Nanostructures Based on Unsupervised Machine Learning. *Advanced Optical Materials*,2200127	8.1	