Lili Zhang

List of Publications by Year in Descending Order

63 papers	14,335 citations	29 h-index	68 g-index
68 ext. papers	16,415 ext. citations	10.7 avg, IF	6.18 L-index

#	Paper	IF	Citations
63	Substitutionally Doped MoSe for High-Performance Electronics and Optoelectronics. *Small*, **2021**, 17, e2102855	11	3
62	Emerging Single-Photon Detectors Based on Low-Dimensional Materials. *Small*, **2021**, e2103963	11	7
61	Broadband Photodetectors: Broadband Bi2O2Se Photodetectors from Infrared to Terahertz (Adv. Funct. Mater. 14/2021). *Advanced Functional Materials*, **2021**, 31, 2170093	15.6	3
60	Unipolar barrier photodetectors based on van der Waals heterostructures. *Nature Electronics*, **2021**, 4, 357-363	28.4	87
59	Observation of Negative Terahertz Photoconductivity in Large Area Type-II Dirac Semimetal PtTe_{2}. *Physical Review Letters*, **2021**, 126, 227402	7.4	8
58	Networking retinomorphic sensor with memristive crossbar for brain-inspired visual perception. *National Science Review*, **2021**, 8, nwaa172	10.8	28
57	Infrared Gesture Recognition System Based on Near-Sensor Computing. *IEEE Electron Device Letters* , **2021**, 1-1	4.4	1
56	A high-performance quantum well infrared photodetector based on semiconductor□metal periodic microstructure. *Optical and Quantum Electronics*, **2021**, 53, 1	2.4	2
55	Fabrication of Co doped MoS2 nanosheets with enlarged interlayer spacing as efficient and pH-Universal bifunctional electrocatalyst for overall water splitting. *Ceramics International*, **2021**, 47, 24501-24510	5.1	8
54	Broadband Bi2O2Se Photodetectors from Infrared to Terahertz. *Advanced Functional Materials*, **2021**, 31, 2009554	15.6	26
53	Reconfigurable logic and neuromorphic circuits based on electrically tunable two-dimensional homojunctions. *Nature Electronics*, **2020**, 3, 383-390	28.4	81
52	Gate-tunable van der Waals heterostructure for reconfigurable neural network vision sensor. *Science Advances*, **2020**, 6, eaba6173	14.3	66
51	Tuning Electrical Conductance in Bilayer MoS through Defect-Mediated Interlayer Chemical Bonding. *ACS Nano*, **2020**, 14, 10265-10275	16.7	22
50	Van der Waals Heterostructures for High-Performance Device Applications: Challenges and Opportunities. *Advanced Materials*, **2020**, 32, e1903800	24	109
49	A Noble Metal Dichalcogenide for High-Performance Field-Effect Transistors and Broadband Photodetectors. *Advanced Functional Materials*, **2020**, 30, 1907945	15.6	45
48	Enhanced Performance of HgCdTe Midwavelength Infrared Electron Avalanche Photodetectors With Guard Ring Designs. *IEEE Transactions on Electron Devices*, **2020**, 67, 542-546	2.9	13
47	Edge-Epitaxial Growth of InSe Nanowires toward High-Performance Photodetectors. *Small*, **2020**, 16, e1905902	11	14

46	Robust Impact-Ionization Field-Effect Transistor Based on Nanoscale Vertical Graphene/Black Phosphorus/Indium Selenide Heterostructures. *ACS Nano*, **2020**, 14, 434-441	16.7	15
45	Strain-Sensitive Magnetization Reversal of a van der Waals Magnet. *Advanced Materials*, **2020**, 32, e2004533	24	38
44	Suppression of Electron-Hole Recombination by Intrinsic Defects in 2D Monoelemental Material. *Journal of Physical Chemistry Letters*, **2019**, 10, 6151-6158	6.4	39
43	Observation of ballistic avalanche phenomena in nanoscale vertical InSe/BP heterostructures. *Nature Nanotechnology*, **2019**, 14, 217-222	28.7	99
42	Direct Evidence for Charge Compensation-Induced Large Magnetoresistance in Thin WTe. *Nano Letters*, **2019**, 19, 3969-3975	11.5	23
41	A method for the characterization of intra-pixel response of infrared sensor. *Optical and Quantum Electronics*, **2019**, 51, 1	2.4	6
40	Gate-tunable ReS2/MoTe2 heterojunction with high-performance photodetection. *Optical and Quantum Electronics*, **2019**, 51, 1	2.4	7
39	Plasmon Excited Ultrahot Carriers and Negative Differential Photoresponse in a Vertical Graphene van der Waals Heterostructure. *Nano Letters*, **2019**, 19, 3295-3304	11.5	19
38	Ab initio nonadiabatic molecular dynamics investigations on the excited carriers in condensed matter systems. *Wiley Interdisciplinary Reviews: Computational Molecular Science*, **2019**, 9, e1411	7.9	80
37	Sensing Infrared Photons at Room Temperature: From Bulk Materials to Atomic Layers. *Small*, **2019**, 15, e1904396	11	48
36	Mono-Elemental Properties of 2D Black Phosphorus Ensure Extended Charge Carrier Lifetimes under Oxidation: Time-Domain Ab Initio Analysis. *Journal of Physical Chemistry Letters*, **2019**, 10, 1083-1091	6.4	55
35	Optimized microstructure and impedance matching for improving the absorbing properties of core-shell C@Fe3C/Fe nanocomposites. *Journal of Alloys and Compounds*, **2019**, 780, 552-557	5.7	27
34	Robust memristors based on layered two-dimensional materials. *Nature Electronics*, **2018**, 1, 130-136	28.4	348
33	Gate-Induced Interfacial Superconductivity in 1T-SnSe. *Nano Letters*, **2018**, 18, 1410-1415	11.5	54
32	Topological Phase Transition-Induced Triaxial Vector Magnetoresistance in (BiIn)Se Nanodevices. *ACS Nano*, **2018**, 12, 1537-1543	16.7	11
31	Microwave absorption of NdFe magnetic powders tuned with impedance matching. *Journal of Magnetism and Magnetic Materials*, **2018**, 449, 385-389	2.8	17
30	Low-Temperature Eutectic Synthesis of PtTe2 with Weak Antilocalization and Controlled Layer Thinning. *Advanced Functional Materials*, **2018**, 28, 1803746	15.6	47
29	Negative Photoconductance in van der Waals Heterostructure-Based Floating Gate Phototransistor. *ACS Nano*, **2018**, 12, 9513-9520	16.7	75

28	2 step of conductance fluctuations due to the broken time-reversal symmetry in bulk-insulating BiSbTeSe2 devices. *Applied Physics Letters*, **2018**, 112, 243106	3.4	3
27	Experimental Identification of Critical Condition for Drastically Enhancing Thermoelectric Power Factor of Two-Dimensional Layered Materials. *Nano Letters*, **2018**, 18, 7538-7545	11.5	50
26	Proximity-Induced Superconductivity with Subgap Anomaly in Type II Weyl Semi-Metal WTe. *Nano Letters*, **2018**, 18, 7962-7968	11.5	26
25	Gate-tunable weak antilocalization in a few-layer InSe. *Physical Review B*, **2018**, 98,	3.3	18
24	Controllable SERS performance for the flexible paper-like films of reduced graphene oxide. *Applied Surface Science*, **2017**, 419, 373-381	6.7	27
23	Gated tuned superconductivity and phonon softening in monolayer and bilayer MoS2. *Npj Quantum Materials*, **2017**, 2,	5	26
22	Intrinsic p-type W-based transition metal dichalcogenide by substitutional Ta-doping. *Applied Physics Letters*, **2017**, 111, 043502	3.4	16
21	Van der Waals epitaxial growth and optoelectronics of large-scale WSe/SnS vertical bilayer p-n junctions. *Nature Communications*, **2017**, 8, 1906	17.4	258
20	Damage-free and rapid transfer of CVD-grown two-dimensional transition metal dichalcogenides by dissolving sacrificial water-soluble layers. *Nanoscale*, **2017**, 9, 19124-19130	7.7	20
19	Room temperature high-detectivity mid-infrared photodetectors based on black arsenic phosphorus. *Science Advances*, **2017**, 3, e1700589	14.3	269
18	Gate-tunable negative longitudinal magnetoresistance in the predicted type-II Weyl semimetal WTe. *Nature Communications*, **2016**, 7, 13142	17.4	166
17	High Responsivity Phototransistors Based on Few-Layer ReS2 for Weak Signal Detection. *Advanced Functional Materials*, **2016**, 26, 1938-1944	15.6	217
16	Broadband Photovoltaic Detectors Based on an Atomically Thin Heterostructure. *Nano Letters*, **2016**, 16, 2254-9	11.5	248
15	Rational Design of Fe2O3/Reduced Graphene Oxide Composites: Rapid Detection and Effective Removal of Organic Pollutants. *ACS Applied Materials & Interfaces*, **2016**, 8, 6431-8	9.5	73
14	Facile synthesis of iron oxides/reduced graphene oxide composites: application for electromagnetic wave absorption at high temperature. *Scientific Reports*, **2015**, 5, 9298	4.9	73
13	Integrated digital inverters based on two-dimensional anisotropic ReS2 field-effect transistors. *Nature Communications*, **2015**, 6, 6991	17.4	417
12	The preparation of Fe3O4 cube-like nanoparticles via the ethanol reduction of Fe2O3 and the study of its electromagnetic wave absorption. *Applied Surface Science*, **2015**, 359, 723-728	6.7	37
11	Mesoporous hollow Zn2SiO4:Mn2+ nanospheres: The study of photoluminescence and adsorption properties. *Materials Research Bulletin*, **2015**, 61, 76-82	5.1	12

List of Publications

10	Integrated analytical techniques with high sensitivity for studying brain translocation and potential impairment induced by intranasally instilled copper nanoparticles. *Toxicology Letters*, **2014**, 226, 70-80	4.4	34
9	Topological transport and atomic tunnelling-clustering dynamics for aged Cu-doped Bi2Te3 crystals. *Nature Communications*, **2014**, 5, 5022	17.4	50
8	WO3 and Ag nanoparticle co-sensitized TiO2 nanowires: preparation and the enhancement of photocatalytic activity. *RSC Advances*, **2014**, 4, 23831-23837	3.7	25
7	Hydrothermal growth of TiO2 nanowire membranes sensitized with CdS quantum dots for the enhancement of photocatalytic performance. *Nanoscale Research Letters*, **2014**, 9, 270	5	27
6	Characterization and photocatalytic activity of (ZnO□uO)/SBA-15 nanocomposites synthesized by two-solvent method. *Materials Research Bulletin*, **2014**, 56, 119-124	5.1	20
5	TiO2 nanobelts photocatalysts decorated with Bi2WO6 nanocrystals: Preparation and enhanced photocatalytic activity. *Materials Research Bulletin*, **2014**, 55, 121-125	5.1	17
4	A novel bubbling-assisted exfoliating method preparation of magnetically separable □Fe2O3/graphene recyclable photocatalysts. *Functional Materials Letters*, **2014**, 07, 1450056	1.2	4
3	Two-solvent method synthesis of SnO2 nanoparticles embedded in SBA-15: Gas-sensing and photocatalytic properties study. *Materials Research Bulletin*, **2014**, 50, 440-445	5.1	12
2	Hopping transport through defect-induced localized states in molybdenum disulphide. *Nature Communications*, **2013**, 4, 2642	17.4	740
1	Superior thermal conductivity of single-layer graphene. *Nano Letters*, **2008**, 8, 902-7	11.5	9908