Ding-Jiang Xue

List of Publications by Year in Descending Order

64 papers	5,054 citations	34 h-index	68 g-index
68 ext. papers	6,250 ext. citations	12 avg, IF	5.68 L-index

#	Paper	IF	Citations
64	Investigation of the sublimation mechanism of GeSe and GeS. *Chemical Communications*, **2021**, 57, 11461-11464	5.8	1
63	Surface-Defect States in Photovoltaic Absorber GeSe. *Journal of Physical Chemistry Letters*, **2021**, 12, 10249-10254	6.4	1
62	Strain in perovskite solar cells: origins, impacts and regulation. *National Science Review*, **2021**, 8, nwab047	10.8	40
61	Boosting the efficiency of GeSe solar cells by low-temperature treatment of p-n junction. *Science China Materials*, **2021**, 64, 2118-2126	7.1	9
60	Electro-Optic Modulation Using Metal-Free Perovskites. *ACS Applied Materials & Interfaces*, **2021**, 13, 19042-19047	9.5	3
59	Interfacial Strain Engineering in Wide-Bandgap GeS Thin Films for Photovoltaics. *Journal of the American Chemical Society*, **2021**,	16.4	9
58	Crystallization Kinetics Modulation of FASnI Films with Pre-nucleation Clusters for Efficient Lead-Free Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2021**, 60, 3693-3698	16.4	32
57	Crystallization Kinetics Modulation of FASnI3 Films with Pre-nucleation Clusters for Efficient Lead-Free Perovskite Solar Cells. *Angewandte Chemie*, **2021**, 133, 3737-3742	3.6	4
56	In-plane anisotropic 2D Ge-based binary materials for optoelectronic applications. *Chemical Communications*, **2021**, 57, 565-575	5.8	7
55	An antibonding valence band maximum enables defect-tolerant and stable GeSe photovoltaics. *Nature Communications*, **2021**, 12, 670	17.4	16
54	One-Pot Synthesis Enables Magnetic Coupled CrTe/MnTe/CrTe Integrated Heterojunction Nanorods. *Nano Letters*, **2021**, 21, 7684-7690	11.5	2
53	Controlling the Crystallization Kinetics of Lead-Free Tin Halide Perovskites for High Performance Green Photovoltaics. *Advanced Energy Materials*, **2021**, 11, 2102131	21.8	11
52	Wide-bandgap perovskites for indoor photovoltaics. *Science Bulletin*, **2021**, 66, 2047-2049	10.6	1
51	Identifying the Crystalline Orientation of Mechanically Exfoliated Anisotropic Layered Materials through Their Morphologies. *Advanced Materials Interfaces*, **2020**, 7, 2000612	4.6	4
50	Efficient tandem solar cells with solution-processed perovskite on textured crystalline silicon. *Science*, **2020**, 367, 1135-1140	33.3	298
49	Regulating strain in perovskite thin films through charge-transport layers. *Nature Communications*, **2020**, 11, 1514	17.4	165
48	Solution Synthesis of Layered van der Waals (vdW) Ferromagnetic CrGeTe Nanosheets from a Non-vdW CrTeTemplate. *Journal of the American Chemical Society*, **2020**, 142, 4438-4444	16.4	18

47	Room-Temperature Solution-Processed PbS Quantum Dot Solar Cells. *Chinese Journal of Chemistry*, **2020**, 38, 356-360	4.9	4
46	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. *Nature Energy*, **2020**, 5, 131-140	62.3	552
45	High-Efficiency CsPbI2Br Perovskite Solar Cells with Dopant-Free Poly(3-hexylthiophene) Hole Transporting Layers. *Advanced Energy Materials*, **2020**, 10, 2000501	21.8	44
44	Strain-engineering the in-plane electrical anisotropy of GeSe monolayers. *Physical Chemistry Chemical Physics*, **2020**, 22, 914-918	3.6	10
43	GeSe thin-film solar cells. *Materials Chemistry Frontiers*, **2020**, 4, 775-787	7.8	41
42	Three-Dimensional Optical Anisotropy of Low-Symmetry Layered GeS. *ACS Applied Materials & Interfaces*, **2019**, 11, 24247-24253	9.5	16
41	Investigation of Oxygen Passivation for High-Performance All-Inorganic Perovskite Solar Cells. *Journal of the American Chemical Society*, **2019**, 141, 18075-18082	16.4	76
40	Polarization-Sensitive Ultraviolet Photodetection of Anisotropic 2D GeS2. *Advanced Functional Materials*, **2019**, 29, 1900411	15.6	78
39	Sb2(Se1-xSx)3 Thin-Film Solar Cells Fabricated by Single-Source Vapor Transport Deposition. *Solar Rrl*, **2019**, 3, 1800280	7.1	30
38	Weak Interlayer Interaction in 2D Anisotropic GeSe. *Advanced Science*, **2019**, 6, 1801810	13.6	23
37	Fully Air-Bladed High-Efficiency Perovskite Photovoltaics. *Joule*, **2019**, 3, 402-416	27.8	95
36	High-Mobility Hydrophobic Conjugated Polymer as Effective Interlayer for Air-Stable Efficient Perovskite Solar Cells (Solar RRL 12019). *Solar Rrl*, **2019**, 3, 1970015	7.1	1
35	Strain-engineering the anisotropic electrical properties of low-symmetry bilayer GeSe. *Journal of Applied Physics*, **2019**, 125, 082524	2.5	4
34	High-Mobility Hydrophobic Conjugated Polymer as Effective Interlayer for Air-Stable Efficient Perovskite Solar Cells. *Solar Rrl*, **2019**, 3, 1800232	7.1	24
33	In-Plane Optical Anisotropy of Low-Symmetry 2D GeSe. *Advanced Optical Materials*, **2019**, 7, 1801311	8.1	44
32	Air-Stable In-Plane Anisotropic GeSe for Highly Polarization-Sensitive Photodetection in Short Wave Region. *Journal of the American Chemical Society*, **2018**, 140, 4150-4156	16.4	125
31	Thermodynamically Stable Orthorhombic CsPbI Thin Films for High-Performance Photovoltaics. *Journal of the American Chemical Society*, **2018**, 140, 11716-11725	16.4	206
30	Polar Solvent Induced Lattice Distortion of Cubic CsPbI Nanocubes and Hierarchical Self-Assembly into Orthorhombic Single-Crystalline Nanowires. *Journal of the American Chemical Society*, **2018**, 140, 11705-11715	16.4	154

29	Strain-engineering the electronic properties and anisotropy of GeSe monolayers.. *RSC Advances*, **2018**, 8, 33445-33450	3.7	6
28	Tuning the Optical Absorption Property of GeSe Thin Films by Annealing Treatment. *Physica Status Solidi - Rapid Research Letters*, **2018**, 12, 1800370	2.5	4
27	Synthesis and characterization of NaSbS2 thin film for potential photodetector and photovoltaic application. *Chinese Chemical Letters*, **2017**, 28, 881-887	8.1	13
26	Investigation of Physical and Electronic Properties of GeSe for Photovoltaic Applications. *Advanced Electronic Materials*, **2017**, 3, 1700141	6.4	51
25	Enhanced Sb2Se3 solar cell performance through theory-guided defect control. *Progress in Photovoltaics: Research and Applications*, **2017**, 25, 861-870	6.8	94
24	GeSe Thin-Film Solar Cells Fabricated by Self-Regulated Rapid Thermal Sublimation. *Journal of the American Chemical Society*, **2017**, 139, 958-965	16.4	167
23	Buried homojunction in CdS/Sb2Se3 thin film photovoltaics generated by interfacial diffusion. *Applied Physics Letters*, **2017**, 111, 013901	3.4	58
22	In situ sulfurization to generate Sb2(Se1 □kSx)3 alloyed films and their application for photovoltaics. *Progress in Photovoltaics: Research and Applications*, **2017**, 25, 113-122	6.8	47
21	Versatile Solution-Processed Synthesis of Two-Dimensional Ultrathin Metal Chalcogenides Following Frank-van der Merwe Growth. *ACS Applied Materials & Interfaces*, **2017**, 9, 27102-27110	9.5	8
20	Synthesis and characterization of hydrazine solution processed Cu12Sb4S13 film. *Solar Energy Materials and Solar Cells*, **2016**, 144, 33-39	6.4	39
19	Rational design and electron transfer kinetics of MoS2/CdS nanodots-on-nanorods for efficient visible-light-driven hydrogen generation. *Nano Energy*, **2016**, 28, 319-329	17.1	113
18	General Space-Confined On-Substrate Fabrication of Thickness-Adjustable Hybrid Perovskite Single-Crystalline Thin Films. *Journal of the American Chemical Society*, **2016**, 138, 16196-16199	16.4	145
17	Tuning the Fermi-level of TiO mesoporous layer by lanthanum doping towards efficient perovskite solar cells. *Nanoscale*, **2016**, 8, 16881-16885	7.7	75
16	Antimony selenide thin-film solar cells. *Semiconductor Science and Technology*, **2016**, 31, 063001	1.8	124
15	Hydrazine solution processed Sb2S3, Sb2Se3 and Sb2(S(1-x)Se(x))3 film: molecular precursor identification, film fabrication and band gap tuning. *Scientific Reports*, **2015**, 5, 10978	4.9	66
14	Ambient CdCl2 treatment on CdS buffer layer for improved performance of Sb2Se3 thin film photovoltaics. *Applied Physics Letters*, **2015**, 107, 143902	3.4	35
13	Improving the performance of Sb2Se3 thin film solar cells over 4% by controlled addition of oxygen during film deposition. *Progress in Photovoltaics: Research and Applications*, **2015**, 23, 1828-1836	6.8	99
12	CuSbSe2 as a Potential Photovoltaic Absorber Material: Studies from Theory to Experiment. *Advanced Energy Materials*, **2015**, 5, 1501203	21.8	80

11	Thin-film Sb2Se3 photovoltaics with oriented one-dimensional ribbons and benign grain boundaries. *Nature Photonics*, **2015**, 9, 409-415	33.9	548
10	Generalized Water-Processed Metal Chalcogenide Complexes: Synthesis and Applications. *Chemistry of Materials*, **2015**, 27, 8048-8057	9.6	30
9	Sulfurization induced surface constitution and its correlation to the performance of solution-processed Cu2ZnSn(S,Se)4 solar cells. *Scientific Reports*, **2014**, 4, 6288	4.9	42
8	Improving the photo current of the [60]PCBM/P3HT photodetector device by using wavelength-matched photonic crystals. *Journal of Materials Chemistry C*, **2014**, 2, 1500	7.1	17
7	Thermal evaporation and characterization of Sb2Se3 thin film for substrate Sb2Se3/CdS solar cells. *ACS Applied Materials & Interfaces*, **2014**, 6, 10687-95	9.5	235
6	Synthesis of wurtzite Cu2ZnGeSe4 nanocrystals and their thermoelectric properties. *Chemistry - an Asian Journal*, **2013**, 8, 2383-7	4.5	20
5	Improving the electrode performance of Ge through Ge@C core-shell nanoparticles and graphene networks. *Journal of the American Chemical Society*, **2012**, 134, 2512-5	16.4	411
4	Anisotropic photoresponse properties of single micrometer-sized GeSe nanosheet. *Advanced Materials*, **2012**, 24, 4528-33	24	196
3	Bandgap engineering of monodispersed Cu(2-x)S(y)Se(1-y) nanocrystals through chalcogen ratio and crystal structure. *Journal of the American Chemical Society*, **2011**, 133, 18558-61	16.4	86
2	Facile synthesis of germanium nanocrystals and their application in organic-inorganic hybrid photodetectors. *Advanced Materials*, **2011**, 23, 3704-7	24	94
1	Investigation of weak interlayer coupling in 2D layered GeS2 from theory to experiment. *Nano Research*,1	10	2