Haipeng Xie

List of Publications by Year
in descending order

96 papers	5,233 citations	126907 33 h-index	88630 70 g-index
97 all docs	97 docs citations	97 times ranked	7520 citing authors

#	Article	IF	Citations
1	Dual-band metamaterial absorber with stable absorption performance based on fractal structure. Journal Physics D: Applied Physics, 2022, 55, 095003.	2.8	12
2	Emission properties of sequentially deposited ultrathin CH3NH3PbI3/MoS2 heterostructures. Current Applied Physics, 2022, 36, 27-33.	2.4	8
3	Temperature-dependent photoluminescence of Co-evaporated MAPbI3 ultrathin films. Results in Physics, 2022, 34, 105326.	4.1	11
4	Reducing Energy Disorder in Perovskite Solar Cells by Chelation. Journal of the American Chemical Society, 2022, 144, 5400-5410.	13.7	72
5	Ionic Liquidâ€Tuned Crystallization for Stable and Efficient Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	10
6	Dual-function flexible metasurface for absorption and polarization conversion and its application for radar cross section reduction. Journal of Applied Physics, 2022, 131, .	2.5	11
7	Passivation effect of NTCDA nanofilm on black phosphorus. Results in Physics, 2022, 36, 105466.	4.1	0
8	Enhancement of Electrochromic Properties of Polyaniline Induced by Copper Ions. Nanoscale Research Letters, 2022, 17, 51.	5.7	12
9	Improved moisture resistance and interfacial recombination of perovskite solar cells by doping oleylamine in spiro-OMeTAD based hole-transport layer. Applied Physics Letters, 2022, 120, .	3.3	4
10	Design of Real-Time Automatic Gain Control Circuit for Ultra-Low-Frequency (ULF) Communications. , 2022, , .		0
11	Ion Migration Accelerated Reaction between Oxygen and Metal Halide Perovskites in Light and Its Suppression by Cesium Incorporation. Advanced Energy Materials, 2021, 11, 2002552.	19.5	64
12	Adjusting energy level alignment between HTL and CsPbI₂Br to improve solar cell efficiency. Journal of Semiconductors, 2021, 42, 030501.	3.7	21
13	Creating a Dualâ€Functional 2D Perovskite Layer at the Interface to Enhance the Performance of Flexible Perovskite Solar Cells. Small, 2021, 17, e2102368.	10.0	44
14	Facile Surface Laser Modification of Nickel Foams for Efficient Water Oxidation Electrocatalysis. ChemElectroChem, 2021, 8, 2124-2128.	3.4	2
15	Liquid medium annealing for fabricating durable perovskite solar cells with improved reproducibility. Science, 2021, 373, 561-567.	12.6	227
16	Sandwiched electrode buffer for efficient and stable perovskite solar cells with dual back surface fields. Joule, 2021, 5, 2148-2163.	24.0	63
17	Interfacial modification for high performance photodetector based on perovskite. , 2021, , .		0
18	Promoting Energy Transfer via Manipulation of Crystallization Kinetics of Quasiâ€2D Perovskites for Efficient Green Lightâ€Emitting Diodes. Advanced Materials, 2021, 33, e2102246.	21.0	88

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19	Hybridization-Induced Inversion of Spin Polarization at Rubrene/Ferromagnetic Cobalt Interface. Journal of Physical Chemistry C, 2021, 125, 20697-20705.	3.1	1
20	Interfacial electronic structure at rubrene/NiFe heterostructure. Results in Physics, 2021, 29, 104692.	4.1	2
21	Modification of FA0.85MA0.15Pb(I0.85Br0.15)3 Films by NH2-POSS. Crystals, 2021, 11, 1544.	2.2	3
22	All-inorganic, hole-transporting-layer-free, carbon-based CsPbIBr2 planar solar cells with ZnO as electron-transporting materials. Journal of Alloys and Compounds, 2020, 817, 152768.	5.5	22
23	Energyâ€Level Modulation in Diboronâ€Modified SnO₂ for Highâ€Efficiency Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900217.	5.8	28
24	MAPbI3/agarose photoactive composite for highly stable unencapsulated perovskite solar cells in humid environment. Nano Energy, 2020, 67, 104246.	16.0	36
25	Photoemission studies of C8-BTBT/La0.67Sr0.33MnO3 interface. Synthetic Metals, 2020, 260, 116261.	3.9	9
26	Ultrafast fabrication of Cu oxide micro/nano-structures via laser ablation to promote oxygen evolution reaction. Chemical Engineering Journal, 2020, 383, 123086.	12.7	42
27	Probing Phase Distribution in 2D Perovskites for Efficient Device Design. ACS Applied Materials & Interfaces, 2020, 12, 3127-3133.	8.0	39
28	Electronic structure and spin polarization of Co/black phosphorus interface. Journal of Magnetism and Magnetic Materials, 2020, 499, 166297.	2.3	5
29	Cu@C core-shell nanoparticles with efficient optical absorption: DDA-based simulation and experimental validation. Results in Physics, 2020, 16, 102885.	4.1	3
30	Rubidium Doping to Enhance Carrier Transport in CsPbBr₃ Single Crystals for High-Performance X-Ray Detection. ACS Applied Materials & Interfaces, 2020, 12, 989-996.	8.0	84
31	All-inorganic, hole-transporting-layer-free, carbon-based CsPbIBr2 planar perovskite solar cells by a two-step temperature-control annealing process. Materials Science in Semiconductor Processing, 2020, 108, 104870.	4.0	21
32	Effect of interfacial interaction on spin polarization at organic-cobalt interface. Organic Electronics, 2020, 78, 105567.	2.6	7
33	Tailoring the structure of supported Î´-MnO2 nanosheets to raise pseudocapacitance by surface-modified carbon cloth. Journal of Power Sources, 2020, 449, 227507.	7.8	19
34	Interface electronic structure between aluminum and black phosphorus. Results in Physics, 2020, 18, 103222.	4.1	3
35	Evolutions of morphology and electronic properties of few-layered MoS2 exposed to UVO. Results in Physics, 2020, 19, 103634.	4.1	10
36	Rubidium Ions Enhanced Crystallinity for Ruddlesdenâ€“Popper Perovskites. Advanced Science, 2020, 7, 2002445.	11.2	25

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37	Effective passivation of black phosphorus against atmosphere by quasi-monolayer of F4TCNQ molecules. Applied Physics Letters, 2020, 117, .	3.3	10
38	Modification of an ultrathin C₆₀ interlayer on the electronic structure and molecular packing of C8-BTBT on HOPG. Physical Chemistry Chemical Physics, 2020, 22, 25264-25271.	2.8	4
39	Triphenylamineâ€“Polystyrene Blends for Perovskite Solar Cells with Simultaneous Energy Loss Suppression and Stability Improvement. Solar Rrl, 2020, 4, 2000490.	5.8	6
40	Modification of C60 nano-interlayers on organic field-effect transistors based on 2,7-diocty[1]benzothieno-[3,2-b]benzothiophene (C8-BTBT)/SiO2. Results in Physics, 2020, 19, 103590.	4.1	5
41	SiO₂ nanoparticle-regulated crystallization of lead halide perovskite and improved efficiency of carbon-electrode-based low-temperature planar perovskite solar cells*. Chinese Physics B, 2020, 29, 078401.	1.4	6
42	The Role of Surface Termination in Halide Perovskites for Efficient Photocatalytic Synthesis. Angewandte Chemie - International Edition, 2020, 59, 12931-12937.	13.8	27
43	The Role of Surface Termination in Halide Perovskites for Efficient Photocatalytic Synthesis. Angewandte Chemie, 2020, 132, 13031-13037.	2.0	2
44	Asymmetric Fermi velocity induced chiral magnetotransport anisotropy in the type-II Dirac semi-metal PtSe2. Communications Physics, 2020, 3, .	5.3	8
45	Type-II Interface Band Alignment in the vdW PbI₂â€“MoSe₂ Heterostructure. ACS Applied Materials & Interfaces, 2020, 12, 32099-32105.	8.0	20
46	Enormous enhancement in electrical performance of few-layered MoTe2 due to Schottky barrier reduction induced by ultraviolet ozone treatment. Nano Research, 2020, 13, 952-958.	10.4	25
47	Fully Doctor-bladed efficient perovskite solar cells in ambient condition via composition engineering. Organic Electronics, 2020, 83, 105736.	2.6	18
48	Large-scale Roll-to-Roll Micro-gravure Printed Flexible PBDB-T/IT-M Bulk Heterojunction Photodetectors. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	7
49	Interfaces between MoO_x and MoX ₂ (X = S, Se, and Te)*. Chinese Physics B, 2020, 29, 116802.	1.4	7
50	PbI₂â€“MoS₂ Heterojunction: van der Waals Epitaxial Growth and Energy Band Alignment. Journal of Physical Chemistry Letters, 2019, 10, 4203-4208.	4.6	25
51	Effects of CsPbBr3 nanocrystals concentration on electronic structure and surface composition of perovskite films. Organic Electronics, 2019, 73, 327-331.	2.6	22
52	Hybrids of PtRu Nanoclusters and Black Phosphorus Nanosheets for Highly Efficient Alkaline Hydrogen Evolution Reaction. ACS Catalysis, 2019, 9, 10870-10875.	11.2	86
53	A homogeneous pâ€“n junction diode by selective doping of few layer MoSe₂ using ultraviolet ozone for high-performance photovoltaic devices. Nanoscale, 2019, 11, 13469-13476.	5.6	41
54	van der Waals epitaxial growth of ultrathin metallic NiSe nanosheets on WSe2 as high performance contacts for WSe2 transistors. Nano Research, 2019, 12, 1683-1689.	10.4	31

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55	Cation and anion immobilization through chemical bonding enhancement with fluorides for stable halide perovskite solar cells. Nature Energy, 2019, 4, 408-415.	39.5	831
56	Interface Energy-Level Alignment between Black Phosphorus and F₁₆CuPc Molecular Films. Journal of Physical Chemistry C, 2019, 123, 10443-10450.	3.1	12
57	Electronic structure evolution at DBBA/Au(111) interface W/O Bismuth insertion layer. Synthetic Metals, 2019, 251, 24-29.	3.9	10
58	Low-temperature synthesis of all-inorganic perovskite nanocrystals for UV-photodetectors. Journal of Materials Chemistry C, 2019, 7, 5488-5496.	5.5	19
59	In situ surface modification of TiO2 by CaTiO3 to improve the UV stability and power conversion efficiency of perovskite solar cells. Applied Physics Letters, 2019, 115, .	3.3	25
60	Structural and electronic properties of atomically thin Bismuth on Au(111). Surface Science, 2019, 679, 147-153.	1.9	29
61	Interfacial electronic structures of MoOx/mixed perovskite photodetector. Organic Electronics, 2019, 65, 162-169.	2.6	30
62	Cobalt hydroxide-black phosphorus nanosheets: A superior electrocatalyst for electrochemical oxygen evolution. Electrochimica Acta, 2019, 297, 40-45.	5.2	27
63	Large-scale roll-to-roll printed, flexible and stable organic bulk heterojunction photodetector. Npj Flexible Electronics, 2018, 2, .	10.7	54
64	Efficient, stable and flexible perovskite solar cells using two-step solution-processed SnO2 layers as electron-transport-material. Organic Electronics, 2018, 58, 126-132.	2.6	31
65	Extremely low trap-state energy level perovskite solar cells passivated using NH2-POSS with improved efficiency and stability. Journal of Materials Chemistry A, 2018, 6, 6806-6814.	10.3	45
66	One-pot synthesis of CuPt nanodendrites with enhanced activity towards methanol oxidation reaction. RSC Advances, 2018, 8, 9293-9298.	3.6	8
67	Energy level and thickness control on PEDOT:PSS layer for efficient planar heterojunction perovskite cells. Journal Physics D: Applied Physics, 2018, 51, 025110.	2.8	15
68	Congeneric Incorporation of CsPbBr₃ Nanocrystals in a Hybrid Perovskite Heterojunction for Photovoltaic Efficiency Enhancement. ACS Energy Letters, 2018, 3, 30-38.	17.4	106
69	Highly Efficient, Solution-Processed CsPbI₂Br Planar Heterojunction Perovskite Solar Cells via Flash Annealing. ACS Photonics, 2018, 5, 4104-4110.	6.6	64
70	Interface Electronic Structure between Au and Black Phosphorus. Journal of Physical Chemistry C, 2018, 122, 18405-18411.	3.1	7
71	Dopant-induced electron localization drives CO2 reduction to C2 hydrocarbons. Nature Chemistry, 2018, 10, 974-980.	13.6	781
72	Famatinite Cu₃SbS₄ nanocrystals as hole transporting material for efficient perovskite solar cells. Journal of Materials Chemistry C, 2018, 6, 7989-7993.	5.5	20

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73	Accelerated electron extraction and improved UV stability of TiO2 based perovskite solar cells by SnO2 based surface passivation. Organic Electronics, 2018, 59, 184-189.	2.6	45
74	Energy Level Evolution and Oxygen Exposure of Fullerene/Black Phosphorus Interface. Journal of Physical Chemistry Letters, 2018, 9, 5254-5261.	4.6	13
75	Electronic Structures and Nanofilm Growth of 2,7-Dioctyl[1]Benzothieno[3,2-b]Benzothiophene on Black Phosphorus. Journal of Nanoscience and Nanotechnology, 2018, 18, 4332-4336.	0.9	2
76	Fullerene (C60) interlayer modification on the electronic structure and the film growth of 2,7-diocty[1]benzothieno-[3,2-b]benzothiophene on SiO2. Synthetic Metals, 2017, 229, 1-6.	3.9	14
77	Highâ€Performance Broadband Perovskite Photodetectors Based on CH₃NH₃PbI₃/C8BTBT Heterojunction. Advanced Electronic Materials, 2017, 3, 1700058.	5.1	101
78	Interface electronic structure and morphology of 2,7-dioctyl[1]benzothieno[3,2-b]benzothiophene (C8-BTBT) on Au film. Applied Surface Science, 2017, 416, 696-703.	6.1	17
79	2D MoS₂ Neuromorphic Devices for Brainâ€Like Computational Systems. Small, 2017, 13, 1700933.	10.0	268
80	The correlations of the electronic structure and film growth of 2,7-diocty[1]benzothieno[3,2-b]benzothiophene (C8-BTBT) on SiO₂. Physical Chemistry Chemical Physics, 2017, 19, 1669-1676.	2.8	34
81	Irreversible light-soaking effect of perovskite solar cells caused by light-induced oxygen vacancies in titanium oxide. Applied Physics Letters, 2017, 111, .	3.3	56
82	Multilevel Nonvolatile Organic Photomemory Based on Vanadyl-Phthalocyanine/para-Sexiphenyl Heterojunctions. ACS Photonics, 2017, 4, 2573-2579.	6.6	68
83	Charge Transfer at the PTCDA/Black Phosphorus Interface. Journal of Physical Chemistry C, 2017, 121, 18084-18094.	3.1	46
84	Electronic structures at the interface between CuPc and black phosphorus. Journal of Chemical Physics, 2017, 147, 064702.	3.0	12
85	Van Der Waals Heterostructures between Small Organic Molecules and Layered Substrates. Crystals, 2016, 6, 113.	2.2	24
86	Evolution of the electronic structure of C60/La0.67Sr0.33MnO3 interface. Applied Physics Letters, 2016, 108, .	3.3	35
87	Orientation-dependent energy level alignment and film growth of 2,7-diocty[1]benzothieno[3,2-b]benzothiophene (C8-BTBT) on HOPG. Journal of Chemical Physics, 2016, 144, 034701.	3.0	33
88	Effects of Precursor Ratios and Annealing on Electronic Structure and Surface Composition of CH₃NH₃PbI₃ Perovskite Films. Journal of Physical Chemistry C, 2016, 120, 215-220.	3.1	108
89	Air-stable and high-performance organic field-effect transistors based on ordered, large-domain phthalocyanine copper thin film. Synthetic Metals, 2015, 210, 336-341.	3.9	34
90	Efficient organic photovoltaics using solution-processed, annealing-free TiO2 nanocrystalline particles as an interface modification layer. Organic Electronics, 2015, 17, 253-261.	2.6	45

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91	Thickness-Dependent Air-Exposure-Induced Phase Transition of CuPc Ultrathin Films to Well-Ordered One-Dimensional Nanocrystals on Layered Substrates. Journal of Physical Chemistry C, 2015, 119, 4217-4223.	3.1	36
92	Effects of annealing on structure and composition of LSMO thin films. Physica B: Condensed Matter, 2015, 477, 14-19.	2.7	47
93	Interfacial electronic structure at the CH3NH3PbI3/MoOx interface. Applied Physics Letters, 2015, 106, .	3.3	152
94	Qualifying composition dependent p and n self-doping in CH3NH3PbI3. Applied Physics Letters, 2014, 105, .	3.3	518
95	Efficient and stable inverted polymer solar cells using TiO2 nanoparticles and analysized by Mott-Schottky capacitance. Organic Electronics, 2014, 15, 1745-1752.	2.6	41
96	Effect of MoO3 buffer layer on the electronic structure of Al-BP interface. Journal Physics D: Applied Physics, 0, , .	2.8	1