

Huizhen Wu

List of Publications by Year in descending order

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92
papers

1,441
citations

361413

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2066
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#	ARTICLE	IF	CITATIONS
1	Bright luminescence of Sb doping in all-inorganic zinc halide perovskite variant. <i>Journal of Alloys and Compounds</i> , 2022, 895, 162610.	5.5	10
2	Investigation of resistive switching in lead-free bismuth-silver halide double perovskite. <i>Semiconductor Science and Technology</i> , 2022, 37, 065011.	2.0	2
3	An overview of the pressure- and strain-induced changes in the structural and optoelectronic properties of organometal halide perovskites. <i>Solar Energy</i> , 2022, 239, 198-220.	6.1	4
4	Towards single-molecule detection: A novel hybrid system with two-dimensional GaTe sandwiched between Au nanoparticles and hole array. <i>Journal of Alloys and Compounds</i> , 2021, 856, 157445.	5.5	0
5	Self-trapped exciton emission in an Sn-doped all-inorganic zero-dimensional zinc halide perovskite variant. <i>Nanoscale</i> , 2021, 13, 15285-15291.	5.6	23
6	Theoretical study of the strain influence on lead-free bismuth-based halide perovskites. <i>Journal of Materials Science</i> , 2021, 56, 11377-11385.	3.7	4
7	A new strategy to improve the performance of MoS ₂ -based 2D photodetector by synergism of colloidal CuInS ₂ quantum dots and surface plasma resonance of noble metal nanoparticles. <i>Journal of Alloys and Compounds</i> , 2021, 856, 158179.	5.5	23
8	Observation of gain operation mode in Ge:B BIB THz detector. <i>AIP Advances</i> , 2021, 11, 055015.	1.3	1
9	Broadband, optically transparent and highly flexible multispectral beam splitter based on Ag nanowires/graphene composite film for hybrid optical systems. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 295102.	2.8	5
10	Dark-Current-Blocking Mechanism in BIB Far-Infrared Detectors by Interfacial Barriers. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 2804-2809.	3.0	5
11	Nontoxic and Less Toxic Hybrid Perovskites: a Synergistic Strategy for Sustainable Photovoltaic Devices. <i>Solar Rrl</i> , 2021, 5, 2100212.	5.8	10
12	Temperature-sensitive mechanism for silicon blocked-impurity-band photodetectors. <i>Applied Physics Letters</i> , 2021, 119, .	3.3	6
13	Ultrathin, highly flexible and optically transparent terahertz polarizer based on transparent conducting oxide. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 125109.	2.8	10
14	Lead-Free Antimony Halide Perovskite with Heterovalent Mn ²⁺ Doping. <i>Inorganic Chemistry</i> , 2020, 59, 15289-15294.	4.0	25
15	The effect of dodecylammonium chloride on the film morphology, crystallinity, and performance of lead-free Bi-based solution-processed photovoltaics devices. <i>Solar Energy</i> , 2020, 207, 1356-1363.	6.1	18
16	Ultrahigh-Speed Mid-Infrared Photodetectors With 2-D Electron Gas in a CdTe/PbTe Heterojunction. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 2432-2436.	3.0	5
17	Aqueous phase fabrication and conversion of Pb(OH)Br into a CH ₃ NH ₃ PbBr ₃ perovskite and its application in resistive memory switching devices. <i>Green Chemistry</i> , 2020, 22, 3608-3614.	9.0	19
18	Synthesis of large two-dimensional lead-free bismuth-silver double perovskite microplatelets and their application for field-effect transistors. <i>Chemical Communications</i> , 2020, 56, 7917-7920.	4.1	18

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19	A Potential Checkmate to Lead: Bismuth in Organometal Halide Perovskites, Structure, Properties, and Applications. <i>Advanced Science</i> , 2020, 7, 1903143.	11.2	60
20	Impact of the Structural Parameters on the Photoresponse of Terahertz Blocked-Impurity-Band Detectors With Planar Structure. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2020, 10, 358-362.	3.1	7
21	Surface-enhanced Raman scattering on sandwiched structures with gallium telluride. <i>Journal of Materials Science</i> , 2020, 55, 10047-10055.	3.7	2
22	Lateral photovoltaic mid-infrared detector with a two-dimensional electron gas at the heterojunction interface. <i>Optica</i> , 2020, 7, 1394.	9.3	3
23	Enhanced stability in cesium assisted hybrid 2D/3D-perovskite thin films and solar cells prepared in ambient humidity. <i>Solar Energy</i> , 2019, 189, 325-332.	6.1	29
24	Ultrafast dynamics of pure many-body effect and its competition with bandgap widening via electron-phonon coupling in PbTe thin films. <i>Semiconductor Science and Technology</i> , 2019, 34, 105011.	2.0	5
25	Determination of band alignment at the CdTe/SnTe heterojunction interface for CdTe thin-film solar cells. <i>Europhysics Letters</i> , 2019, 127, 37003.	2.0	3
26	Lattice-Mismatched PbTe/ZnTe Heterostructure with High-Speed Midinfrared Photoresponses. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 39342-39350.	8.0	16
27	An overview of the decompositions in organo-metal halide perovskites and shielding with 2-dimensional perovskites. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 109, 160-186.	16.4	42
28	Design and fabrication of plasmonic tuned THz detectors by periodic hole structures. <i>Infrared Physics and Technology</i> , 2019, 99, 45-48.	2.9	6
29	Electric Field Control of Dirac Two-Dimensional Electron Gas in PbTe/CdTe Heterostructures. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1800551.	2.4	3
30	Photoluminescence enhancement in wide spectral range excitation in CsPbBr ₃ nanocrystal/Ag nanostructure via surface plasmon coupling. <i>Optics Letters</i> , 2019, 44, 658.	3.3	20
31	Enhancement of Two-Photon Fluorescence and Low Threshold Amplification of Spontaneous Emission of Zn-processed CuInS ₂ Quantum Dots. <i>ACS Photonics</i> , 2018, 5, 1310-1317.	6.6	11
32	Hybrid Structure of 2D Layered GaTe with Au Nanoparticles for Ultrasensitive Detection of Aromatic Molecules. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 1356-1362.	8.0	16
33	Hybrid AgNPs/MEH-PPV nanocomplexes with enhanced optical absorption and photoluminescence properties. <i>New Journal of Chemistry</i> , 2018, 42, 18991-18999.	2.8	6
34	Ge-based triple-band infrared photodetector. <i>Applied Physics Express</i> , 2018, 11, 114102.	2.4	9
35	Response to "Comment on "Water-processed carbon nanotube/graphene hybrids with enhanced field emission properties" [AIP Advances 8, 039101 (2018)]. <i>AIP Advances</i> , 2018, 8, .	1.3	0
36	Ge-based mid-infrared blocked-impurity-band photodetectors. <i>Infrared Physics and Technology</i> , 2018, 92, 13-17.	2.9	18

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37	Realization of a New Topological Crystalline Insulator and Lifshitz Transition in PbTe. <i>Advanced Functional Materials</i> , 2018, 28, 1803188.	14.9	16
38	Plasmon-enhanced luminescence in novel complex conjugated polymer nanoparticles: publisher's note. <i>Optics Letters</i> , 2018, 43, 231.	3.3	0
39	Effects of external magnetic field and out-of-plane strain on magneto-optical Kerr spectra in CrI ₃ monolayer. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 285303.	1.8	16
40	The effect of infrared plasmon on the performance of Si-based THz detectors. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 839-844.	2.2	13
41	Comparison of Photoresponse of Si-Based BIB THz Detectors. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 1094-1099.	3.0	22
42	Surface plasmon enhanced Si-based BIB terahertz detectors. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	13
43	Electronic band structure of epitaxial PbTe (111) thin films observed by angle-resolved photoemission spectroscopy. <i>Physical Review B</i> , 2017, 95, .	3.2	6
44	Plasmon-enhanced luminescence in novel complex conjugated polymer nanoparticles. <i>Optics Letters</i> , 2017, 42, 3789.	3.3	8
45	Electron energy transfer effect in Au NS/CH ₃ NH ₃ PbI _{3-x} Cl _x heterostructures via localized surface plasmon resonance coupling. <i>Optics Letters</i> , 2016, 41, 4297.	3.3	15
46	Band alignment at the interface of PbTe/SnTe heterojunction determined by X-ray photoelectron spectroscopy. <i>Europhysics Letters</i> , 2016, 116, 37006.	2.0	8
47	Extended storage of multiple excitons in trap states of semiconductor nanocrystals. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	3
48	Influence of size and surface state emission on photoluminescence of CdSe quantum dots under UV irradiation. <i>Journal of Luminescence</i> , 2016, 177, 306-313.	3.1	10
49	Enhanced photoluminescence properties of bismuth sulfide nanocrystals with core-shell Ag@SiO ₂ . <i>Optics Letters</i> , 2016, 41, 1466.	3.3	16
50	Gate Tuning of Förster Resonance Energy Transfer in a Graphene - Quantum Dot FET Photo-Detector. <i>Scientific Reports</i> , 2016, 6, 28224.	3.3	16
51	Enhanced Field-Emission Performance from Carbon Nanotube Emitters on Nickel Foam Cathodes. <i>Journal of Electronic Materials</i> , 2016, 45, 2299-2304.	2.2	18
52	Oxygen Intercalation Induced by Photocatalysis on the Surface of Hybrid Lead Halide Perovskites. <i>Journal of Physical Chemistry C</i> , 2016, 120, 7606-7611.	3.1	52
53	Water-processed carbon nanotube/graphene hybrids with enhanced field emission properties. <i>AIP Advances</i> , 2015, 5, .	1.3	19
54	Quantum Oscillations in a Two-Dimensional Electron Gas at the Rocksalt/Zincblende Interface of PbTe/CdTe (111) Heterostructures. <i>Nano Letters</i> , 2015, 15, 4381-4386.	9.1	25

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55	Quantum-dot blue light emitting diodes utilizing organic/inorganic hybrid structures. Japanese Journal of Applied Physics, 2015, 54, 02BC03.	1.5	0
56	Molecular beam epitaxy and characterizations of PbTe grown on GaAs(211) substrates using CdTe/ZnTe buffers. Journal of Crystal Growth, 2015, 420, 17-21.	1.5	9
57	Tunable electrical properties of NiO thin films and p-type thin-film transistors. Thin Solid Films, 2015, 592, 195-199.	1.8	49
58	Controllable synthesis and growth mechanism of dual size distributed PbSe quantum dots. RSC Advances, 2015, 5, 1961-1967.	3.6	4
59	A dry method to synthesize dendritic Ag ₂ Se nanostructures utilizing CdSe quantum dots and Ag thin films. Nanotechnology, 2015, 26, 015601.	2.6	4
60	Plasmon enhanced fluorescence from quaternary CuInZnS quantum dots. Applied Surface Science, 2015, 327, 394-399.	6.1	13
61	Designable Luminescence with Quantum Dot-Silver Plasmon Coupler. Small, 2014, 10, 3099-3109.	10.0	17
62	Resonant nature of intrinsic defect energy levels in PbTe revealed by infrared photoreflectance spectroscopy. Applied Physics Letters, 2014, 105, 022109.	3.3	11
63	Phonon blocking by two dimensional electron gas in polar CdTe/PbTe heterojunctions. Applied Physics Letters, 2014, 104, 161601.	3.3	19
64	White light-emitting quantum dot diodes and tuning of luminescence processes. Applied Physics A: Materials Science and Processing, 2014, 116, 941-945.	2.3	6
65	Optical properties of pH-sensitive carbon-dots with different modifications. Journal of Luminescence, 2014, 148, 238-242.	3.1	79
66	Band alignment of ZnO/CdSe quantum dots heterojunction determined by ultraviolet photoelectron spectroscopy using synchrotron radiation. Applied Surface Science, 2013, 276, 258-261.	6.1	9
67	Two-dimensional electron gas at the metastable twisted interfaces of CdTe/PbTe (111) single heterojunctions. Physical Review B, 2013, 87, .	3.2	27
68	Annealing-induced bimodal size distribution of small CdSe quantum dots with white-light emission. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1726-1733.	1.8	4
69	Twisted ZnO/CdTe/PbTe (111) heterojunction as a metastable interface structure. New Journal of Physics, 2012, 14, 113021.	2.9	13
70	Physical approaches to tuning the luminescence color patterns of colloidal quantum dots. New Journal of Physics, 2012, 14, 013059.	2.9	12
71	Plasmon-enhanced mid-infrared luminescence from polar and lattice-structure-mismatched CdTe/PbTe single heterojunctions. Applied Physics Letters, 2012, 100, 182104.	3.3	15
72	Enhancement of mid-infrared luminescence from polar CdTe/PbTe heterostructures. , 2012, , .		0

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73	Plasmon-Enhanced Surface-State Emission of CdSe Quantum Dots and Its Application to Microscale Luminescence Patterns. <i>Journal of Physical Chemistry C</i> , 2012, 116, 11283-11291.	3.1	24
74	Observation of regular defects formed on the surface of PbTe thin films grown by molecular beam epitaxy. <i>Applied Surface Science</i> , 2011, 257, 1986-1989.	6.1	14
75	Annealing effects of In ₂ O ₃ thin films on electrical properties and application in thin film transistors. <i>Thin Solid Films</i> , 2011, 519, 3254-3258.	1.8	86
76	The effect of annealing and photoactivation on the optical transitions of band-edge and surface trap states of colloidal quantum dots in PMMA. <i>Nanotechnology</i> , 2011, 22, 125202.	2.6	34
77	Enhancement of light emission from nanostructured In ₂ O ₃ via surface plasmons. <i>Optics Express</i> , 2010, 18, 23385.	3.4	7
78	Large Rashba splitting in highly asymmetric CdTe/PbTe/PbSrTe quantum well structures. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	26
79	Multiphonon resonant Raman scattering in N-doped ZnO. <i>Journal of Raman Spectroscopy</i> , 2009, 40, 2155-2161.	2.5	57
80	Controllable Synthesis of Ordered ZnO Nanodots Arrays by Nanosphere Lithography. <i>Crystal Growth and Design</i> , 2008, 8, 2917-2920.	3.0	9
81	Luminescence enhancement of plasma-etched InAsP/InGaAsP quantum wells. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008, 26, 219-223.	2.1	3
82	Experimental determination of valence band offset at PbTe/CdTe(111) heterojunction interface by x-ray photoelectron spectroscopy. <i>Applied Physics Letters</i> , 2008, 93, 202101.	3.3	34
83	Observation of phonon modes in epitaxial PbTe films grown by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2007, 101, 103505.	2.5	35
84	Transparent Thin-Film Transistors Using ZnMgO as Dielectrics and Channel. <i>IEEE Transactions on Electron Devices</i> , 2007, 54, 2856-2859.	3.0	25
85	Cubic Mg _x Zn _{1-x} O films grown on SiO ₂ substrates. <i>Optical Materials</i> , 2006, 28, 271-275.	3.6	3
86	Progress of IV-VI Semiconductor Research in China. , 2006, , .		5
87	Luminescent properties of annealed and directly wafer-bonded InAsP/InGaAsP multiple quantum wells. <i>Semiconductor Science and Technology</i> , 2005, 20, 615-620.	2.0	2
88	Annealing effect on electrical properties of high-kMgZnO film on silicon. <i>Semiconductor Science and Technology</i> , 2005, 20, L15-L19.	2.0	17
89	Experimental determination of deformation potentials and band nonparabolicity parameters for PbSe. <i>Physical Review B</i> , 2002, 66, .	3.2	24
90	Atomic Ordering in Self-assembled Epitaxial II-VI and IV-VI Compound Semiconductor Quantum Dot Systems. <i>Materials Research Society Symposia Proceedings</i> , 2002, 749, 1.	0.1	3

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91	IV-VI Semiconductor growth on silicon substrates and new mid-infrared laser fabrication methods. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 1999, 55, 1999-2005.	3.9	14
92	Ultra-broadband and multiband infrared/terahertz photodetectors with high sensitivity. Photonics Research, 0, , .	7.0	7