

Dazheng Chen

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Depletion-Mode In^{2+} -Ga ₂ O ₃ MOSFETs Grown by Nonvacuum, Cost-Effective Mist-CVD Method on Fe-Doped GaN Substrates. IEEE Transactions on Electron Devices, 2022, 69, 1196-1199.	1.6	1
2	Stability Improvement of Perovskite Solar Cells by the Moisture-Resistant PMMA:Spiro-OMeTAD Hole Transport Layer. Polymers, 2022, 14, 343.	2.0	14
3	<i>In situ</i> , seed-free formation of a Ruddlesden-Popper perovskite Cs ₂ PbCl ₂ nanowires/PbI ₂ heterojunction for a high-responsivity, self-powered photodetector. Journal of Materials Chemistry C, 2022, 10, 3538-3546.	2.7	2
4	Promising applications of wide bandgap inorganic perovskites in underwater photovoltaic cells. Solar Energy, 2022, 233, 489-493.	2.9	15
5	Performance Improvement of a In^{2+} -Ga ₂ O ₃ -Based Solar-Blind Metal Oxide Semiconductor Field-Effect Phototransistor Using <i>In Situ</i> Ozone Pretreatment Technology. IEEE Transactions on Electron Devices, 2022, 69, 1143-1148.	1.6	8
6	Enhancement-Mode Heterojunction Vertical In^{2+} -Ga ₂ O ₃ MOSFET with a P-Type Oxide Current-Blocking Layer. Applied Sciences (Switzerland), 2022, 12, 1757.	1.3	4
7	Intermediate Phase-Assisted Sequential Deposition Toward 15.24% Efficiency Carbon Electrode CsPbI ₂ Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	13
8	Enhanced breakdown voltage of Si-GaN monolithic heterogeneous integrated Cascode FETs by the device structure design. Solid-State Electronics, 2022, 190, 108251.	0.8	2
9	Wide-range-adjusted threshold voltages for E-mode AlGaIn/GaN HEMT with a p-SnO cap gate. Science China Materials, 2022, 65, 795-802.	3.5	7
10	Charge-selective-contact-dependent halide phase segregation in CsPbI ₂ perovskite solar cells and its correlation to device degradation. Applied Surface Science, 2022, 595, 153544.	3.1	4
11	High-Performance In^{2+} -Ga ₂ O ₃ -Based Solar-Blind Metal-Oxide-Semiconductor Field-Effect Phototransistor Under Zero Gate Bias. IEEE Transactions on Electron Devices, 2022, 69, 3807-3810.	1.6	2
12	Interfacial Dipole poly(2-ethyl-2-oxazoline) Modification Triggers Simultaneous Band Alignment and Passivation for Air-Stable Perovskite Solar Cells. Polymers, 2022, 14, 2748.	2.0	2
13	Suppressing Halide Phase Segregation in CsPbI ₂ Films by Polymer Modification for Hysteresis-Less All-Inorganic Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 2868-2878.	4.0	34
14	Carbon-based, all-inorganic, lead-free Ag ₂ BiI ₅ ruddersite solar cells with high photovoltages. Solid-State Electronics, 2021, 176, 107950.	0.8	11
15	Synchronous Interface Modification and Bulk Passivation via a One-Step Cesium Bromide Diffusion Process for Highly Efficient Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 10110-10119.	4.0	15
16	Slow halide exchange in CsPbI ₂ films for high-efficiency, carbon-based, all-inorganic perovskite solar cells. Science China Materials, 2021, 64, 2107-2117.	3.5	10
17	Ultrahigh-Performance Solar-Blind Photodetectors Based on High Quality Heteroepitaxial Single Crystalline In^{2+} -Ga ₂ O ₃ Film Grown by Vacuumfree, Low-Cost Mist Chemical Vapor Deposition. Advanced Materials Technologies, 2021, 6, 2001296.	3.0	36
18	Performance Improvement of All-Inorganic, Hole-Transport-Layer-Free Perovskite Solar Cells Through Dipoles-Adjustment by Polyethyleneimine Incorporating. IEEE Electron Device Letters, 2021, 42, 537-540.	2.2	3

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19	Wide-Bandgap All-Inorganic CsPbBr ₂ Top Cells With MoO _x /Ag/TeO ₂ Composite Transparent Anode Towards Efficient Four-Terminal Perovskite/Si Tandem Solar Cells. IEEE Photonics Journal, 2021, 13, 1-8.	1.0	1
20	High Performance $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}$ Solar-Blind Metal-Oxide Semiconductor Field-Effect Phototransistor With Hafnium Oxide Gate Dielectric Process. IEEE Electron Device Letters, 2021, 42, 545-548.	2.2	28
21	Improving perovskite solar cell performance by compositional engineering via triple-mixed cations. Solar Energy, 2021, 220, 412-417.	2.9	11
22	Simple and Convenient Interface Modification by Nanosized Diamond for Carbon Based All-Inorganic CsPbBr ₂ Solar Cells. ACS Applied Energy Materials, 2021, 4, 5661-5667.	2.5	4
23	Annealing-Free, High-Performance Perovskite Solar Cells by Controlling Crystallization via Guanidinium Cation Doping. Solar Rrl, 2021, 5, 2100097.	3.1	13
24	$\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}$ epitaxial growth on Fe-GaN template by non-vacuum mist CVD and its application in Schottky barrier diodes. AIP Advances, 2021, 11, .	0.6	4
25	AlN/GaN Superlattice Channel HEMTs on Silicon Substrate. IEEE Transactions on Electron Devices, 2021, 68, 3296-3301.	1.6	14
26	1.2 kV reverse blocking Schottky-drain Si-GaN monolithic integrated cascode FET. AIP Advances, 2021, 11, 105112.	0.6	1
27	Performance Enhancement of All-Inorganic Carbon-Based CsPbBr ₂ Perovskite Solar Cells Using a Moth-Eye Anti-Reflector. Nanomaterials, 2021, 11, 2726.	1.9	5
28	Generic water-based spray-assisted growth for scalable high-efficiency carbon-electrode all-inorganic perovskite solar cells. IScience, 2021, 24, 103365.	1.9	10
29	High-Purity, Thick CsPbCl ₃ Films toward Selective Ultraviolet-Harvesting Visibly Transparent Photovoltaics. ACS Applied Energy Materials, 2021, 4, 12121-12127.	2.5	8
30	Optimization of Sacrificial Layer Etching in Single-Crystal Silicon Nano-Films Transfer Printing for Heterogeneous Integration Application. Nanomaterials, 2021, 11, 3085.	1.9	1
31	<i>In situ</i> polymer-covered annealing strategy for high-efficiency carbon-electrode CsPbBr ₂ solar cells. New Journal of Chemistry, 2021, 45, 22661-22667.	1.4	2
32	All-Inorganic Two-Dimensional Ruddlesden-Popper Perovskite Cs ₂ PbI ₂ Cl ₂ Nanosheet Films for Self-Powered, Visible-Blind UV Photodetectors. , 2021, , .		0
33	Recycling of FTO/TiO ₂ Substrates: Route toward Simultaneously High-Performance and Cost-Efficient Carbon-Based, All-Inorganic CsPbBr ₂ Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 4549-4557.	4.0	38
34	Sacrificial additive-assisted film growth endows self-powered CsPbBr ₃ photodetectors with ultra-low dark current and high sensitivity. Journal of Materials Chemistry C, 2020, 8, 209-218.	2.7	28
35	Flux-mediated growth strategy enables low-temperature fabrication of high-efficiency all-inorganic CsPbBr ₂ perovskite solar cells. Electrochimica Acta, 2020, 330, 135325.	2.6	29
36	Boosting performance of perovskite solar cells with Graphene quantum dots decorated SnO ₂ electron transport layers. Applied Surface Science, 2020, 507, 145099.	3.1	66

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37	Tailored interfacial crystal facets for efficient CH ₃ NH ₃ PbI ₃ perovskite solar cells. <i>Organic Electronics</i> , 2020, 78, 105598.	1.4	5
38	Charge-Transporting-Layer-Free, Vacuum-Free, All-Inorganic CsPbI ₂ Br ₂ Perovskite Solar Cells Via Dipoles-Adjusted Interface. <i>Nanomaterials</i> , 2020, 10, 1324.	1.9	9
39	Ultrawide Band Gap Oxide Semiconductor-Triggered Performance Improvement of Perovskite Solar Cells via the Novel Ga ₂ O ₃ /SnO ₂ Composite Electron-Transporting Bilayer. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 54703-54710.	4.0	26
40	High-Performance ¹²⁵ I-Ga ₂ O ₃ Solar-Blind Schottky Barrier Photodiode With Record Detectivity and Ultrahigh Gain via Carrier Multiplication Process. <i>IEEE Electron Device Letters</i> , 2020, 41, 1794-1797.	2.2	33
41	Enhancing the Performance of Two-Terminal All-Perovskite Tandem Solar Cells by the Optical Coupling Layer Beyond the Antireflection Function. <i>IEEE Photonics Journal</i> , 2020, 12, 1-12.	1.0	5
42	Suppressing intrinsic self-doping of CsPbI ₂ Br ₂ films for high-performance all-inorganic, carbon-based perovskite solar cells. <i>Sustainable Energy and Fuels</i> , 2020, 4, 4506-4515.	2.5	25
43	Dual-Phase CsPbCl ₃ ∕Cs ₄ PbCl ₆ Perovskite Films for Self-Powered, Visible-Blind UV Photodetectors with Fast Response. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32961-32969.	4.0	114
44	Wafer-Scale Si∕GaN Monolithic Integrated E-Mode Cascode FET Realized by Transfer Printing and Self-Aligned Etching Technology. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 3304-3308.	1.6	14
45	Interfacial Voids Trigger Carbon-Based, All-Inorganic CsPbI ₂ Br ₂ Perovskite Solar Cells with Photovoltage Exceeding 1.33 V. <i>Nano-Micro Letters</i> , 2020, 12, 87.	14.4	84
46	Combustion-processed NiO/ALD TiO ₂ bilayer as a novel low-temperature electron transporting material for efficient all-inorganic CsPbI ₂ Br ₂ solar cell. <i>Solar Energy</i> , 2020, 203, 10-18.	2.9	12
47	Highly efficient bifacial CsPbI ₂ Br ₂ solar cells with a TeO ₂ /Ag transparent electrode and unsymmetrical carrier transport behavior. <i>Dalton Transactions</i> , 2020, 49, 6012-6019.	1.6	11
48	Transparent Ultrathin Metal Electrode with Microcavity Configuration for Highly Efficient TCO-Free Perovskite Solar Cells. <i>Materials</i> , 2020, 13, 2328.	1.3	1
49	A Modulated Double∕Passivation Strategy Toward Highly Efficient Perovskite Solar Cells with Efficiency Over 21%. <i>Solar Rrl</i> , 2019, 3, 1900291.	3.1	12
50	Efficient Ni/Au Mesh Transparent Electrodes for ITO-Free Planar Perovskite Solar Cells. <i>Nanomaterials</i> , 2019, 9, 932.	1.9	23
51	Interfacial TiO ₂ atomic layer deposition triggers simultaneous crystallization control and band alignment for efficient CsPbI ₂ Br ₂ perovskite solar cell. <i>Organic Electronics</i> , 2019, 74, 103-109.	1.4	27
52	Flexible Solar-Blind Ga ₂ O ₃ Ultraviolet Photodetectors With High Responsivity and Photo-to-Dark Current Ratio. <i>IEEE Photonics Journal</i> , 2019, 11, 1-9.	1.0	24
53	Light Processing Enables Efficient Carbon-Based, All-Inorganic Planar CsPbI ₂ Br ₂ Solar Cells with High Photovoltages. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 2997-3005.	4.0	98
54	High-performance Acetone Soluble Tape Transfer Printing Method for Heterogeneous Integration. <i>Scientific Reports</i> , 2019, 9, 15769.	1.6	12

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55	Benign Pinholes in CsPbBr ₂ Absorber Film Enable Efficient Carbon-Based, All-Inorganic Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 5254-5262.	2.5	37
56	An efficient TeO ₂ /Ag transparent top electrode for 20%-efficiency bifacial perovskite solar cells with a bifaciality factor exceeding 80%. Journal of Materials Chemistry A, 2019, 7, 15156-15163.	5.2	37
57	Intermediate Phase Halide Exchange Strategy toward a High-Quality, Thick CsPbBr ₃ Film for Optoelectronic Applications. ACS Applied Materials & Interfaces, 2019, 11, 22543-22549.	4.0	34
58	Performance enhancement of perovskite solar cells via material quality improvement assisted by MAI/IPA solution post-treatment. Dalton Transactions, 2019, 48, 5292-5298.	1.6	8
59	Band Alignment Engineering Towards High Efficiency Carbon-Based Inorganic Planar CsPbBr ₂ Perovskite Solar Cells. ChemSusChem, 2019, 12, 2318-2325.	3.6	110
60	Enhancing material quality and device performance of perovskite solar cells via a facile regrowth way assisted by the DMF/Chlorobenzene mixed solution. Organic Electronics, 2019, 70, 300-305.	1.4	11
61	Device simulation of inverted CH ₃ NH ₃ PbI ₃ xCl _x perovskite solar cells based on PCBM electron transport layer and NiO hole transport layer. Solar Energy, 2018, 169, 11-18.	2.9	92
62	Enhanced planar perovskite solar cell efficiency and stability using a perovskite/PCBM heterojunction formed in one step. Nanoscale, 2018, 10, 3053-3059.	2.8	80
63	High-Performance Planar Perovskite Solar Cells Using Low Temperature, Solution-Based Nickel Oxide Hole Transporting Layer with Efficiency Exceeding 20%. Advanced Energy Materials, 2018, 8, 1703432.	10.2	279
64	Efficient Bifacial Semitransparent Perovskite Solar Cells Using Ag/V ₂ O ₅ as Transparent Anodes. ACS Applied Materials & Interfaces, 2018, 10, 12731-12739.	4.0	46
65	Simulation study towards high performance transparent-conductive-oxide free perovskite solar cells using metal microcavity and optical coupling layer. IEEE Photonics Journal, 2018, , 1-1.	1.0	6
66	Bendable Single Crystal Silicon Nanomembrane Thin Film Transistors with Improved Low-Temperature Processed Metal/n-Si Ohmic Contact by Inserting TiO ₂ Interlayer. Nanomaterials, 2018, 8, 1060.	1.9	4
67	Device Simulation of Organic-Inorganic Halide Perovskite/Crystalline Silicon Four-Terminal Tandem Solar Cell With Various Antireflection Materials. IEEE Journal of Photovoltaics, 2018, 8, 1685-1691.	1.5	30
68	Improving Electron Extraction Ability and Device Stability of Perovskite Solar Cells Using a Compatible PCBM/AZO Electron Transporting Bilayer. Nanomaterials, 2018, 8, 720.	1.9	34
69	Intermolecular Exchange Boosts Efficiency of Air-Stable, Carbon-Based All-Inorganic Planar CsPbBr ₂ Perovskite Solar Cells to Over 9%. Advanced Energy Materials, 2018, 8, 1802080.	10.2	215
70	Efficient Semitransparent Perovskite Solar Cells Using a Transparent Silver Electrode and Four-Terminal Perovskite/Silicon Tandem Device Exploration. Journal of Nanomaterials, 2018, 2018, 1-8.	1.5	7
71	Alleviating hysteresis and improving efficiency of MA _{1-x} Fa _y PbI _{3-x} Br _x perovskite solar cells by controlling the halide composition. Journal of Materials Science, 2018, 53, 16500-16510.	1.7	10
72	Aged Precursor Solution toward Low-Temperature Fabrication of Efficient Carbon-Based All-Inorganic Planar CsPbBr ₂ Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 4991-4997.	2.5	83

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73	Performance Enhancement of Planar Heterojunction Perovskite Solar Cells through Tuning the Doping Properties of Hole-Transporting Materials. ACS Omega, 2017, 2, 326-336.	1.6	72
74	Enhanced efficiency of planar perovskite solar cells via a two-step deposition using DMF as an additive to optimize the crystal growth behavior. Journal of Materials Chemistry A, 2017, 5, 13032-13038.	5.2	82
75	Polycrystalline Diamond MOSFET With MoO ₃ Gate Dielectric and Passivation Layer. IEEE Electron Device Letters, 2017, 38, 1302-1304.	2.2	15
76	Polycrystalline diamond RF MOSFET with MoO ₃ gate dielectric. AIP Advances, 2017, 7, .	0.6	6
77	Effects of Annealing Conditions on Mixed Lead Halide Perovskite Solar Cells and Their Thermal Stability Investigation. Materials, 2017, 10, 837.	1.3	30
78	Efficient Inverted ITO-Free Organic Solar Cells Based on Transparent Silver Electrode with Aqueous Solution-Processed ZnO Interlayer. International Journal of Photoenergy, 2017, 2017, 1-6.	1.4	0
79	A PCBM-Modified TiO ₂ Blocking Layer towards Efficient Perovskite Solar Cells. International Journal of Photoenergy, 2017, 2017, 1-9.	1.4	20
80	Effect of polyelectrolyte interlayer on efficiency and stability of p-i-n perovskite solar cells. Solar Energy, 2016, 139, 190-198.	2.9	25
81	Mixed-solvent-vapor annealing of perovskite for photovoltaic device efficiency enhancement. Nano Energy, 2016, 28, 417-425.	8.2	114
82	High-Performance Low-Bandgap Polymer Solar Cells With Optical Microcavity Employing Ultrathin Ag Film Electrode. IEEE Photonics Journal, 2016, 8, 1-12.	1.0	2
83	Efficient inverted polymer solar cells using low-temperature zinc oxide interlayer processed from aqueous solution. Japanese Journal of Applied Physics, 2015, 54, 042301.	0.8	11
84	ITO-Free Semitransparent Organic Solar Cells Based on Silver Thin Film Electrodes. International Journal of Photoenergy, 2014, 2014, 1-7.	1.4	5
85	Improvement of transparent silver thin film anodes for organic solar cells with a decreased percolation threshold of silver. Solar Energy Materials and Solar Cells, 2014, 127, 193-200.	3.0	30
86	Efficient "Light-soaking"-free Inverted Organic Solar Cells with Aqueous Solution Processed Low-Temperature ZnO Electron Extraction Layers. ACS Applied Materials & Interfaces, 2013, 5, 13318-13324.	4.0	22
87	High-Efficiency (>14%) and Air-Stable Carbon-Based, All-Inorganic CsPbI ₂ Br Perovskite Solar Cells through a Top-Seeded Growth Strategy. ACS Energy Letters, 0, , 1500-1510.	8.8	106