Chunfu Zhang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2181719/publications.pdf

Version: 2024-02-01

196	5,557	94433	110387
papers	citations	37 h-index	64 g-index

197	197	197	5805
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design, realization and loss analysis of efficient low-cost large-area bifacial interdigitated-back-contact solar cells with front floating emitter. Solar Energy Materials and Solar Cells, 2022, 235, 111466.	6.2	5
2	Synthesis of n-type ZrO2 doped Îµ-Ga2O3 thin films by PLD and fabrication of Schottky diode. Journal of Alloys and Compounds, 2022, 900, 163120.	5.5	3
3	Depletion-Mode Î²-Ga₂O₃ MOSFETs Grown by Nonvacuum, Cost-Effective Mist-CVD Method on Fe-Doped GaN Substrates. IEEE Transactions on Electron Devices, 2022, 69, 1196-1199.	3.0	1
4	Effect of oxygen plasma treatment on the performance of recessed AlGaN/GaN Schottky barrier diodes. Applied Physics Express, 2022, 15, 016504.	2.4	3
5	Unidirectional p-GaN gate HEMT with composite source-drain field plates. Science China Information Sciences, 2022, 65, 1.	4.3	2
6	Stability Improvement of Perovskite Solar Cells by the Moisture-Resistant PMMA:Spiro-OMeTAD Hole Transport Layer. Polymers, 2022, 14, 343.	4.5	14
7	Diamond MOSFET with MoO3/Si3N4 doubly stacked gate dielectric. Applied Physics Letters, 2022, 120, .	3.3	5
8	In situ, seed-free formation of a Ruddlesdenâ€“Popper perovskite Cs₂PbI₂Cl₂ nanowires/PbI₂ heterojunction for a high-responsivity, self-powered photodetector. Journal of Materials Chemistry C, 2022, 10, 3538-3546.	5.5	2
9	Promising applications of wide bandgap inorganic perovskites in underwater photovoltaic cells. Solar Energy, 2022, 233, 489-493.	6.1	15
10	Performance Improvement of a Î²-Gaâ„Oâ„*f*-Based Solar-Blind Metal Oxide Semiconductor Field-Effect Phototransistor Using In Situ Ozone Pretreatment Technology. IEEE Transactions on Electron Devices, 2022, 69, 1143-1148.	3.0	8
11	Enhancement-Mode Heterojunction Vertical Î²-Ga2O3 MOSFET with a P-Type Oxide Current-Blocking Layer. Applied Sciences (Switzerland), 2022, 12, 1757.	2.5	4
12	Intermediate Phaseâ€Assisted Sequential Deposition Toward 15.24%â€Efficiency Carbonâ€Electrode Cspbi₂br Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	13
13	Enhanced breakdown voltage of Si-GaN monolithic heterogeneous integrated Cascode FETs by the device structure design. Solid-State Electronics, 2022, 190, 108251.	1.4	2
14	Wide-range-adjusted threshold voltages for E-mode AlGaN/GaN HEMT with a p-SnO cap gate. Science China Materials, 2022, 65, 795-802.	6.3	7
15	Trace Al component in Îµ-(AlxGa1-x)2O3 alloy films and film-based solar-blind photodetectors. Ceramics International, 2022, 48, 22031-22038.	4.8	1
16	Charge-selective-contact-dependent halide phase segregation in CsPbIBr2 perovskite solar cells and its correlation to device degradation. Applied Surface Science, 2022, 595, 153544.	6.1	4
17	Proposal and Simulation of Ga₂O₃MOSFET With PN Heterojunction Structure for High-Performance E-Mode Operation. IEEE Transactions on Electron Devices, 2022, 69, 3617-3622.	3.0	11
18	High-Performance Î²-Ga₂O₃-Based Solar-Blind Metalâ€“Oxideâ€“Semiconductor Field-Effect Phototransistor Under Zero Gate Bias. IEEE Transactions on Electron Devices, 2022, 69, 3807-3810.	3.0	2

#	Article	IF	Citations
19	Interfacial Dipole poly(2-ethyl-2-oxazoline) Modification Triggers Simultaneous Band Alignment and Passivation for Air-Stable Perovskite Solar Cells. Polymers, 2022, 14, 2748.	4.5	2
20	Investigation on high quality ultra-wide band gap Î²-Ga₂O₃/AlN heterostructure grown by metal organic chemical vapor deposition. Semiconductor Science and Technology, 2022, 37, 095004.	2.0	5
21	Investigation of Î²-Ga2O3 thin films grown on epi-GaN/sapphire(0001) substrates by low pressure MOCVD. Journal of Alloys and Compounds, 2021, 859, 157810.	5.5	24
22	1.3 kV Reverse-Blocking AlGaN/GaN MISHEMT With Ultralow Turn-On Voltage 0.25 V. IEEE Journal of the Electron Devices Society, 2021, 9, 125-129.	2.1	15
23	Demonstration of High-Performance 4H-SiC MISIM Ultraviolet Photodetector With Operation Temperature of 550 Â°C and High Responsivity. IEEE Transactions on Electron Devices, 2021, 68, 5662-5665.	3.0	14
24	Epitaxial growth of Îµ-(AlGa)₂O₃ films on sapphire substrate by PLD and the fabrication of photodetectors. Optical Materials Express, 2021, 11, 219.	3.0	8
25	Suppressing Halide Phase Segregation in CsPbIBr₂ Films by Polymer Modification for Hysteresis-Less All-Inorganic Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 2868-2878.	8.0	34
26	Carbon-based, all-inorganic, lead-free Ag2BiI5 rudorffite solar cells with high photovoltages. Solid-State Electronics, 2021, 176, 107950.	1.4	11
27	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.	8.0	15
28	Progress in state-of-the-art technologies of Ga₂O₃devices. Journal Physics D: Applied Physics, 2021, 54, 243001.	2.8	86
29	Slow halide exchange in CsPbIBr2 films for high-efficiency, carbon-based, all-inorganic perovskite solar cells. Science China Materials, 2021, 64, 2107-2117.	6.3	10
30	Î²-Ga2O3 hetero-junction barrier Schottky diode with reverse leakage current modulation and BV2/Ron,sp value of 0.93 GW/cm2. Applied Physics Letters, 2021, 118, .	3.3	72
31	H-diamond MOS interface properties and FET characteristics with high-temperature ALD-grown HfO2 dielectric. AIP Advances, 2021, 11, 035041.	1.3	3
32	Ultrahighâ€Performance Solarâ€Blind Photodetectors Based on High Quality Heteroepitaxial Single Crystalline Î²â€Ga₂O₃ Film Grown by Vacuumfree, Lowâ€Cost Mist Chemical Vapor Deposition. Advanced Materials Technologies, 2021, 6, 2001296.	5.8	36
33	Performance Improvement of All-Inorganic, Hole-Transport-Layer-Free Perovskite Solar Cells Through Dipoles-Adjustion by Polyethyleneimine Incorporating. IEEE Electron Device Letters, 2021, 42, 537-540.	3.9	3
34	Wide-Bandgap All-Inorganic CsPbIBr2 Top Cells With MoOx/Ag/TeO2 Composite Transparent Anode Towards Efficient Four-Terminal Perovskite/Si Tandem Solar Cells. IEEE Photonics Journal, 2021, 13, 1-8.	2.0	1
35	High Performance Î²-Ga₂O₃ Solar-Blind Metalâ€“Oxideâ€“Semiconductor Field-Effect Phototransistor With Hafnium Oxide Gate Dielectric Process. IEEE Electron Device Letters, 2021, 42, 545-548.	3.9	28
36	Demonstration of Al0.85Ga0.15N Schottky barrier diode with > 3 kV breakdown voltage and the reverse leakage currents formation mechanism analysis. Applied Physics Letters, 2021, 118, .	3.3	7

#	Article	IF	Citations
37	High performance gate tunable solar blind ultraviolet phototransistors based on amorphous Ga₂O₃ films grown by mist chemical vapor deposition. Nano Select, 2021, 2, 2112-2120.	3.7	12
38	Improving perovskite solar cell performance by compositional engineering via triple-mixed cations. Solar Energy, 2021, 220, 412-417.	6.1	11
39	Simple and Convenient Interface Modification by Nanosized Diamond for Carbon Based All-Inorganic CsPbIBr₂ Solar Cells. ACS Applied Energy Materials, 2021, 4, 5661-5667.	5.1	4
40	Annealingâ€Free, Highâ€Performance Perovskite Solar Cells by Controlling Crystallization via Guanidinium Cation Doping. Solar Rrl, 2021, 5, 2100097.	5.8	13
41	High-performance reverse blocking p-GaN HEMTs with recessed Schottky and p-GaN isolation blocks drain. Applied Physics Letters, 2021, 119, .	3.3	6
42	Î²-Ga2O3 epitaxial growth on Fe-GaN template by non-vacuum mist CVD and its application in Schottky barrier diodes. AIP Advances, 2021, 11, .	1.3	4
43	Influence of Oxygen on Î²-Ga₂O₃ Films Deposited on Sapphire Substrates by MOCVD. ECS Journal of Solid State Science and Technology, 2021, 10, 075009.	1.8	4
44	Reverse blocking p-GaN gate AlGaN/GaN HEMTs with hybrid p-GaN ohmic drain. Superlattices and Microstructures, 2021, 156, 106931.	3.1	10
45	High performance GaN-based monolithic bidirectional switch using diode bridges. Applied Physics Express, 2021, 14, 096502.	2.4	2
46	Au-Free Alâ‚„Gaâ‚„N/Alâ‚„Gaâ‚„N HEMTs on Silicon Substrate With High Reverse Blocking Voltage of 2 kV. IEEE Transactions on Electron Devices, 2021, 68, 4543-4549.	3.0	10
47	Experimental Demonstration of Monolithic Bidirectional Switch With Anti-Paralleled Reverse Blocking p-GaN HEMTs. IEEE Electron Device Letters, 2021, 42, 1264-1267.	3.9	6
48	Heteroepitaxial growth of Î²-Ga2O3 thin films on c-plane sapphire substrates with Î²-(AlxGa1-x)2O3 intermediate buffer layer by mist-CVD method. Materials Today Communications, 2021, 29, 102766.	1.9	10
49	Lateral AlGaN/GaN Schottky Barrier Diode With Arrayed p-GaN Islands Termination. IEEE Transactions on Electron Devices, 2021, 68, 6046-6051.	3.0	10
50	1.2 kV reverse blocking Schottky-drain Siâ€“GaN monolithic integrated cascode FET. AIP Advances, 2021, 11, 105112.	1.3	1
51	Performance Enhancement of All-Inorganic Carbon-Based CsPbIBr2 Perovskite Solar Cells Using a Moth-Eye Anti-Reflector. Nanomaterials, 2021, 11, 2726.	4.1	5
52	Generic water-based spray-assisted growth for scalable high-efficiency carbon-electrode all-inorganic perovskite solar cells. IScience, 2021, 24, 103365.	4.1	10
53	High-Purity, Thick CsPbCl₃ Films toward Selective Ultraviolet-Harvesting Visibly Transparent Photovoltaics. ACS Applied Energy Materials, 2021, 4, 12121-12127.	5.1	8
54	Enhanced P-Type GaN Conductivity by Mg Delta Doped AlGaN/GaN Superlattice Structure. Materials, 2021, 14, 144.	2.9	6

#	Article	IF	Citations
55	Optimization of Sacrificial Layer Etching in Single-Crystal Silicon Nano-Films Transfer Printing for Heterogeneous Integration Application. Nanomaterials, 2021, 11, 3085.	4.1	1
56	Enhancing Breakdown Voltage of a Ga₂O₃ Schottky Barrier Diode with Small-Angle Beveled and High-k Oxide Field Plate. ECS Journal of Solid State Science and Technology, 2021, 10, 125001.	1.8	7
57	In situ polymer-covered annealing strategy for high-efficiency carbon-electrode CsPbIBr₂ solar cells. New Journal of Chemistry, 2021, 45, 22661-22667.	2.8	2
58	All-Inorganic Two-Dimensional Ruddlesden-Popper Perovskite Cs2PbI2Cl2 Nanosheet Films for Self-Powered, Visible-Blind UV Photodetectors. , 2021, , .		0
59	Polyelectrolyteâ€Doped SnO₂ as a Tunable Electron Transport Layer for Highâ€Efficiency and Stable Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900336.	5.8	56
60	Recycling of FTO/TiO₂ Substrates: Route toward Simultaneously High-Performance and Cost-Efficient Carbon-Based, All-Inorganic CsPbIBr₂ Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 4549-4557.	8.0	38
61	Sacrificial additive-assisted film growth endows self-powered CsPbBr₃ photodetectors with ultra-low dark current and high sensitivity. Journal of Materials Chemistry C, 2020, 8, 209-218.	5.5	28
62	Flux-mediated growth strategy enables low-temperature fabrication of high-efficiency all-inorganic CsPbIBr2 perovskite solar cells. Electrochimica Acta, 2020, 330, 135325.	5.2	29
63	Boosting performance of perovskite solar cells with Graphene quantum dots decorated SnO2 electron transport layers. Applied Surface Science, 2020, 507, 145099.	6.1	66
64	Tailored interfacial crystal facets for efficient CH3NH3PbI3 perovskite solar cells. Organic Electronics, 2020, 78, 105598.	2.6	5
65	Dipole-templated homogeneous grain growth of CsPbIBr2 films for efficient self-powered, all-inorganic photodetectors. Solar Energy, 2020, 209, 371-378.	6.1	10
66	Effect of Temperature on the Structural and Optical Properties of Ga2O3 Thin Films Grown on m-plane Sapphire Substrates by Low-Pressure MOCVD. ECS Journal of Solid State Science and Technology, 2020, 9, 065009.	1.8	5
67	Charge-Transporting-Layer-Free, Vacuum-Free, All-Inorganic CsPbIBr2 Perovskite Solar Cells Via Dipoles-Adjusted Interface. Nanomaterials, 2020, 10, 1324.	4.1	9
68	Ultrawide Band Gap Oxide Semiconductor-Triggered Performance Improvement of Perovskite Solar Cells via the Novel Ga₂O₃/SnO₂ Composite Electron-Transporting Bilayer. ACS Applied Materials & Interfaces, 2020, 12, 54703-54710.	8.0	26
69	High-Performance Î²-Ga₂O₃ Solar-Blind Schottky Barrier Photodiode With Record Detectivity and Ultrahigh Gain via Carrier Multiplication Process. IEEE Electron Device Letters, 2020, 41, 1794-1797.	3.9	33
70	Enhancing the Performance of Two-Terminal All-Perovskite Tandem Solar Cells by the Optical Coupling Layer Beyond the Antireflection Function. IEEE Photonics Journal, 2020, 12, 1-12.	2.0	5
71	High-Performance, Vacuum-Free, and Self-Powered CsPbIBr₂ Photodetectors Boosted by Ultra-Wide-Bandgap Ga₂O₃ Interlayer. IEEE Electron Device Letters, 2020, 41, 1532-1535.	3.9	17
72	The Performance Improvement of Using Hole Transport Layer with Lithium and Cobalt for Inverted Planar Perovskite Solar Cell. Coatings, 2020, 10, 354.	2.6	5

#	Article	IF	Citations
73	Suppressing intrinsic self-doping of CsPbIBr₂ films for high-performance all-inorganic, carbon-based perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 4506-4515.	4.9	25
74	Design and fabrication of field-plated normally off Î² -Ga2O3 MOSFET with laminated-ferroelectric charge storage gate for high power application. Applied Physics Letters, 2020, 116, .	3.3	40
75	Dual-Phase CsPbCl₃â€“Cs₄PbCl₆ Perovskite Films for Self-Powered, Visible-Blind UV Photodetectors with Fast Response. ACS Applied Materials & Interfaces, 2020, 12, 32961-32969.	8.0	114
76	Wafer-Scale Siâ€“GaN Monolithic Integrated E-Mode Cascode FET Realized by Transfer Printing and Self-Aligned Etching Technology. IEEE Transactions on Electron Devices, 2020, 67, 3304-3308.	3.0	14
77	Improving electron extraction ability and suppressing recombination of planar perovskite solar cells with the triple cascade electron transporting layer. Solar Energy Materials and Solar Cells, 2020, 208, 110419.	6.2	5
78	High performance hydrogen/oxygen terminated CVD single crystal diamond radiation detector. Applied Physics Letters, 2020, 116, .	3.3	13
79	High temperature (300â€‰Â°C) ALD grown Al2O3 on hydrogen terminated diamond: Band offset and electrical properties of the MOSFETs. Applied Physics Letters, 2020, 116, .	3.3	35
80	Normally-Off-eta -Ga₂O₃ Power MOSFET With Ferroelectric Charge Storage Gate Stack Structure. IEEE Electron Device Letters, 2020, 41, 333-336.	3.9	43
81	Demonstration of a 2 kV Al0.85Ga0.15N Schottky Barrier Diode With Improved On-Current and Ideality Factor. IEEE Electron Device Letters, 2020, 41, 457-460.	3.9	13
82	The Investigation of Î²-Ga₂O₃ Schottky Diode with Floating Field Ring Termination and the Interface States. ECS Journal of Solid State Science and Technology, 2020, 9, 025001.	1.8	20
83	Interfacial Voids Trigger Carbon-Based, All-Inorganic CsPbIBr2 Perovskite Solar Cells with Photovoltage Exceeding 1.33ÂV. Nano-Micro Letters, 2020, 12, 87.	27.0	84
84	Heteroepitaxial growth of Î±-Ga2O3 thin films on a-, c- and r-plane sapphire substrates by low-cost mist-CVD method. Journal of Alloys and Compounds, 2020, 831, 154776.	5.5	36
85	Combustion-processed NiO/ALD TiO2 bilayer as a novel low-temperature electron transporting material for efficient all-inorganic CsPbIBr2 solar cell. Solar Energy, 2020, 203, 10-18.	6.1	12
86	Highly efficient bifacial CsPbIBr₂ solar cells with a TeO₂/Ag transparent electrode and unsymmetrical carrier transport behavior. Dalton Transactions, 2020, 49, 6012-6019.	3.3	11
87	Low-temperature processed high-performance visibleâ€“transparent Ga₂O₃ solar blind ultraviolet photodetectors with the indiumâ€“tinâ€“oxide electrode. Semiconductor Science and Technology, 2020, 35, 125031.	2.0	4
88	Comparison of Ga2O3 Films Grown on m- and r-plane Sapphire Substrates by MOCVD. ECS Journal of Solid State Science and Technology, 2020, 9, 125008.	1.8	1
89	Transparent Ultrathin Metal Electrode with Microcavity Configuration for Highly Efficient TCO-Free Perovskite Solar Cells. Materials, 2020, 13, 2328.	2.9	1
90	Design and Fabrication of Vertical Metal/TiO₂/Î²-Ga₂O₃Dielectric Heterojunction Diode With Reverse Blocking Voltage of 1010 V. IEEE Transactions on Electron Devices, 2020, 67, 5628-5632.	3.0	13

#	Article	IF	Citations
91	Low temperature combustion synthesized indium oxide electron transport layer for high performance and stable perovskite solar cells. Journal of Power Sources, 2019, 438, 226981.	7.8	22
92	High-performance high electron mobility transistors with GaN/InGaN composite channel and superlattice back barrier. Applied Physics Letters, 2019, 115, 072105.	3.3	15
93	Highly Efficient and Stable Planar Perovskite Solar Cells with Modulated Diffusion Passivation Toward High Power Conversion Efficiency and Ultrahigh Fill Factor. Solar Rrl, 2019, 3, 1900293.	5.8	87
94	A Modulated Doubleâ€Passivation Strategy Toward Highly Efficient Perovskite Solar Cells with Efficiency Over 21%. Solar Rrl, 2019, 3, 1900291.	5.8	12
95	Memory Window and Endurance Improvement of Hf0.5Zr0.5O2-Based FeFETs with ZrO2 Seed Layers Characterized by Fast Voltage Pulse Measurements. Nanoscale Research Letters, 2019, 14, 254.	5.7	63
96	A 800â€‰V Î²â€Ga₂O₃ Metalâ€“Oxideâ€“Semiconductor Fieldâ€Effect Transistor with Highâ€Power Figure of Merit of Over 86.3â€‰MWâ€‰cm^{â^'2}. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900421.	1.8	29
97	Efficient Ni/Au Mesh Transparent Electrodes for ITO-Free Planar Perovskite Solar Cells. Nanomaterials, 2019, 9, 932.	4.1	23
98	The investigation of temperature dependent electrical characteristics of Au/Ni/Î²-(InGa)2O3 Schottky diode. Superlattices and Microstructures, 2019, 133, 106179.	3.1	11
99	Interfacial TiO2 atomic layer deposition triggers simultaneous crystallization control and band alignment for efficient CsPbIBr2 perovskite solar cell. Organic Electronics, 2019, 74, 103-109.	2.6	27
100	Flexible Solar-Blind Ga₂O₃ Ultraviolet Photodetectors With High Responsivity and Photo-to-Dark Current Ratio. IEEE Photonics Journal, 2019, 11, 1-9.	2.0	24
101	Light Processing Enables Efficient Carbon-Based, All-Inorganic Planar CsPbIBr₂ Solar Cells with High Photovoltages. ACS Applied Materials & Interfaces, 2019, 11, 2997-3005.	8.0	98
102	Influence of Carrier Gases on the Quality of Epitaxial Corundum-Structured Î±-Ga2O3 Films Grown by Mist Chemical Vapor Deposition Method. Materials, 2019, 12, 3670.	2.9	23
103	High-performance Acetone Soluble Tape Transfer Printing Method for Heterogeneous Integration. Scientific Reports, 2019, 9, 15769.	3.3	12
104	High-Performance Vertical eta -Ga₂O₃Schottky Barrier Diode With Implanted Edge Termination. IEEE Electron Device Letters, 2019, 40, 1788-1791.	3.9	84
105	Thermally Stable and Radiation Hard Ferroelectric Hf_{0.5}Zr_{0.5}O₂ Thin Films on Muscovite Mica for Flexible Nonvolatile Memory Applications. ACS Applied Electronic Materials, 2019, 1, 919-927.	4.3	37
106	Benign Pinholes in CsPbIBr₂ Absorber Film Enable Efficient Carbon-Based, All-Inorganic Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 5254-5262.	5.1	37
107	Efficient NiOx Hole Transporting Layer Obtained by the Oxidation of Metal Nickel Film for Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 4700-4707.	5.1	37
108	Efficient planar perovskite solar cells with low-temperature atomic layer deposited TiO2 electron transport layer and interfacial modifier. Solar Energy, 2019, 188, 239-246.	6.1	24

#	Article	IF	Citations
109	An efficient TeO₂/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.	10.3	37
110	Intermediate Phase Halide Exchange Strategy toward a High-Quality, Thick CsPbBr₃ Film for Optoelectronic Applications. ACS Applied Materials & Interfaces, 2019, 11, 22543-22549.	8.0	34
111	Band alignments at Hf1-Zr O2/Si and Hf0.52Zr0.48O2/Si0.55Ge0.45 interfaces. Superlattices and Microstructures, 2019, 130, 519-527.	3.1	6
112	Improving the production of high-performance solar-blind Î²-Ga2O3 photodetectors by controlling the growth pressure. Journal of Materials Science, 2019, 54, 10335-10345.	3.7	21
113	Performance enhancement of perovskite solar cells via material quality improvement assisted by MAI/IPA solution post-treatment. Dalton Transactions, 2019, 48, 5292-5298.	3.3	8
114	Performance Improvement of Hf_{0.5}Zr_{0.5}O₂-Based Ferroelectric-Field-Effect Transistors With ZrO₂ Seed Layers. IEEE Electron Device Letters, 2019, 40, 714-717.	3.9	95
115	Band Alignment Engineering Towards High Efficiency Carbonâ€Based Inorganic Planar CsPbIBr₂ Perovskite Solar Cells. ChemSusChem, 2019, 12, 2318-2325.	6.8	110
116	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.	2.6	11
117	Interface engineering of low temperature processed all-inorganic CsPbI2Br perovskite solar cells toward PCE exceeding 14%. Nano Energy, 2019, 60, 583-590.	16.0	135
118	Lowâ€Temperature Solutionâ€Processed ZnO Electron Transport Layer for Highly Efficient and Stable Planar Perovskite Solar Cells with Efficiency Over 20%. Solar Rrl, 2019, 3, 1900096.	5.8	66
119	A Facile Way to Improve the Performance of Perovskite Solar Cells by Toluene and Diethyl Ether Mixed Anti-Solvent Engineering. Coatings, 2019, 9, 766.	2.6	11
120	Thinâ€film transistors based on wide bandgap Ga ₂ O ₃ films grown by aqueousâ€solution spinâ€coating method. Micro and Nano Letters, 2019, 14, 1052-1055.	1.3	14
121	High Performance Single Crystalline Diamond Normally-Off Field Effect Transistors. IEEE Journal of the Electron Devices Society, 2019, 7, 82-87.	2.1	23
122	Statistical Process Control for Monitoring the Particles With Excess Zero Counts in Semiconductor Manufacturing. IEEE Transactions on Semiconductor Manufacturing, 2019, 32, 93-103.	1.7	4
123	A review of the most recent progresses of state-of-art gallium oxide power devices. Journal of Semiconductors, 2019, 40, 011803.	3.7	80
124	Device simulation of inverted CH3NH3PbI3â^'xClx perovskite solar cells based on PCBM electron transport layer and NiO hole transport layer. Solar Energy, 2018, 169, 11-18.	6.1	92
125	A non-equilibrium Ti⁴⁺doping strategy for an efficient hematite electron transport layer in perovskite solar cells. Dalton Transactions, 2018, 47, 6404-6411.	3.3	9
126	Optical properties of (Al Ga1-)2O3 on sapphire. Superlattices and Microstructures, 2018, 114, 82-88.	3.1	22

#	Article	IF	Citations
127	Elucidating the Roles of TiCl₄ and PCBM Fullerene Treatment on TiO₂ Electron Transporting Layer for Highly Efficient Planar Perovskite Solar Cells. Journal of Physical Chemistry C, 2018, 122, 1044-1053.	3.1	57
128	Enhanced planar perovskite solar cell efficiency and stability using a perovskite/PCBM heterojunction formed in one step. Nanoscale, 2018, 10, 3053-3059.	5.6	80
129	Investigation of temperature dependent electrical characteristics on Au/Ni/Î²-Ga 2 O 3 Schottky diodes. Superlattices and Microstructures, 2018, 119, 212-217.	3.1	28
130	Highâ€Performance Planar Perovskite Solar Cells Using Low Temperature, Solutionâ€“Combustionâ€Based Nickel Oxide Hole Transporting Layer with Efficiency Exceeding 20%. Advanced Energy Materials, 2018, 8, 1703432.	19.5	279
131	Efficient Bifacial Semitransparent Perovskite Solar Cells Using Ag/V₂O₅ as Transparent Anodes. ACS Applied Materials & Interfaces, 2018, 10, 12731-12739.	8.0	46
132	Investigation on the structural, morphological, electronic and photovoltaic properties of a perovskite thin film by introducing lithium halide. RSC Advances, 2018, 8, 11455-11461.	3.6	4
133	Band alignments of SiO2 and HfO2 dielectrics with (Al Ga1-)2O3 film (0â‰xâ‰0.53) grown on Ga2O3 buffer layer on sapphire. Journal of Alloys and Compounds, 2018, 745, 292-298.	5.5	22
134	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.	2.0	6
135	Bendable Single Crystal Silicon Nanomembrane Thin Film Transistors with Improved Low-Temperature Processed Metal/n-Si Ohmic Contact by Inserting TiO2 Interlayer. Nanomaterials, 2018, 8, 1060.	4.1	4
136	Device Simulation of Organicâ€“Inorganic Halide Perovskite/Crystalline Silicon Four-Terminal Tandem Solar Cell With Various Antireflection Materials. IEEE Journal of Photovoltaics, 2018, 8, 1685-1691.	2.5	30
137	Improving Electron Extraction Ability and Device Stability of Perovskite Solar Cells Using a Compatible PCBM/AZO Electron Transporting Bilayer. Nanomaterials, 2018, 8, 720.	4.1	34
138	Intermolecular Exchange Boosts Efficiency of Airâ€Stable, Carbonâ€Based Allâ€Inorganic Planar CsPbIBr₂ Perovskite Solar Cells to Over 9%. Advanced Energy Materials, 2018, 8, 1802080.	19.5	215
139	Field-Plated Lateral Î²-Ga2O3 Schottky Barrier Diode with High Reverse Blocking Voltage of More Than 3 kV and High DC Power Figure-of-Merit of 500 MW/cm2. IEEE Electron Device Letters, 2018, , 1-1.	3.9	85
140	Enhanced Performance of Inverted Non-Fullerene Organic Solar Cells by Using Metal Oxide Electron- and Hole-Selective Layers with Process Temperature â‰150 Â°C. Polymers, 2018, 10, 725.	4.5	8
141	Integration and Electrical Properties of Ferroelectric Hf0.5Zr0.5O2 Thin Film on Bulk Î²-Ga2O3(-201) Substrate for Memory Applications. IEEE Electron Device Letters, 2018, , 1-1.	3.9	4
142	Solar blind deep ultraviolet Î²-Ga₂O₃photodetectors grown on sapphire by the Mist-CVD method. Optical Materials Express, 2018, 8, 2941.	3.0	83
143	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.	2.7	7
144	Theoretical and Experimental Investigation of Mixed Pbâ€“In Halide Perovskites. Journal of Physical Chemistry C, 2018, 122, 15945-15953.	3.1	19

#	Article	IF	Citations
145	Efficient Low-Cost IBC Solar Cells with a Front Floating Emitter: Structure Optimization and Passivation Layer Study. Energies, 2018, 11, 939.	3.1	7
146	Efficient Planar Hybrid n-Si/PEDOT:PSS Solar Cells with Power Conversion Efficiency up to 13.31% Achieved by Controlling the SiOx Interlayer. Energies, 2018, 11, 1397.	3.1	18
147	Inverted Organic Solar Cells with Low-Temperature Al-Doped-ZnO Electron Transport Layer Processed from Aqueous Solution. Polymers, 2018, 10, 127.	4.5	23
148	Enhanced Planar Perovskite Solar Cell Performance via Contact Passivation of TiO₂/Perovskite Interface with NaCl Doping Approach. ACS Applied Energy Materials, 2018, 1, 3826-3834.	5.1	68
149	Highly efficient perovskite solar cells based on a dopant-free conjugated DPP polymer hole transport layer: influence of solvent vapor annealing. Sustainable Energy and Fuels, 2018, 2, 2154-2159.	4.9	24
150	Interface engineering of TiO2/perovskite interface via fullerene derivatives for high performance planar perovskite solar cells. Organic Electronics, 2018, 62, 459-467.	2.6	32
151	Alleviating hysteresis and improving efficiency of MA1â^'yFAyPbI3â^'xBrx perovskite solar cells by controlling the halide composition. Journal of Materials Science, 2018, 53, 16500-16510.	3.7	10
152	Aged Precursor Solution toward Low-Temperature Fabrication of Efficient Carbon-Based All-Inorganic Planar CsPbIBr₂ Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 4991-4997.	5.1	83
153	(In _x Ga_{1â^'} _x)₂O₃ Photodetectors Fabricated on Sapphire at Different Temperatures by PLD. IEEE Photonics Journal, 2018, 10, 1-8.	2.0	7
154	Tin-assisted growth of Îµ-Ga₂O₃ film and the fabrication of photodetectors on sapphire substrate by PLD. Optical Materials Express, 2018, 8, 3506.	3.0	41
155	Ultrathin Corrugated Metallic Strips for Ultrawideband Surface Wave Trapping at Terahertz Frequencies. IEEE Photonics Journal, 2017, 9, 1-8.	2.0	5
156	Performance Enhancement of Planar Heterojunction Perovskite Solar Cells through Tuning the Doping Properties of Hole-Transporting Materials. ACS Omega, 2017, 2, 326-336.	3.5	72
157	Diamond Field Effect Transistors With MoO₃Gate Dielectric. IEEE Electron Device Letters, 2017, 38, 786-789.	3.9	75
158	Efficient bifacial semitransparent perovskite solar cells with silver thin film electrode. Solar Energy Materials and Solar Cells, 2017, 170, 278-286.	6.2	55
159	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.	10.3	82
160	Intermediate Phase Intermolecular Exchange Triggered Defect Elimination in CH3NH3PbI3 toward Room-Temperature Fabrication of Efficient Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 40378-40385.	8.0	14
161	Polycrystalline Diamond MOSFET With MoO₃ Gate Dielectric and Passivation Layer. IEEE Electron Device Letters, 2017, 38, 1302-1304.	3.9	15
162	Enhanced planar heterojunction perovskite solar cell performance and stability using PDDA polyelectrolyte capping agent. Solar Energy Materials and Solar Cells, 2017, 172, 133-139.	6.2	22

#	Article	IF	Citations
163	Polycrystalline diamond RF MOSFET with MoO3 gate dielectric. AIP Advances, 2017, 7, .	1.3	6
164	Investigation of Fe²⁺-incorporating organicâ€“inorganic hybrid perovskites from first principles and experiments. RSC Advances, 2017, 7, 54586-54593.	3.6	22
165	High performance transient organic solar cells on biodegradable polyvinyl alcohol composite substrates. RSC Advances, 2017, 7, 52930-52937.	3.6	22
166	Hole-Transporting Layer Treatment of Planar Hybrid n-Si/PEDOT:PSS Solar Cells with Power Conversion Efficiency up to 14.5%. International Journal of Photoenergy, 2017, 2017, 1-7.	2.5	2
167	Effects of Annealing Conditions on Mixed Lead Halide Perovskite Solar Cells and Their Thermal Stability Investigation. Materials, 2017, 10, 837.	2.9	30
168	Low Temperature Aqueous Solution-Processed ZnO and Polyethylenimine Ethoxylated Cathode Buffer Bilayer for High Performance Flexible Inverted Organic Solar Cells. Energies, 2017, 10, 494.	3.1	9
169	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.	2.5	0
170	A PCBM-Modified TiO₂ Blocking Layer towards Efficient Perovskite Solar Cells. International Journal of Photoenergy, 2017, 2017, 1-9.	2.5	20
171	Stable Inverted Low-Bandgap Polymer Solar Cells with Aqueous Solution Processed Low-Temperature ZnO Buffer Layers. International Journal of Photoenergy, 2016, 2016, 1-7.	2.5	2
172	Efficient flexible inverted small-bandgap organic solar cells with low-temperature zinc oxide interlayer. Japanese Journal of Applied Physics, 2016, 55, 122302.	1.5	6
173	Effect of polyelectrolyte interlayer on efficiency and stability of p-i-n perovskite solar cells. Solar Energy, 2016, 139, 190-198.	6.1	25
174	Enhancing the photovoltaic performance of planar heterojunction perovskite solar cells by doping the perovskite layer with alkali metal ions. Journal of Materials Chemistry A, 2016, 4, 16546-16552.	10.3	143
175	Interface studies of the planar heterojunction perovskite solar cells. Solar Energy Materials and Solar Cells, 2016, 157, 783-790.	6.2	42
176	Mixed-solvent-vapor annealing of perovskite for photovoltaic device efficiency enhancement. Nano Energy, 2016, 28, 417-425.	16.0	114
177	High-Performance Low-Bandgap Polymer Solar Cells With Optical Microcavity Employing Ultrathin Ag Film Electrode. IEEE Photonics Journal, 2016, 8, 1-12.	2.0	2
178	Controlling aggregation and crystallization of solution processed diketopyrrolopyrrole based polymer for high performance thin film transistors by pre-metered slot die coating process. Organic Electronics, 2016, 36, 113-119.	2.6	20
179	Low temperature aqueous solution-processed Li doped ZnO buffer layers for high performance inverted organic solar cells. Journal of Materials Chemistry C, 2016, 4, 6169-6175.	5.5	45
180	Stability of inverted organic solar cells with lowâ€temperature ZnO buffer layer processed from aqueous solution. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2262-2270.	1.8	6

#	Article	IF	Citations
181	Tensile-Strained Mid-Infrared GeSn Detectors Wrapped in Si ₃N ₄ Liner Stressor: Theoretical Investigation of Impact of Device Architectures. IEEE Photonics Journal, 2015, 7, 1-8.	2.0	2
182	Efficient planar heterojunction solar cell employing CH₃NH₃PbI₂₊_xCl_{1â^'}_xmixed halide perovskite utilizing modified sequential deposition. Japanese Journal of Applied Physics, 2015, 54, 092301.	1.5	3
183	Efficient inverted polymer solar cells using low-temperature zinc oxide interlayer processed from aqueous solution. Japanese Journal of Applied Physics, 2015, 54, 042301.	1.5	11
184	Simulation investigation of tensile strained GeSn fin photodetector with Si_3N_4 liner stressor for extension of absorption wavelength. Optics Express, 2015, 23, 739.	3.4	9
185	Theoretical investigation of tensile strained GeSn waveguide with Si_3N_4 liner stressor for mid-infrared detector and modulator applications. Optics Express, 2015, 23, 7924.	3.4	18
186	ITO-Free Semitransparent Organic Solar Cells Based on Silver Thin Film Electrodes. International Journal of Photoenergy, 2014, 2014, 1-7.	2.5	5
187	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.	6.2	30
188	Efficient â€œLight-soakingâ€•free Inverted Organic Solar Cells with Aqueous Solution Processed Low-Temperature ZnO Electron Extraction Layers. ACS Applied Materials & Interfaces, 2013, 5, 13318-13324.	8.0	22
189	Performance Comparison of Conventional and Inverted Organic Bulk Heterojunction Solar Cells From Optical and Electrical Aspects. IEEE Transactions on Electron Devices, 2013, 60, 451-457.	3.0	24
190	Investigation of Controlled Current Matching in Polymer Tandem Solar Cells Considering Different Layer Sequences and Optical Spacer. Japanese Journal of Applied Physics, 2012, 51, 122301.	1.5	11
191	A simple and efficient solar cell parameter extraction method from a single current-voltage curve. Journal of Applied Physics, 2011, 110, .	2.5	216
192	Inverted Organic Photovoltaic Cells with Solution-Processed Zinc Oxide as Electron Collecting Layer. Japanese Journal of Applied Physics, 2011, 50, 082302.	1.5	11
193	Inverted Organic Photovoltaic Cells with Solution-Processed Zinc Oxide as Electron Collecting Layer. Japanese Journal of Applied Physics, 2011, 50, 082302.	1.5	30
194	High-Efficiency (>14%) and Air-Stable Carbon-Based, All-Inorganic CsPbI₂Br Perovskite Solar Cells through a Top-Seeded Growth Strategy. ACS Energy Letters, 0, , 1500-1510.	17.4	106
195	Photon redistribution of 2T perovskite/Si tandem solar cells induced by the optical coupling layer for higher power conversion efficiency. Semiconductor Science and Technology, 0, , .	2.0	1
196	Heterogrowth of Î²-(Al_xGa_{1â€“x})₂O₃ Thin Films on Sapphire Substrates. Crystal Growth and Design, 0, , .	3.0	1