

# Chunfu Zhang

## List of Publications by Year in descending order

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

Version: 2024-02-01

196  
papers

5,557  
citations

94269

37  
h-index

110170

64  
g-index

197  
all docs

197  
docs citations

197  
times ranked

5805  
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. <i>Solar Energy Materials and Solar Cells</i> , 2022, 235, 111466.	3.0	5
2	Synthesis of n-type ZrO <sub>2</sub> doped $\hat{\mu}$ -Ga <sub>2</sub> O <sub>3</sub> thin films by PLD and fabrication of Schottky diode. <i>Journal of Alloys and Compounds</i> , 2022, 900, 163120.	2.8	3
3	Depletion-Mode $\hat{\mu}$ -Ga <sub>2</sub> O <sub>3</sub> MOSFETs Grown by Nonvacuum, Cost-Effective Mist-CVD Method on Fe-Doped GaN Substrates. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 1196-1199.	1.6	1
4	Effect of oxygen plasma treatment on the performance of recessed AlGaIn/GaN Schottky barrier diodes. <i>Applied Physics Express</i> , 2022, 15, 016504.	1.1	3
5	Unidirectional p-GaN gate HEMT with composite source-drain field plates. <i>Science China Information Sciences</i> , 2022, 65, 1.	2.7	2
6	Stability Improvement of Perovskite Solar Cells by the Moisture-Resistant PMMA:Spiro-OMeTAD Hole Transport Layer. <i>Polymers</i> , 2022, 14, 343.	2.0	14
7	Diamond MOSFET with MoO <sub>3</sub> /Si <sub>3</sub> N <sub>4</sub> doubly stacked gate dielectric. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	5
8	<i>In situ</i> , seed-free formation of a Ruddlesden-Popper perovskite Cs <sub>2</sub> PbCl <sub>2</sub> nanowires/Pb <sub>2</sub> heterojunction for a high-responsivity, self-powered photodetector. <i>Journal of Materials Chemistry C</i> , 2022, 10, 3538-3546.	2.7	2
9	Promising applications of wide bandgap inorganic perovskites in underwater photovoltaic cells. <i>Solar Energy</i> , 2022, 233, 489-493.	2.9	15
10	Performance Improvement of a $\hat{\mu}$ -Ga <sub>2</sub> O <sub>3</sub> -Based Solar-Blind Metal Oxide Semiconductor Field-Effect Phototransistor Using <i>In Situ</i> Ozone Pretreatment Technology. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 1143-1148.	1.6	8
11	Enhancement-Mode Heterojunction Vertical $\hat{\mu}$ -Ga <sub>2</sub> O <sub>3</sub> MOSFET with a P-Type Oxide Current-Blocking Layer. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 1757.	1.3	4
12	Intermediate Phase-Assisted Sequential Deposition Toward 15.24% Efficiency Carbon Electrode CsPbI <sub>2</sub> Perovskite Solar Cells. <i>Solar Rrl</i> , 2022, 6, .	3.1	13
13	Enhanced breakdown voltage of Si-GaN monolithic heterogeneous integrated Cascode FETs by the device structure design. <i>Solid-State Electronics</i> , 2022, 190, 108251.	0.8	2
14	Wide-range-adjusted threshold voltages for E-mode AlGaIn/GaN HEMT with a p-SnO cap gate. <i>Science China Materials</i> , 2022, 65, 795-802.	3.5	7
15	Trace Al component in $\hat{\mu}$ -(Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> alloy films and film-based solar-blind photodetectors. <i>Ceramics International</i> , 2022, 48, 22031-22038.	2.3	1
16	Charge-selective-contact-dependent halide phase segregation in CsPbI <sub>2</sub> perovskite solar cells and its correlation to device degradation. <i>Applied Surface Science</i> , 2022, 595, 153544.	3.1	4
17	Proposal and Simulation of Ga <sub>2</sub> O <sub>3</sub> MOSFET With PN Heterojunction Structure for High-Performance E-Mode Operation. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 3617-3622.	1.6	11
18	High-Performance $\hat{\mu}$ -Ga <sub>2</sub> O <sub>3</sub> -Based Solar-Blind Metal Oxide Semiconductor Field-Effect Phototransistor Under Zero Gate Bias. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 3807-3810.	1.6	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. <i>Polymers</i> , 2022, 14, 2748.	2.0	2
20	Investigation on high quality ultra-wide band gap $\text{In}^{2-}\text{Ga}_{2-}\text{O}_{3-}\text{AlN}$ heterostructure grown by metal organic chemical vapor deposition. <i>Semiconductor Science and Technology</i> , 2022, 37, 095004.	1.0	5
21	Investigation of $\text{In}^{2-}\text{Ga}_2\text{O}_3$ thin films grown on epi-GaN/sapphire(0001) substrates by low pressure MOCVD. <i>Journal of Alloys and Compounds</i> , 2021, 859, 157810.	2.8	24
22	1.3 kV Reverse-Blocking AlGaIn/GaN MISHEMT With Ultralow Turn-On Voltage 0.25 V. <i>IEEE Journal of the Electron Devices Society</i> , 2021, 9, 125-129.	1.2	15
23	Demonstration of High-Performance 4H-SiC MISIM Ultraviolet Photodetector With Operation Temperature of 550 °C and High Responsivity. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 5662-5665.	1.6	14
24	Epitaxial growth of $\text{In}^{2-}(\text{AlGa})_{2-}\text{O}_{3-}$ films on sapphire substrate by PLD and the fabrication of photodetectors. <i>Optical Materials Express</i> , 2021, 11, 219.	1.6	8
25	Suppressing Halide Phase Segregation in $\text{CsPbI}_2\text{Br}$ Films by Polymer Modification for Hysteresis-Less All-Inorganic Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 2868-2878.	4.0	34
26	Carbon-based, all-inorganic, lead-free $\text{Ag}_2\text{BiI}_5$ rudorffite solar cells with high photovoltages. <i>Solid-State Electronics</i> , 2021, 176, 107950.	0.8	11
27	Synchronous Interface Modification and Bulk Passivation via a One-Step Cesium Bromide Diffusion Process for Highly Efficient Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 10110-10119.	4.0	15
28	Progress in state-of-the-art technologies of $\text{Ga}_{2-}\text{O}_{3-}$ devices. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 243001.	1.3	86
29	Slow halide exchange in $\text{CsPbI}_2\text{Br}_2$ films for high-efficiency, carbon-based, all-inorganic perovskite solar cells. <i>Science China Materials</i> , 2021, 64, 2107-2117.	3.5	10
30	$\text{In}^{2-}\text{Ga}_2\text{O}_3$ hetero-junction barrier Schottky diode with reverse leakage current modulation and BV <sub>2/Ron,sp</sub> value of 0.93 GW/cm <sup>2</sup> . <i>Applied Physics Letters</i> , 2021, 118, .	1.5	72
31	H-diamond MOS interface properties and FET characteristics with high-temperature ALD-grown HfO <sub>2</sub> dielectric. <i>AIP Advances</i> , 2021, 11, 035041.	0.6	3
32	Ultra-high Performance Solar-Blind Photodetectors Based on High Quality Heteroepitaxial Single Crystalline $\text{In}^{2-}\text{Ga}_{2-}\text{O}_{3-}$ Film Grown by Vacuum-free, Low-Cost Mist Chemical Vapor Deposition. <i>Advanced Materials Technologies</i> , 2021, 6, 2001296.	3.0	36
33	Performance Improvement of All-Inorganic, Hole-Transport-Layer-Free Perovskite Solar Cells Through Dipoles-Adjustment by Polyethyleneimine Incorporating. <i>IEEE Electron Device Letters</i> , 2021, 42, 537-540.	2.2	3
34	Wide-Bandgap All-Inorganic $\text{CsPbI}_2\text{Br}_2$ Top Cells With MoO <sub>x</sub> /Ag/TeO <sub>2</sub> Composite Transparent Anode Towards Efficient Four-Terminal Perovskite/Si Tandem Solar Cells. <i>IEEE Photonics Journal</i> , 2021, 13, 1-8.	1.0	1
35	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. <i>IEEE Electron Device Letters</i> , 2021, 42, 545-548.	2.2	28
36	Demonstration of Al <sub>0.85</sub> Ga <sub>0.15</sub> N Schottky barrier diode with > 3 kV breakdown voltage and the reverse leakage currents formation mechanism analysis. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	7

#	ARTICLE	IF	CITATIONS
37	High performance gate tunable solar blind ultraviolet phototransistors based on amorphous Ga <sub>2</sub> O <sub>3</sub> films grown by mist chemical vapor deposition. Nano Select, 2021, 2, 2112-2120.	1.9	12
38	Improving perovskite solar cell performance by compositional engineering via triple-mixed cations. Solar Energy, 2021, 220, 412-417.	2.9	11
39	Simple and Convenient Interface Modification by Nanosized Diamond for Carbon Based All-Inorganic CsPbI <sub>3</sub> Solar Cells. ACS Applied Energy Materials, 2021, 4, 5661-5667.	2.5	4
40	Annealing-Free, High-Performance Perovskite Solar Cells by Controlling Crystallization via Guanidinium Cation Doping. Solar Rrl, 2021, 5, 2100097.	3.1	13
41	High-performance reverse blocking p-GaN HEMTs with recessed Schottky and p-GaN isolation blocks drain. Applied Physics Letters, 2021, 119, .	1.5	6
42	Î <sup>2</sup> -Ga <sub>2</sub> O <sub>3</sub> 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
43	Influence of Oxygen on Î <sup>2</sup> -Ga <sub>2</sub> O <sub>3</sub> Films Deposited on Sapphire Substrates by MOCVD. ECS Journal of Solid State Science and Technology, 2021, 10, 075009.	0.9	4
44	Reverse blocking p-GaN gate AlGa <sub>0.5</sub> N/GaN HEMTs with hybrid p-GaN ohmic drain. Superlattices and Microstructures, 2021, 156, 106931.	1.4	10
45	High performance GaN-based monolithic bidirectional switch using diode bridges. Applied Physics Express, 2021, 14, 096502.	1.1	2
46	Au-Free Al <sub>0.5</sub> Ga <sub>0.5</sub> N/Al <sub>0.5</sub> Ga <sub>0.5</sub> N HEMTs on Silicon Substrate With High Reverse Blocking Voltage of 2 kV. IEEE Transactions on Electron Devices, 2021, 68, 4543-4549.	1.6	10
47	Experimental Demonstration of Monolithic Bidirectional Switch With Anti-Paralleled Reverse Blocking p-GaN HEMTs. IEEE Electron Device Letters, 2021, 42, 1264-1267.	2.2	6
48	Heteroepitaxial growth of Î <sup>2</sup> -Ga <sub>2</sub> O <sub>3</sub> thin films on c-plane sapphire substrates with Î <sup>2</sup> -(Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> intermediate buffer layer by mist-CVD method. Materials Today Communications, 2021, 29, 102766.	0.9	10
49	Lateral AlGa <sub>0.5</sub> N/GaN Schottky Barrier Diode With Arrayed p-GaN Islands Termination. IEEE Transactions on Electron Devices, 2021, 68, 6046-6051.	1.6	10
50	1.2 kV reverse blocking Schottky-drain Si-δ-GaN monolithic integrated cascode FET. AIP Advances, 2021, 11, 105112.	0.6	1
51	Performance Enhancement of All-Inorganic Carbon-Based CsPbI <sub>3</sub> Perovskite Solar Cells Using a Moth-Eye Anti-Reflector. Nanomaterials, 2021, 11, 2726.	1.9	5
52	Generic water-based spray-assisted growth for scalable high-efficiency carbon-electrode all-inorganic perovskite solar cells. IScience, 2021, 24, 103365.	1.9	10
53	High-Purity, Thick CsPbCl <sub>3</sub> Films toward Selective Ultraviolet-Harvesting Visibly Transparent Photovoltaics. ACS Applied Energy Materials, 2021, 4, 12121-12127.	2.5	8
54	Enhanced P-Type GaN Conductivity by Mg Delta Doped AlGa <sub>0.5</sub> N/GaN Superlattice Structure. Materials, 2021, 14, 144.	1.3	6

#	ARTICLE	IF	CITATIONS
55	Optimization of Sacrificial Layer Etching in Single-Crystal Silicon Nano-Films Transfer Printing for Heterogeneous Integration Application. <i>Nanomaterials</i> , 2021, 11, 3085.	1.9	1
56	Enhancing Breakdown Voltage of a Ga <sub>2</sub> O <sub>3</sub> Schottky Barrier Diode with Small-Angle Beveled and High-k Oxide Field Plate. <i>ECS Journal of Solid State Science and Technology</i> , 2021, 10, 125001.	0.9	7
57	<i>In situ</i> polymer-covered annealing strategy for high-efficiency carbon-electrode CsPbBr <sub>2</sub> solar cells. <i>New Journal of Chemistry</i> , 2021, 45, 22661-22667.	1.4	2
58	All-Inorganic Two-Dimensional Ruddlesden-Popper Perovskite Cs <sub>2</sub> PbI <sub>2</sub> Cl <sub>2</sub> Nanosheet Films for Self-Powered, Visible-Blind UV Photodetectors. , 2021, , .		0
59	Polyelectrolyte- $\delta$ -Doped SnO <sub>2</sub> as a Tunable Electron Transport Layer for High-Efficiency and Stable Perovskite Solar Cells. <i>Solar Rrl</i> , 2020, 4, 1900336.	3.1	56
60	Recycling of FTO/TiO <sub>2</sub> Substrates: Route toward Simultaneously High-Performance and Cost-Efficient Carbon-Based, All-Inorganic CsPbBr <sub>2</sub> Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 4549-4557.	4.0	38
61	Sacrificial additive-assisted film growth endows self-powered CsPbBr <sub>3</sub> photodetectors with ultra-low dark current and high sensitivity. <i>Journal of Materials Chemistry C</i> , 2020, 8, 209-218.	2.7	28
62	Flux-mediated growth strategy enables low-temperature fabrication of high-efficiency all-inorganic CsPbBr <sub>2</sub> perovskite solar cells. <i>Electrochimica Acta</i> , 2020, 330, 135325.	2.6	29
63	Boosting performance of perovskite solar cells with Graphene quantum dots decorated SnO <sub>2</sub> electron transport layers. <i>Applied Surface Science</i> , 2020, 507, 145099.	3.1	66
64	Tailored interfacial crystal facets for efficient CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite solar cells. <i>Organic Electronics</i> , 2020, 78, 105598.	1.4	5
65	Dipole-templated homogeneous grain growth of CsPbBr <sub>2</sub> films for efficient self-powered, all-inorganic photodetectors. <i>Solar Energy</i> , 2020, 209, 371-378.	2.9	10
66	Effect of Temperature on the Structural and Optical Properties of Ga <sub>2</sub> O <sub>3</sub> Thin Films Grown on m-plane Sapphire Substrates by Low-Pressure MOCVD. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 065009.	0.9	5
67	Charge-Transporting-Layer-Free, Vacuum-Free, All-Inorganic CsPbBr <sub>2</sub> Perovskite Solar Cells Via Dipoles-Adjusted Interface. <i>Nanomaterials</i> , 2020, 10, 1324.	1.9	9
68	Ultrawide Band Gap Oxide Semiconductor-Triggered Performance Improvement of Perovskite Solar Cells via the Novel Ga <sub>2</sub> O <sub>3</sub> /SnO <sub>2</sub> Composite Electron-Transporting Bilayer. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 54703-54710.	4.0	26
69	High-Performance $\hat{I}^2$ -Ga <sub>2</sub> O <sub>3</sub> 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
70	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
71	High-Performance, Vacuum-Free, and Self-Powered CsPbBr <sub>2</sub> Photodetectors Boosted by Ultra-Wide-Bandgap Ga <sub>2</sub> O <sub>3</sub> Interlayer. <i>IEEE Electron Device Letters</i> , 2020, 41, 1532-1535.	2.2	17
72	The Performance Improvement of Using Hole Transport Layer with Lithium and Cobalt for Inverted Planar Perovskite Solar Cell. <i>Coatings</i> , 2020, 10, 354.	1.2	5

#	ARTICLE	IF	CITATIONS
73	Suppressing intrinsic self-doping of CsPbBr <sub>2</sub> films for high-performance all-inorganic, carbon-based perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 4506-4515.	2.5	25
74	Design and fabrication of field-plated normally off $\text{In}^2\text{-Ga}_2\text{O}_3$ MOSFET with laminated-ferroelectric charge storage gate for high power application. Applied Physics Letters, 2020, 116, .	1.5	40
75	Dual-Phase CsPbCl <sub>3</sub> â€“Cs <sub>4</sub> PbCl <sub>6</sub> Perovskite Films for Self-Powered, Visible-Blind UV Photodetectors with Fast Response. ACS Applied Materials & Interfaces, 2020, 12, 32961-32969.	4.0	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.	1.6	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.	3.0	5
78	High performance hydrogen/oxygen terminated CVD single crystal diamond radiation detector. Applied Physics Letters, 2020, 116, .	1.5	13
79	High temperature (300â€“%Â°C) ALD grown Al <sub>2</sub> O <sub>3</sub> on hydrogen terminated diamond: Band offset and electrical properties of the MOSFETs. Applied Physics Letters, 2020, 116, .	1.5	35
80	Normally-Off- $\text{Ga}_2\text{O}_3$ Power MOSFET With Ferroelectric Charge Storage Gate Stack Structure. IEEE Electron Device Letters, 2020, 41, 333-336.	2.2	43
81	Demonstration of a 2 kV Al <sub>0.85</sub> Ga <sub>0.15</sub> N Schottky Barrier Diode With Improved On-Current and Ideality Factor. IEEE Electron Device Letters, 2020, 41, 457-460.	2.2	13
82	The Investigation of $\text{In}^2\text{-Ga}_2\text{O}_3$ Schottky Diode with Floating Field Ring Termination and the Interface States. ECS Journal of Solid State Science and Technology, 2020, 9, 025001.	0.9	20
83	Interfacial Voids Trigger Carbon-Based, All-Inorganic CsPbBr <sub>2</sub> Perovskite Solar Cells with Photovoltage Exceeding 1.33â€“V. Nano-Micro Letters, 2020, 12, 87.	14.4	84
84	Heteroepitaxial growth of $\text{In}^2\text{-Ga}_2\text{O}_3$ thin films on a-, c- and r-plane sapphire substrates by low-cost mist-CVD method. Journal of Alloys and Compounds, 2020, 831, 154776.	2.8	36
85	Combustion-processed NiO/ALD TiO <sub>2</sub> bilayer as a novel low-temperature electron transporting material for efficient all-inorganic CsPbBr <sub>2</sub> solar cell. Solar Energy, 2020, 203, 10-18.	2.9	12
86	Highly efficient bifacial CsPbBr <sub>2</sub> solar cells with a TeO <sub>2</sub> /Ag transparent electrode and unsymmetrical carrier transport behavior. Dalton Transactions, 2020, 49, 6012-6019.	1.6	11
87	Low-temperature processed high-performance visibleâ€“transparent $\text{Ga}_2\text{O}_3$ solar blind ultraviolet photodetectors with the indiumâ€“tinâ€“oxide electrode. Semiconductor Science and Technology, 2020, 35, 125031.	1.0	4
88	Comparison of Ga <sub>2</sub> O <sub>3</sub> Films Grown on m- and r-plane Sapphire Substrates by MOCVD. ECS Journal of Solid State Science and Technology, 2020, 9, 125008.	0.9	1
89	Transparent Ultrathin Metal Electrode with Microcavity Configuration for Highly Efficient TCO-Free Perovskite Solar Cells. Materials, 2020, 13, 2328.	1.3	1
90	Design and Fabrication of Vertical Metal/TiO <sub>2</sub> / $\text{In}^2\text{-Ga}_2\text{O}_3$ Dielectric Heterojunction Diode With Reverse Blocking Voltage of 1010 V. IEEE Transactions on Electron Devices, 2020, 67, 5628-5632.	1.6	13

#	ARTICLE	IF	CITATIONS
91	Low temperature combustion synthesized indium oxide electron transport layer for high performance and stable perovskite solar cells. <i>Journal of Power Sources</i> , 2019, 438, 226981.	4.0	22
92	High-performance high electron mobility transistors with GaN/InGaN composite channel and superlattice back barrier. <i>Applied Physics Letters</i> , 2019, 115, 072105.	1.5	15
93	Highly Efficient and Stable Planar Perovskite Solar Cells with Modulated Diffusion Passivation Toward High Power Conversion Efficiency and Ultrahigh Fill Factor. <i>Solar Rrl</i> , 2019, 3, 1900293.	3.1	87
94	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
95	Memory Window and Endurance Improvement of Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> -Based FeFETs with ZrO <sub>2</sub> Seed Layers Characterized by Fast Voltage Pulse Measurements. <i>Nanoscale Research Letters</i> , 2019, 14, 254.	3.1	63
96	A 800 V Ga <sub>2</sub> O <sub>3</sub> Metal Oxide Semiconductor Field Effect Transistor with High Power Figure of Merit of Over 86.3 MW/cm <sup>2</sup> . <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1900421.	0.8	29
97	Efficient Ni/Au Mesh Transparent Electrodes for ITO-Free Planar Perovskite Solar Cells. <i>Nanomaterials</i> , 2019, 9, 932.	1.9	23
98	The investigation of temperature dependent electrical characteristics of Au/Ni <sup>2+</sup> -(InGa) <sub>2</sub> O <sub>3</sub> Schottky diode. <i>Superlattices and Microstructures</i> , 2019, 133, 106179.	1.4	11
99	Interfacial TiO <sub>2</sub> atomic layer deposition triggers simultaneous crystallization control and band alignment for efficient CsPbI <sub>2</sub> Br <sub>2</sub> perovskite solar cell. <i>Organic Electronics</i> , 2019, 74, 103-109.	1.4	27
100	Flexible Solar-Blind Ga <sub>2</sub> O <sub>3</sub> Ultraviolet Photodetectors With High Responsivity and Photo-to-Dark Current Ratio. <i>IEEE Photonics Journal</i> , 2019, 11, 1-9.	1.0	24
101	Light Processing Enables Efficient Carbon-Based, All-Inorganic Planar CsPbI <sub>2</sub> Br <sub>2</sub> Solar Cells with High Photovoltages. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 2997-3005.	4.0	98
102	Influence of Carrier Gases on the Quality of Epitaxial Corundum-Structured InGa <sub>2</sub> O <sub>3</sub> Films Grown by Mist Chemical Vapor Deposition Method. <i>Materials</i> , 2019, 12, 3670.	1.3	23
103	High-performance Acetone Soluble Tape Transfer Printing Method for Heterogeneous Integration. <i>Scientific Reports</i> , 2019, 9, 15769.	1.6	12
104	High-Performance Vertical Ga <sub>2</sub> O <sub>3</sub> Schottky Barrier Diode With Implanted Edge Termination. <i>IEEE Electron Device Letters</i> , 2019, 40, 1788-1791.	2.2	84
105	Thermally Stable and Radiation Hard Ferroelectric Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> Thin Films on Muscovite Mica for Flexible Nonvolatile Memory Applications. <i>ACS Applied Electronic Materials</i> , 2019, 1, 919-927.	2.0	37
106	Benign Pinholes in CsPbI <sub>2</sub> Br <sub>2</sub> Absorber Film Enable Efficient Carbon-Based, All-Inorganic Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 5254-5262.	2.5	37
107	Efficient NiO Hole Transporting Layer Obtained by the Oxidation of Metal Nickel Film for Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 4700-4707.	2.5	37
108	Efficient planar perovskite solar cells with low-temperature atomic layer deposited TiO <sub>2</sub> electron transport layer and interfacial modifier. <i>Solar Energy</i> , 2019, 188, 239-246.	2.9	24

#	ARTICLE	IF	CITATIONS
109	An efficient TeO <sub>2</sub> /Ag transparent top electrode for 20%-efficiency bifacial perovskite solar cells with a bifaciality factor exceeding 80%. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15156-15163.	5.2	37
110	Intermediate Phase Halide Exchange Strategy toward a High-Quality, Thick CsPbBr <sub>3</sub> Film for Optoelectronic Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 22543-22549.	4.0	34
111	Band alignments at Hf1-Zr O <sub>2</sub> /Si and Hf <sub>0.52</sub> Zr <sub>0.48</sub> O <sub>2</sub> /Si <sub>0.55</sub> Ge <sub>0.45</sub> interfaces. <i>Superlattices and Microstructures</i> , 2019, 130, 519-527.	1.4	6
112	Improving the production of high-performance solar-blind $\hat{2}$ -Ga <sub>2</sub> O <sub>3</sub> photodetectors by controlling the growth pressure. <i>Journal of Materials Science</i> , 2019, 54, 10335-10345.	1.7	21
113	Performance enhancement of perovskite solar cells <i>via</i> material quality improvement assisted by MAI/IPA solution post-treatment. <i>Dalton Transactions</i> , 2019, 48, 5292-5298.	1.6	8
114	Performance Improvement of Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> -Based Ferroelectric-Field-Effect Transistors With ZrO <sub>2</sub> Seed Layers. <i>IEEE Electron Device Letters</i> , 2019, 40, 714-717.	2.2	95
115	Band Alignment Engineering Towards High Efficiency Carbon-Based Inorganic Planar CsPbI <sub>2</sub> Perovskite Solar Cells. <i>ChemSusChem</i> , 2019, 12, 2318-2325.	3.6	110
116	Enhancing material quality and device performance of perovskite solar cells via a facile regrowth way assisted by the DMF/Chlorobenzene mixed solution. <i>Organic Electronics</i> , 2019, 70, 300-305.	1.4	11
117	Interface engineering of low temperature processed all-inorganic CsPbI <sub>2</sub> Br perovskite solar cells toward PCE exceeding 14%. <i>Nano Energy</i> , 2019, 60, 583-590.	8.2	135
118	Low-Temperature Solution-Processed ZnO Electron Transport Layer for Highly Efficient and Stable Planar Perovskite Solar Cells with Efficiency Over 20%. <i>Solar Rrl</i> , 2019, 3, 1900096.	3.1	66
119	A Facile Way to Improve the Performance of Perovskite Solar Cells by Toluene and Diethyl Ether Mixed Anti-Solvent Engineering. <i>Coatings</i> , 2019, 9, 766.	1.2	11
120	Thin-film transistors based on wide bandgap Ga <sub>2</sub> O <sub>3</sub> films grown by aqueous solution spin-coating method. <i>Micro and Nano Letters</i> , 2019, 14, 1052-1055.	0.6	14
121	High Performance Single Crystalline Diamond Normally-Off Field Effect Transistors. <i>IEEE Journal of the Electron Devices Society</i> , 2019, 7, 82-87.	1.2	23
122	Statistical Process Control for Monitoring the Particles With Excess Zero Counts in Semiconductor Manufacturing. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2019, 32, 93-103.	1.4	4
123	A review of the most recent progresses of state-of-art gallium oxide power devices. <i>Journal of Semiconductors</i> , 2019, 40, 011803.	2.0	80
124	Device simulation of inverted CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> -xCl <sub>x</sub> perovskite solar cells based on PCBM electron transport layer and NiO hole transport layer. <i>Solar Energy</i> , 2018, 169, 11-18.	2.9	92
125	A non-equilibrium Ti <sup>4+</sup> doping strategy for an efficient hematite electron transport layer in perovskite solar cells. <i>Dalton Transactions</i> , 2018, 47, 6404-6411.	1.6	9
126	Optical properties of (Al Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> on sapphire. <i>Superlattices and Microstructures</i> , 2018, 114, 82-88.	1.4	22



#	ARTICLE	IF	CITATIONS
127	Elucidating the Roles of $\text{TiCl}_4$ and PCBM Fullerene Treatment on $\text{TiO}_2$ Electron Transporting Layer for Highly Efficient Planar Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , 2018, 122, 1044-1053.	1.5	57
128	Enhanced planar perovskite solar cell efficiency and stability using a perovskite/PCBM heterojunction formed in one step. <i>Nanoscale</i> , 2018, 10, 3053-3059.	2.8	80
129	Investigation of temperature dependent electrical characteristics on $\text{Au/Ni/I}^2\text{-Ga}_2\text{O}_3$ Schottky diodes. <i>Superlattices and Microstructures</i> , 2018, 119, 212-217.	1.4	28
130	High Performance Planar Perovskite Solar Cells Using Low Temperature, Solution-Based Nickel Oxide Hole Transporting Layer with Efficiency Exceeding 20%. <i>Advanced Energy Materials</i> , 2018, 8, 1703432.	10.2	279
131	Efficient Bifacial Semitransparent Perovskite Solar Cells Using $\text{Ag/V}_2\text{O}_5$ as Transparent Anodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 12731-12739.	4.0	46
132	Investigation on the structural, morphological, electronic and photovoltaic properties of a perovskite thin film by introducing lithium halide. <i>RSC Advances</i> , 2018, 8, 11455-11461.	1.7	4
133	Band alignments of $\text{SiO}_2$ and $\text{HfO}_2$ dielectrics with $(\text{Al Ga}_1)\text{-}2\text{O}_3$ film (0.53) grown on $\text{Ga}_2\text{O}_3$ buffer layer on sapphire. <i>Journal of Alloys and Compounds</i> , 2018, 745, 292-298.	2.8	22
134	Simulation study towards high performance transparent-conductive-oxide free perovskite solar cells using metal microcavity and optical coupling layer. <i>IEEE Photonics Journal</i> , 2018, , 1-1.	1.0	6
135	Bendable Single Crystal Silicon Nanomembrane Thin Film Transistors with Improved Low-Temperature Processed Metal/n-Si Ohmic Contact by Inserting $\text{TiO}_2$ Interlayer. <i>Nanomaterials</i> , 2018, 8, 1060.	1.9	4
136	Device Simulation of Organic-Inorganic Halide Perovskite/Crystalline Silicon Four-Terminal Tandem Solar Cell With Various Antireflection Materials. <i>IEEE Journal of Photovoltaics</i> , 2018, 8, 1685-1691.	1.5	30
137	Improving Electron Extraction Ability and Device Stability of Perovskite Solar Cells Using a Compatible PCBM/AZO Electron Transporting Bilayer. <i>Nanomaterials</i> , 2018, 8, 720.	1.9	34
138	Intermolecular Exchange Boosts Efficiency of Air-Stable, Carbon-Based All-Inorganic Planar $\text{CsPbI}_2$ Perovskite Solar Cells to Over 9%. <i>Advanced Energy Materials</i> , 2018, 8, 1802080.	10.2	215
139	Field-Plated Lateral $\text{I}^2\text{-Ga}_2\text{O}_3$ Schottky Barrier Diode with High Reverse Blocking Voltage of More Than 3 kV and High DC Power Figure-of-Merit of 500 MW/cm <sup>2</sup> . <i>IEEE Electron Device Letters</i> , 2018, , 1-1.	2.2	85
140	Enhanced Performance of Inverted Non-Fullerene Organic Solar Cells by Using Metal Oxide Electron- and Hole-Selective Layers with Process Temperature $\leq 150$ °C. <i>Polymers</i> , 2018, 10, 725.	2.0	8
141	Integration and Electrical Properties of Ferroelectric $\text{Hf}_0.5\text{Zr}_0.5\text{O}_2$ Thin Film on Bulk $\text{I}^2\text{-Ga}_2\text{O}_3$ (-201) Substrate for Memory Applications. <i>IEEE Electron Device Letters</i> , 2018, , 1-1.	2.2	4
142	Solar blind deep ultraviolet $\text{I}^2\text{-Ga}_2\text{O}_3$ photodetectors grown on sapphire by the Mist-CVD method. <i>Optical Materials Express</i> , 2018, 8, 2941.	1.6	83
143	Efficient Semitransparent Perovskite Solar Cells Using a Transparent Silver Electrode and Four-Terminal Perovskite/Silicon Tandem Device Exploration. <i>Journal of Nanomaterials</i> , 2018, 2018, 1-8.	1.5	7
144	Theoretical and Experimental Investigation of Mixed Pb-In Halide Perovskites. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15945-15953.	1.5	19

#	ARTICLE	IF	CITATIONS
145	Efficient Low-Cost IBC Solar Cells with a Front Floating Emitter: Structure Optimization and Passivation Layer Study. <i>Energies</i> , 2018, 11, 939.	1.6	7
146	Efficient Planar Hybrid n-Si/PEDOT:PSS Solar Cells with Power Conversion Efficiency up to 13.31% Achieved by Controlling the SiO <sub>x</sub> Interlayer. <i>Energies</i> , 2018, 11, 1397.	1.6	18
147	Inverted Organic Solar Cells with Low-Temperature Al-Doped-ZnO Electron Transport Layer Processed from Aqueous Solution. <i>Polymers</i> , 2018, 10, 127.	2.0	23
148	Enhanced Planar Perovskite Solar Cell Performance via Contact Passivation of TiO <sub>2</sub> /Perovskite Interface with NaCl Doping Approach. <i>ACS Applied Energy Materials</i> , 2018, 1, 3826-3834.	2.5	68
149	Highly efficient perovskite solar cells based on a dopant-free conjugated DPP polymer hole transport layer: influence of solvent vapor annealing. <i>Sustainable Energy and Fuels</i> , 2018, 2, 2154-2159.	2.5	24
150	Interface engineering of TiO <sub>2</sub> /perovskite interface via fullerene derivatives for high performance planar perovskite solar cells. <i>Organic Electronics</i> , 2018, 62, 459-467.	1.4	32
151	Alleviating hysteresis and improving efficiency of MA <sub>1-x</sub> F <sub>y</sub> PbI <sub>3-xBrx</sub> perovskite solar cells by controlling the halide composition. <i>Journal of Materials Science</i> , 2018, 53, 16500-16510.	1.7	10
152	Aged Precursor Solution toward Low-Temperature Fabrication of Efficient Carbon-Based All-Inorganic Planar CsPbI <sub>2</sub> Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2018, 1, 4991-4997.	2.5	83
153	(In <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> Photodetectors Fabricated on Sapphire at Different Temperatures by PLD. <i>IEEE Photonics Journal</i> , 2018, 10, 1-8.	1.0	7
154	Tin-assisted growth of $\mu$ -Ga <sub>2</sub> O <sub>3</sub> film and the fabrication of photodetectors on sapphire substrate by PLD. <i>Optical Materials Express</i> , 2018, 8, 3506.	1.6	41
155	Ultrathin Corrugated Metallic Strips for Ultrawideband Surface Wave Trapping at Terahertz Frequencies. <i>IEEE Photonics Journal</i> , 2017, 9, 1-8.	1.0	5
156	Performance Enhancement of Planar Heterojunction Perovskite Solar Cells through Tuning the Doping Properties of Hole-Transporting Materials. <i>ACS Omega</i> , 2017, 2, 326-336.	1.6	72
157	Diamond Field Effect Transistors With MoO <sub>3</sub> Gate Dielectric. <i>IEEE Electron Device Letters</i> , 2017, 38, 786-789.	2.2	75
158	Efficient bifacial semitransparent perovskite solar cells with silver thin film electrode. <i>Solar Energy Materials and Solar Cells</i> , 2017, 170, 278-286.	3.0	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. <i>Journal of Materials Chemistry A</i> , 2017, 5, 13032-13038.	5.2	82
160	Intermediate Phase Intermolecular Exchange Triggered Defect Elimination in CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> toward Room-Temperature Fabrication of Efficient Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 40378-40385.	4.0	14
161	Polycrystalline Diamond MOSFET With MoO <sub>3</sub> Gate Dielectric and Passivation Layer. <i>IEEE Electron Device Letters</i> , 2017, 38, 1302-1304.	2.2	15
162	Enhanced planar heterojunction perovskite solar cell performance and stability using PDDA polyelectrolyte capping agent. <i>Solar Energy Materials and Solar Cells</i> , 2017, 172, 133-139.	3.0	22

#	ARTICLE	IF	CITATIONS
163	Polycrystalline diamond RF MOSFET with MoO <sub>3</sub> gate dielectric. AIP Advances, 2017, 7, .	0.6	6
164	Investigation of Fe <sup>2+</sup> -incorporating organic-inorganic hybrid perovskites from first principles and experiments. RSC Advances, 2017, 7, 54586-54593.	1.7	22
165	High performance transient organic solar cells on biodegradable polyvinyl alcohol composite substrates. RSC Advances, 2017, 7, 52930-52937.	1.7	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.	1.4	2
167	Effects of Annealing Conditions on Mixed Lead Halide Perovskite Solar Cells and Their Thermal Stability Investigation. Materials, 2017, 10, 837.	1.3	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.	1.6	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.	1.4	0
170	A PCBM-Modified TiO <sub>2</sub> Blocking Layer towards Efficient Perovskite Solar Cells. International Journal of Photoenergy, 2017, 2017, 1-9.	1.4	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.	1.4	2
172	Efficient flexible inverted small-bandgap organic solar cells with low-temperature zinc oxide interlayer. Japanese Journal of Applied Physics, 2016, 55, 122302.	0.8	6
173	Effect of polyelectrolyte interlayer on efficiency and stability of p-i-n perovskite solar cells. Solar Energy, 2016, 139, 190-198.	2.9	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.	5.2	143
175	Interface studies of the planar heterojunction perovskite solar cells. Solar Energy Materials and Solar Cells, 2016, 157, 783-790.	3.0	42
176	Mixed-solvent-vapor annealing of perovskite for photovoltaic device efficiency enhancement. Nano Energy, 2016, 28, 417-425.	8.2	114
177	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
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.	1.4	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.	2.7	45
180	Stability of inverted organic solar cells with low-temperature ZnO buffer layer processed from aqueous solution. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2262-2270.	0.8	6

#	ARTICLE	IF	CITATIONS
181	Tensile-Strained Mid-Infrared GeSn Detectors Wrapped in Si <sub>3</sub> N <sub>4</sub> Liner Stressor: Theoretical Investigation of Impact of Device Architectures. IEEE Photonics Journal, 2015, 7, 1-8.	1.0	2
182	Efficient planar heterojunction solar cell employing CH <sub>3</sub> NH <sub>3</sub> PbI <sub>2</sub> mixed halide perovskite utilizing modified sequential deposition. Japanese Journal of Applied Physics, 2015, 54, 092301.	0.8	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.	0.8	11
184	Simulation investigation of tensile strained GeSn fin photodetector with Si <sub>3</sub> N <sub>4</sub> liner stressor for extension of absorption wavelength. Optics Express, 2015, 23, 739.	1.7	9
185	Theoretical investigation of tensile strained GeSn waveguide with Si <sub>3</sub> N <sub>4</sub> liner stressor for mid-infrared detector and modulator applications. Optics Express, 2015, 23, 7924.	1.7	18
186	ITO-Free Semitransparent Organic Solar Cells Based on Silver Thin Film Electrodes. International Journal of Photoenergy, 2014, 2014, 1-7.	1.4	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.	3.0	30
188	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
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.	1.6	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.	0.8	11
191	A simple and efficient solar cell parameter extraction method from a single current-voltage curve. Journal of Applied Physics, 2011, 110, .	1.1	216
192	Inverted Organic Photovoltaic Cells with Solution-Processed Zinc Oxide as Electron Collecting Layer. Japanese Journal of Applied Physics, 2011, 50, 082302.	0.8	11
193	Inverted Organic Photovoltaic Cells with Solution-Processed Zinc Oxide as Electron Collecting Layer. Japanese Journal of Applied Physics, 2011, 50, 082302.	0.8	30
194	High-Efficiency (>14%) and Air-Stable Carbon-Based, All-Inorganic CsPb <sub>2</sub> Br Perovskite Solar Cells through a Top-Seeded Growth Strategy. ACS Energy Letters, 0, , 1500-1510.	8.8	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, , .	1.0	1
196	Heterogrowth of $\text{In}^{2+}(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ Thin Films on Sapphire Substrates. Crystal Growth and Design, 0, , .	1.4	1