

Long Shibing

List of Publications by Year in descending order

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57
papers

3,196
citations

136950

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all docs

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docs citations

57
times ranked

2349
citing authors

#	ARTICLE	IF	CITATIONS
1	Real-Time Observation on Dynamic Growth/Dissolution of Conductive Filaments in Oxide-Electrolyte-Based ReRAM. <i>Advanced Materials</i> , 2012, 24, 1844-1849.	21.0	520
2	An Overview of the Ultrawide Bandgap Ga ₂ O ₃ Semiconductor-Based Schottky Barrier Diode for Power Electronics Application. <i>Nanoscale Research Letters</i> , 2018, 13, 290.	5.7	155
3	Metal-Semiconductor-Metal $\mu\text{-Ga}_2\text{O}_3$ Solar-Blind Photodetectors with a Record-High Responsivity Rejection Ratio and Their Gain Mechanism. <i>ACS Photonics</i> , 2020, 7, 812-820.	6.6	152
4	Schottky barrier diode based on $\text{In}_2\text{-Ga}_2\text{O}_3$ (100) single crystal substrate and its temperature-dependent electrical characteristics. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	132
5	Bidirectional photocurrent in p-n heterojunction nanowires. <i>Nature Electronics</i> , 2021, 4, 645-652.	26.0	129
6	Unambiguously Enhanced Ultraviolet Luminescence of AlGa _N Wavy Quantum Well Structures Grown on Large Misoriented Sapphire Substrate. <i>Advanced Functional Materials</i> , 2019, 29, 1905445.	14.9	128
7	Band engineering of III-nitride-based deep-ultraviolet light-emitting diodes: a review. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 073002.	2.8	102
8	Review of polymorphous Ga ₂ O ₃ materials and their solar-blind photodetector applications. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 043001.	2.8	98
9	Amorphous Gallium Oxide-Based Gate-Tunable High-Performance Thin Film Phototransistor for Solar-Blind Imaging. <i>Advanced Electronic Materials</i> , 2019, 5, 1900389.	5.1	95
10	Low defect density and small I-V curve hysteresis in NiO/ $\text{In}_2\text{-Ga}_2\text{O}_3$ pn diode with a high PFOM of 0.65 GW/cm ² . <i>Applied Physics Letters</i> , 2021, 118, .	3.3	92
11	High-Performance Metal-Organic Chemical Vapor Deposition Grown $\epsilon\text{-Ga}_2\text{O}_3$ Solar-Blind Photodetector With Asymmetric Schottky Electrodes. <i>IEEE Electron Device Letters</i> , 2019, 40, 1475-1478.	3.9	91
12	Ultra-High Performance Amorphous Ga ₂ O ₃ Photodetector Arrays for Solar-Blind Imaging. <i>Advanced Science</i> , 2021, 8, e2101106.	11.2	91
13	Review of deep ultraviolet photodetector based on gallium oxide. <i>Chinese Physics B</i> , 2019, 28, 018501.	1.4	85
14	Evolution of the conductive filament system in HfO ₂ -based memristors observed by direct atomic-scale imaging. <i>Nature Communications</i> , 2021, 12, 7232.	12.8	85
15	High-Performance Harsh-Environment-Resistant GaO _X Solar-Blind Photodetectors via Defect and Doping Engineering. <i>Advanced Materials</i> , 2022, 34, e2106923.	21.0	83
16	Demonstration of AlGa _N /Ga _N -based ultraviolet phototransistor with a record high responsivity over 3.6 $\times 10^7$ A/W. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	74
17	Ultrahigh-Performance Solar-Blind Photodetector Based on α -Phase-Dominated Ga ₂ O ₃ Film With Record Low Dark Current of 81 fA. <i>IEEE Electron Device Letters</i> , 2019, 40, 1483-1486.	3.9	58
18	Characterization of the inhomogeneous barrier distribution in a Pt/(100) $\text{In}_2\text{-Ga}_2\text{O}_3$ Schottky diode via its temperature-dependent electrical properties. <i>AIP Advances</i> , 2018, 8, .	1.3	56

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19	Toward emerging gallium oxide semiconductors: A roadmap. <i>Fundamental Research</i> , 2021, 1, 697-716.	3.3	56
20	Enhancement-Mode Ga_2O_3 Metal-Oxide Semiconductor Field-Effect Solar-Blind Phototransistor With Ultrahigh Detectivity and Photo-to-Dark Current Ratio. <i>IEEE Electron Device Letters</i> , 2019, 40, 742-745.	3.9	55
21	Advantages of AlGaIn-based deep-ultraviolet light-emitting diodes with an Al-composition graded quantum barrier. <i>Optics Express</i> , 2019, 27, A1544.	3.4	53
22	High-Voltage (0.1 MV) Ga_2O_3 Vertical Schottky Barrier Diode With Thermally-Oxidized Termination. <i>IEEE Electron Device Letters</i> , 2020, 41, 131-134.	3.9	52
23	Schottky Barrier Rectifier Based on (100) Ga_2O_3 and its DC and AC Characteristics. <i>IEEE Electron Device Letters</i> , 2018, 39, 556-559.	3.9	50
24	Tuning the Charge Transfer Dynamics of the Nanostructured GaN Photoelectrodes for Efficient Photoelectrochemical Detection in the Ultraviolet Band. <i>Advanced Functional Materials</i> , 2021, 31, 2103007.	14.9	50
25	Fast Switching Ga_2O_3 Power MOSFET With a Trench-Gate Structure. <i>IEEE Electron Device Letters</i> , 2019, 40, 1385-1388.	3.9	46
26	C-V and J-V investigation of $\text{HfO}_2/\text{Al}_2\text{O}_3$ bilayer dielectrics MOSCAPs on (100) In_2O_3 -Ga $_2\text{O}_3$. <i>AIP Advances</i> , 2018, 8, .	1.3	40
27	High-Detectivity In_2O_3 -Ga $_2\text{O}_3$ Microflake Solar-Blind Phototransistor for Weak Light Detection. <i>IEEE Electron Device Letters</i> , 2021, 42, 383-386.	3.9	40
28	Enhancement-Mode In_2O_3 -Ga $_2\text{O}_3$ Metal-Oxide Semiconductor Field-Effect Transistor with High Breakdown Voltage over 3000 V Realized by Oxygen Annealing. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020, 14, 1900586.	2.4	39
29	Observation of polarity-switchable photoconductivity in III-nitride/MoS $_x$ core-shell nanowires. <i>Light: Science and Applications</i> , 2022, 11, .	16.6	38
30	Double-Barrier In_2O_3 Schottky Barrier Diode With Low Turn-on Voltage and Leakage Current. <i>IEEE Electron Device Letters</i> , 2021, 42, 430-433.	3.9	37
31	Realizing High-Performance In_2O_3 MOSFET by Using Variation of Lateral Doping: A TCAD Study. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 1501-1506.	3.0	37
32	Enhanced Performance of an AlGaIn-Based Deep-Ultraviolet LED Having Graded Quantum Well Structure. <i>IEEE Photonics Journal</i> , 2019, 11, 1-6.	2.0	36
33	Over 1 GW/cm 2 Vertical Ga_2O_3 Schottky Barrier Diodes Without Edge Termination. <i>IEEE Electron Device Letters</i> , 2022, 43, 264-267.	3.9	34
34	Balancing the Transmittance and Carrier Collection Ability of Ag Nanowire Networks for High-Performance Self-Powered Ga_2O_3 Schottky Photodiode. <i>Advanced Optical Materials</i> , 2021, 9, 2100173.	7.3	32
35	Fully Printed High-Performance n-Type Metal Oxide Thin-Film Transistors Utilizing Coffee-Ring Effect. <i>Nano-Micro Letters</i> , 2021, 13, 164.	27.0	30
36	Photovoltage-Competing Dynamics in Photoelectrochemical Devices: Achieving Self-Powered Spectrally Distinctive Photodetection. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	30

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37	Normally-off AlN/ $\text{In}^2\text{-Ga}_2\text{O}_3$ field-effect transistors using polarization-induced doping. Journal Physics D: Applied Physics, 2020, 53, 345107.	2.8	24
38	Aqueous-Printed Ga_2O_3 Films for High-Performance Flexible and Heat-Resistant Deep Ultraviolet Photodetector and Array. Advanced Optical Materials, 2022, 10, .	7.3	24
39	High-Performance $\text{In}^2\text{-Ga}_2\text{O}_3$ Solar-Blind Photodetector With Extremely Low Working Voltage. IEEE Electron Device Letters, 2021, 42, 1492-1495.	3.9	23
40	Achieving Record High External Quantum Efficiency >86.7% in Solar-Blind Photoelectrochemical Photodetection. Advanced Functional Materials, 2022, 32, .	14.9	23
41	2.6 kV NiO/ Ga_2O_3 Heterojunction Diode with Superior High-Temperature Voltage Blocking Capability. , 2022, , .		20
42	Coupling Plasmonic Pt Nanoparticles with AlGaN Nanostructures for Enhanced Broadband Photoelectrochemical-Detection Applications. ACS Applied Nano Materials, 2021, 4, 13938-13946.	5.0	15
43	Hysteresis-free Ga_2O_3 solar-blind phototransistor modulated from photoconduction to photogating effect. Applied Physics Letters, 2022, 120, .	3.3	13
44	Normally-off $\text{In}^2\text{-Ga}_2\text{O}_3$ Power Heterojunction Field-Effect-Transistor Realized by p-NiO and Recessed-Gate. , 2022, , .		13
45	Demonstration of AlGaIn/GaN HEMTs on vicinal sapphire substrates with large misoriented angles. Applied Physics Letters, 2021, 119, .	3.3	8
46	Correlation Between Electrical Performance and Gate Width of GaN-Based HEMTs. IEEE Electron Device Letters, 2022, 43, 1199-1202.	3.9	8
47	Investigation of quantum structure in N-polar deep-ultraviolet light-emitting diodes. Journal of Applied Physics, 2021, 129, .	2.5	7
48	Elevated barrier height originated from electric dipole effect and improved breakdown characteristics in PtO/ $\text{In}^2\text{-Ga}_2\text{O}_3$ Schottky barrier diodes. Journal Physics D: Applied Physics, 2022, 55, 304003.	2.8	7
49	One Transistor One Electrolyte-Gated Transistor for Supervised Learning in SNNs. IEEE Electron Device Letters, 2022, 43, 296-299.	3.9	6
50	Experimental Investigation on Threshold Voltage Instability for $\text{In}^2\text{-Ga}_2\text{O}_3$ MOSFET Under Electrical and Thermal Stress. IEEE Transactions on Electron Devices, 2022, 69, 5048-5054.	3.0	6
51	A unified hybrid compact model of $\text{In}^2\text{-Ga}_2\text{O}_3$ Schottky barrier diodes for mixer and rectifier applications. Science China Information Sciences, 2021, 64, 1.	4.3	5
52	Resistive Switching: Breaking the Current-Retention Dilemma in Cation-Based Resistive Switching Devices Utilizing Graphene with Controlled Defects (Adv. Mater. 14/2018). Advanced Materials, 2018, 30, 1870100.	21.0	4
53	Controlling different phases of gallium oxide for solar-blind photodetector application. Semiconductors and Semimetals, 2021, 107, 101-151.	0.7	4
54	Leakage current suppression and breakdown voltage enhancement in GaN-on-GaN vertical Schottky barrier diodes enabled by oxidized platinum as Schottky contact metal. Semiconductor Science and Technology, 2022, 37, 065010.	2.0	2

#	ARTICLE	IF	CITATIONS
55	Positive-Bias Stress Stability of Solution-Processed Oxide Semiconductor Thin-Film Transistor. IEEE Transactions on Electron Devices, 2022, 69, 3727-3731.	3.0	2
56	An improved analytical model for the statistics of SET emergence point in HfO2 memristive device. AIP Advances, 2019, 9, 025118.	1.3	1
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