

# Zeng Liu

## List of Publications by Year in descending order

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61  
papers

1,527  
citations

361296

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345118

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61  
all docs

61  
docs citations

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times ranked

648  
citing authors

#	ARTICLE	IF	CITATIONS
1	A broadband self-powered UV photodetector of a $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}/\text{In}^{3-}\text{Cu}$ p-n junction. Chinese Physics B, 2022, 31, 024205.	0.7	10
2	High-sensitive, self-powered deep UV photodetector based on p-CuSCN/n-Ga <sub>2</sub> O <sub>3</sub> thin film heterojunction. Optics Communications, 2022, 504, 127483.	1.0	22
3	Multifunctional polypyrrole and rose-like silver flower-decorated E-textile with outstanding pressure/strain sensing and energy storage performance. Chemical Engineering Journal, 2022, 427, 130823.	6.6	40
4	Preparation and characterization of cellulose nanocrystals from spent edible fungus substrate. Journal of the Science of Food and Agriculture, 2022, 102, 2761-2772.	1.7	7
5	Ti <sub>3</sub> C <sub>2</sub> /In-Ga <sub>2</sub> O <sub>3</sub> Schottky Self-Powered Solar-Blind Photodetector With Robust Responsivity. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-8.	1.9	15
6	A self-powered $\text{In}^{2-}\text{Ga}_2\text{O}_3/\text{CsCu}_2\text{I}_3$ heterojunction photodiode responding to deep ultraviolet irradiation. Current Applied Physics, 2022, 33, 20-26.	1.1	20
7	Foam-like GaN: Study on the controlled tuning of pore size by R group change in amino acid etchant and its ultra-high photocurrent response. Vacuum, 2022, 196, 110779.	1.6	3
8	Enhancement-mode normally-off $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}:\text{Si}$ metal-semiconductor field-effect deep-ultraviolet phototransistor. Semiconductor Science and Technology, 2022, 37, 015001.	1.0	13
9	Enhancing the self-powered performance in VO <sub>x</sub> /Ga <sub>2</sub> O <sub>3</sub> heterojunction ultraviolet photodetector by hole-transport engineering. Journal of Alloys and Compounds, 2022, 902, 163801.	2.8	17
10	Oxygen vacancies modulating self-powered photoresponse in PEDOT:PSS/In-Ga <sub>2</sub> O <sub>3</sub> heterojunction by trapping effect. Science China Technological Sciences, 2022, 65, 704-712.	2.0	20
11	Ga <sub>2</sub> O <sub>3</sub> /In <sub>2</sub> O <sub>3</sub> Oxide Heterojunction Photovoltaic Photodetector With Superhigh Solar-Blind Spectral Discriminability. IEEE Transactions on Electron Devices, 2022, 69, 2443-2448.	1.6	20
12	In <sup>2+</sup> -Ga <sub>2</sub> O <sub>3</sub> -Based Power Devices: A Concise Review. Crystals, 2022, 12, 406.	1.0	34
13	A 4 Å—4 metal-semiconductor-metal rectangular deep-ultraviolet detector array of Ga <sub>2</sub> O <sub>3</sub> photoconductor with high photo response. Chinese Physics B, 2022, 31, 088503.	0.7	11
14	Quasi-Epitaxial Growth of In <sup>2+</sup> -Ga <sub>2</sub> O <sub>3</sub> -Coated Wide Band Gap Semiconductor Tape for Flexible UV Photodetectors. ACS Applied Materials & Interfaces, 2022, 14, 1304-1314.	4.0	29
15	A self-powered deep-ultraviolet photodetector based on a hybrid organic-inorganic p-P3HT/n-Ga <sub>2</sub> O <sub>3</sub> heterostructure. Physica Scripta, 2022, 97, 075804.	1.2	2
16	Low MOCVD growth temperature controlled phase transition of Ga <sub>2</sub> O <sub>3</sub> films for ultraviolet sensing. Vacuum, 2022, 203, 111270.	1.6	13
17	High-temperature reliability of all-oxide self-powered deep UV photodetector based on In-Ga <sub>2</sub> O <sub>3</sub> /ZnO heterojunction. Journal Physics D: Applied Physics, 2022, 55, 375106.	1.3	14
18	Ultrahigh-performance planar In <sup>2+</sup> -Ga <sub>2</sub> O <sub>3</sub> solar-blind Schottky photodiode detectors. Science China Technological Sciences, 2021, 64, 59-64.	2.0	32

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19	Construction of a low-temperature, highly sensitive H <sub>2</sub> S sensor based on surfaces and interfaces reaction triggered by Au-doped hierarchical structured composites. <i>Chemical Physics Letters</i> , 2021, 763, 138188.	1.2	6
20	Self-powered solar-blind photodiodes based on EFG-grown (100)-dominant $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> substrate*. <i>Chinese Physics B</i> , 2021, 30, 017302.	0.7	9
21	Reinforcement of double built-in electric fields in spiro-MeOTAD/Ga <sub>2</sub> O <sub>3</sub> /Si p <sup>+</sup> -i <sup>-</sup> n structure for a high-sensitivity solar-blind UV photovoltaic detector. <i>Journal of Materials Chemistry C</i> , 2021, 9, 14788-14798.	2.7	21
22	Solution Spin-Coated BiFeO <sub>3</sub> Onto Ga <sub>2</sub> O <sub>3</sub> Towards Self-Powered Deep UV Photo Detector of Ga <sub>2</sub> O <sub>3</sub> /BiFeO <sub>3</sub> Heterojunction. <i>IEEE Sensors Journal</i> , 2021, 21, 23987-23994.	2.4	10
23	Enhanced deep-ultraviolet sensing by an all-inorganic p-PZT/n-Ga <sub>2</sub> O <sub>3</sub> thin-film heterojunction. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 195104.	1.3	11
24	Photoresponsive characteristics of EFG-grown iron-doped (100) Ga <sub>2</sub> O <sub>3</sub> substrate with low dark current. <i>Physica Scripta</i> , 2021, 96, 065801.	1.2	8
25	Fabrication of a poly(N-vinyl carbazole)/ $\mu$ -Ga <sub>2</sub> O <sub>3</sub> organic-inorganic heterojunction diode for solar-blind sensing applications. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 215104.	1.3	10
26	Electrical Characterizations of Planar Ga <sub>2</sub> O <sub>3</sub> Schottky Barrier Diodes. <i>Micromachines</i> , 2021, 12, 259.	1.4	12
27	High-responsivity solar-blind photodetector based on MOCVD-grown Si-doped $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> thin film*. <i>Chinese Physics B</i> , 2021, 30, 057301.	0.7	11
28	Honeycomb-like gallium nitride prepared via dual-ion synergistic etching mechanism using amino acid as etchant. <i>Chemical Physics Letters</i> , 2021, 773, 138588.	1.2	6
29	A study for the influences of temperatures on ZnGa <sub>2</sub> O <sub>4</sub> films and solar-blind sensing performances. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 405107.	1.3	12
30	16 Å— 4 Linear Solar-Blind UV Photoconductive Detector Array Based on $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> Film. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 3435-3438.	1.6	30
31	Planar rose-like ZnO/honeycombed gallium nitride heterojunction prepared by CVD towards enhanced H <sub>2</sub> sensing without precious metal modification. <i>Vacuum</i> , 2021, 190, 110312.	1.6	8
32	A broadband UV-visible photodetector based on a Ga <sub>2</sub> O <sub>3</sub> /BFO heterojunction. <i>Physica Scripta</i> , 2021, 96, 125823.	1.2	22
33	High-Performance Dual-Mode Solar-Blind Sensor of a Si-Doped $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> Trench Schottky Photodiode. <i>IEEE Sensors Journal</i> , 2021, 21, 18663-18669.	2.4	18
34	An ultra-high aspect ratio BTO nanowires synthesized via slowing the release of barium ions. <i>Vacuum</i> , 2021, 194, 110629.	1.6	2
35	Broadband Ultraviolet Self-Powered Photodetector Constructed on Exfoliated $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> /CuI Core-Shell Microwire Heterojunction with Superior Reliability. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 447-453.	2.1	90
36	Self-Powered Ultraviolet Photodetector Based on $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> /WO <sub>3</sub> NPs Heterojunction With Low Noise and High Visible Rejection. <i>IEEE Sensors Journal</i> , 2021, 21, 26724-26730.	2.4	20

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37	Preparation of all-oxide $\text{In}^{2+}\text{-Ga}_2\text{O}_3/\text{In}^{\pm}\text{-MoO}_3$ heterojunction towards self-driven deep ultraviolet photosensor. <i>Physica Scripta</i> , 2021, 96, 125844.	1.2	13
38	An inspiration from purple orchid leaves: Surface characteristics and wettability of nanoscale organometallic coatings electrodeposited on laser-patterned microstructures. <i>Surface and Coatings Technology</i> , 2021, 427, 127817.	2.2	16
39	A Spiro-MeOTAD/ $\text{Ga}_2\text{O}_3$ /Si p-i-n Junction Featuring Enhanced Self-Powered Solar-Blind Sensing via Balancing Absorption of Photons and Separation of Photogenerated Carriers. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 57619-57628.	4.0	19
40	A self-powered solar-blind photodetector with large $\text{V}_{oc}$ enhancing performance based on the PEDOT:PSS/ $\text{Ga}_2\text{O}_3$ organic-inorganic hybrid heterojunction. <i>Journal of Materials Chemistry C</i> , 2020, 8, 1292-1300.	2.7	94
41	Comparison of optoelectrical characteristics between Schottky and Ohmic contacts to $\text{In}^{2+}\text{-Ga}_2\text{O}_3$ thin film. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 085105.	1.3	40
42	In-situ preparation of water chestnut-based carbon aerogel and its application in binder-less electric double layer electrode and stress sensing. <i>Vacuum</i> , 2020, 181, 109731.	1.6	5
43	Fabrication and characterization of Mg-doped $\mu\text{-Ga}_2\text{O}_3$ solar-blind photodetector. <i>Vacuum</i> , 2020, 177, 109425.	1.6	33
44	Construction of a $\text{In}^{2+}\text{-Ga}_2\text{O}_3$ -based metal-oxide-semiconductor-structured photodiode for high-performance dual-mode solar-blind detector applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 5071-5081.	2.7	58
45	High sensitivity and fast response self-powered solar-blind ultraviolet photodetector with a $\text{In}^{2+}\text{-Ga}_2\text{O}_3$ /Spiro-MeOTAD p-n heterojunction. <i>Journal of Materials Chemistry C</i> , 2020, 8, 4502-4509.	2.7	69
46	Fabrication of $\mu\text{-Ga}_2\text{O}_3$ solar-blind photodetector with symmetric interdigital Schottky contacts responding to low intensity light signal. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 295109.	1.3	43
47	X-ray photoelectron spectroscopy study for band alignments of $\text{BaTiO}_3/\text{Ga}_2\text{O}_3$ and $\text{In}_2\text{O}_3/\text{Ga}_2\text{O}_3$ heterostructures. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, .	0.9	8
48	The Effect of Mn Dopant on Structural and Optoelectronic Properties of $\text{In}^{3+}\text{-Ga}_2\text{O}_3$ thin Film Photodetectors. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 055010.	0.9	6
49	Self-Powered $\text{In}^{2+}\text{-Ga}_2\text{O}_3$ Solar-Blind Photodetector Based on the Planar $\text{Au}/\text{Ga}_2\text{O}_3$ Schottky Junction. <i>ECS Journal of Solid State Science and Technology</i> , 2020, 9, 065011.	0.9	28
50	Energy-band alignments at $\text{ZnO}/\text{Ga}_2\text{O}_3$ and $\text{Ta}_2\text{O}_5/\text{Ga}_2\text{O}_3$ heterointerfaces by X-ray photoelectron spectroscopy and electron affinity rule. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	38
51	Rectifying Effect of the $\text{Sr}_3\text{Al}_2\text{O}_6/\text{Ga}_2\text{O}_3$ Heterojunction. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1900570.	0.8	8
52	Ultrasensitive, Superhigh Signal-to-Noise Ratio, Self-Powered Solar-Blind Photodetector Based on $\text{In-Ga}_2\text{O}_3$ / $\text{Inp-CuSCN}$ Core-Shell Microwire Heterojunction. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 35105-35114.	4.0	161
53	Interfacial properties of two-dimensional graphene/ $\text{ZrS}_2$ and $\text{ScS}_2/\text{ZrS}_2$ contacts. <i>Applied Surface Science</i> , 2019, 476, 778-788.	3.1	11
54	Preliminary study for the effects of temperatures on optoelectrical properties of $\text{In}^{2+}\text{-Ga}_2\text{O}_3$ thin films. <i>Vacuum</i> , 2019, 166, 79-83.	1.6	25

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55	Band alignments of $\text{In}^{2+}$ - $\text{Ga}_2\text{O}_3$ with $\text{MgO}$ , $\text{Al}_2\text{O}_3$ and $\text{MgAl}_2\text{O}_4$ measured by x-ray photoelectron spectroscopy. Journal Physics D: Applied Physics, 2019, 52, 295104.	1.3	28
56	Review of gallium oxide based field-effect transistors and Schottky barrier diodes. Chinese Physics B, 2019, 28, 017105.	0.7	76
57	A high-performance ultraviolet solar-blind photodetector based on a $\text{In}^{2+}$ - $\text{Ga}_2\text{O}_3$ Schottky photodiode. Journal of Materials Chemistry C, 2019, 7, 13920-13929.	2.7	88
58	The electronic structure and magnetic property of the Mn doped $\text{In}^{2+}$ - $\text{Ga}_2\text{O}_3$ . Superlattices and Microstructures, 2019, 125, 330-337.	1.4	16
59	A Multi-Scale Study on Silicon-Oxide Etching Processes in $\text{C}_4\text{F}_8/\text{Ar}$ Plasmas. Plasma Science and Technology, 2016, 18, 666-673.	0.7	4
60	Effects of Tailed Pulse-Bias on Ion Energy Distributions and Charging Effects on Insulating Substrates. Plasma Science and Technology, 2015, 17, 560-566.	0.7	10
61	Band offsets and electronical properties of the $\text{Ga}_2\text{O}_3/\text{FTO}$ heterojunction via transferring free-standing $\text{Ga}_2\text{O}_3$ onto FTO/glass. Chinese Physics B, 0, , .	0.7	2