

# Jiancheng Yang

## List of Publications by Year in descending order

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21  
papers

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citations

430442

18  
h-index

713013

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docs citations

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times ranked

2327  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of Ga <sub>2</sub> O <sub>3</sub> materials, processing, and devices. Applied Physics Reviews, 2018, 5, .	5.5	1,816
2	High Breakdown Voltage ( $\sim 201$ ) $\eta$ -Ga <sub>2</sub> O <sub>3</sub> Schottky Rectifiers. IEEE Electron Device Letters, 2017, 38, 906-909.	2.2	159
3	Radiation damage effects in Ga <sub>2</sub> O <sub>3</sub> materials and devices. Journal of Materials Chemistry C, 2019, 7, 10-24.	2.7	154
4	High reverse breakdown voltage Schottky rectifiers without edge termination on Ga <sub>2</sub> O <sub>3</sub> . Applied Physics Letters, 2017, 110, .	1.5	149
5	Point defect induced degradation of electrical properties of Ga <sub>2</sub> O <sub>3</sub> by 10 <sup>16</sup> MeV proton damage. Applied Physics Letters, 2018, 112, .	1.5	98
6	Ga <sub>2</sub> O <sub>3</sub> Schottky rectifiers with 1 ampere forward current, 650 V reverse breakdown and 26.5 MW.cm <sup>-2</sup> figure-of-merit. AIP Advances, 2018, 8, .	0.6	73
7	Defects responsible for charge carrier removal and correlation with deep level introduction in irradiated $\hat{I}^2$ -Ga <sub>2</sub> O <sub>3</sub> . Applied Physics Letters, 2018, 113, .	1.5	62
8	Effect of 1.5 <sup>16</sup> MeV electron irradiation on $\hat{I}^2$ -Ga <sub>2</sub> O <sub>3</sub> carrier lifetime and diffusion length. Applied Physics Letters, 2018, 112, .	1.5	55
9	Diffusion length of non-equilibrium minority charge carriers in $\hat{I}^2$ -Ga <sub>2</sub> O <sub>3</sub> measured by electron beam induced current. Journal of Applied Physics, 2018, 123, .	1.1	50
10	Vertical geometry 33.2 A, 4.8 MW <sup>16</sup> cm <sup>2</sup> Ga <sub>2</sub> O <sub>3</sub> field-plated Schottky rectifier arrays. Applied Physics Letters, 2019, 114, .	1.5	50
11	Inductively coupled plasma etch damage in (-201) Ga <sub>2</sub> O <sub>3</sub> Schottky diodes. Applied Physics Letters, 2017, 110, .	1.5	49
12	Effect of surface treatments on electrical properties of $\hat{I}^2$ -Ga <sub>2</sub> O <sub>3</sub> . Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2018, 36, .	0.6	49
13	Ohmic contacts on n-type $\hat{I}^2$ -Ga <sub>2</sub> O <sub>3</sub> using AZO/Ti/Au. AIP Advances, 2017, 7, .	0.6	48
14	Vertical Geometry, 2-A Forward Current Ga <sub>2</sub> O <sub>3</sub> Schottky Rectifiers on Bulk Ga <sub>2</sub> O <sub>3</sub> Substrates. IEEE Transactions on Electron Devices, 2018, 65, 2790-2796.	1.6	41
15	Reverse Breakdown in Large Area, Field-Plated, Vertical $\hat{I}^2$ -Ga <sub>2</sub> O <sub>3</sub> Rectifiers. ECS Journal of Solid State Science and Technology, 2019, 8, Q3159-Q3164.	0.9	36
16	Dynamic Switching Characteristics of 1 A Forward Current $\eta$ -Ga <sub>2</sub> O <sub>3</sub> Rectifiers. IEEE Journal of the Electron Devices Society, 2019, 7, 57-61.	1.2	36
17	Zika virus detection using antibody-immobilized disposable cover glass and AlGa <sub>N</sub> /Ga <sub>N</sub> high electron mobility transistors. Applied Physics Letters, 2018, 113, .	1.5	27
18	Rapid detection of cardiac troponin I using antibody-immobilized gate-pulsed AlGa <sub>N</sub> /Ga <sub>N</sub> high electron mobility transistor structures. Applied Physics Letters, 2017, 111, .	1.5	22

#	ARTICLE	IF	CITATIONS
19	Switching Behavior and Forward Bias Degradation of 700V, 0.2A, $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}$ Vertical Geometry Rectifiers. ECS Journal of Solid State Science and Technology, 2019, 8, Q3028-Q3033.	0.9	18
20	Implementation of a 900V Switching Circuit for High Breakdown Voltage $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}$ Schottky Diodes. ECS Journal of Solid State Science and Technology, 2019, 8, Q3229-Q3234.	0.9	18
21	Electron injection-induced effects in Si-doped $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}$ . AIP Advances, 2019, 9, .	0.6	15