

# Arkka Bhattacharyya

## List of Publications by Year in descending order

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24  
papers

692  
citations

566801

15  
h-index

642321

23  
g-index

24  
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24  
docs citations

24  
times ranked

413  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electronic and ionic conductivity in $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> single crystals. Journal of Applied Physics, 2022, 131, .	1.1	5
2	4.4 kV $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> MESFETs with power figure of merit exceeding 100 MW cm <sup>-2</sup> . Applied Physics Express, 2022, 15, 061001.	1.1	40
3	On the terahertz response of metal-gratings on anisotropic dielectric substrates and its prospective application for anisotropic refractive index characterization. Journal of Applied Physics, 2022, 131, .	1.1	3
4	Lateral Gallium Oxide Field Effect Transistors with High Figure of Merit. , 2022, , .		0
5	Oxygen annealing induced changes in defects within $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> epitaxial films measured using photoluminescence. Journal Physics D: Applied Physics, 2021, 54, 174004.	1.3	11
6	N-type doping of low-pressure chemical vapor deposition grown $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> thin films using solid-source germanium. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	14
7	130Å Al <sub>0.1</sub> $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> metal semiconductor field effect transistor with low-temperature metalorganic vapor phase epitaxy-regrown ohmic contacts. Applied Physics Express, 2021, 14, 076502.	1.1	39
8	In Situ Dielectric Al <sub>2</sub> O <sub>3</sub> / $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> Interfaces Grown Using Metal-Organic Chemical Vapor Deposition. Advanced Electronic Materials, 2021, 7, 2100333.	2.6	17
9	High-k Oxide Field-Plated Vertical (001) $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> Schottky Barrier Diode With Baliga's Figure of Merit Over 1 GW/cm <sup>2</sup> . IEEE Electron Device Letters, 2021, 42, 1140-1143.	2.2	86
10	Ga <sub>2</sub> O <sub>3</sub> -on-SiC Composite Wafer for Thermal Management of Ultrawide Bandgap Electronics. ACS Applied Materials & Interfaces, 2021, 13, 40817-40829.	4.0	49
11	Spalling-Induced Liftoff and Transfer of Electronic Films Using a van der Waals Release Layer. Small, 2021, 17, e2102668.	5.2	4
12	Multi-kV Class $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> MESFETs With a Lateral Figure of Merit Up to 355 MW/cm <sup>2</sup> . IEEE Electron Device Letters, 2021, 42, 1272-1275.	2.2	50
13	Growth and characterization of metalorganic vapor-phase epitaxy-grown $\hat{\Gamma}^2$ -(Al <sub>x</sub> ) <sub>1-x</sub> Tj ETQq1 1 0.784314 rgBT /Overlock 10 channels. Applied Physics Express, 2021, 14, 025501.	1.1	40
14	Low temperature homoepitaxy of (010) $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> by metalorganic vapor phase epitaxy: Expanding the growth window. Applied Physics Letters, 2020, 117, .	1.5	56
15	Compensation in (2 $\hat{\Gamma}^0$ 1) homoepitaxial $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> thin films grown by metalorganic vapor-phase epitaxy. Journal of Applied Physics, 2020, 128, .	1.1	13
16	Defect states and their electric field-enhanced electron thermal emission in heavily Zr-doped $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> crystals. Applied Physics Letters, 2020, 117, .	1.5	13
17	Design of a $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> Schottky Barrier Diode With p-Type III-Nitride Guard Ring for Enhanced Breakdown. IEEE Transactions on Electron Devices, 2020, 67, 4842-4848.	1.6	21
18	Delta-doped $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> films with narrow FWHM grown by metalorganic vapor-phase epitaxy. Applied Physics Letters, 2020, 117, .	1.5	17

#	ARTICLE	IF	CITATIONS
19	Synthesis and Characterization of Large-Area Nanometer-Thin $\text{In}^{2+}$ - $\text{Ga}_{2}\text{O}_{3}$ Films from Oxide Printing of Liquid Metal Gallium. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020, 217, 1901007.	0.8	16
20	Delta-doped $\text{In}^{2+}$ - $\text{Ga}_{2}\text{O}_{3}$ thin films and $\text{In}^{2+}$ - $(\text{Al}_{0.26}\text{Ga}_{0.74})_{2}\text{O}_{3}$ - $\text{In}^{2+}$ - $\text{Ga}_{2}\text{O}_{3}$ heterostructures grown by metalorganic vapor-phase epitaxy. <i>Applied Physics Express</i> , 2020, 13, 045501.		38
21	Schottky Barrier Height Engineering in $\text{In}^{2+}$ - $\text{Ga}_{2}\text{O}_{3}$ Using $\text{SiO}_{2}$ Interlayer Dielectric. <i>IEEE Journal of the Electron Devices Society</i> , 2020, 8, 286-294.	1.2	32
22	Degenerate doping in $\text{In}^{2+}$ - $\text{Ga}_{2}\text{O}_{3}$ single crystals through Hf-doping. <i>Semiconductor Science and Technology</i> , 2020, 35, 04LT01.	1.0	43
23	Si-doped $\text{In}^{2+}$ - $(\text{Al}_{0.26}\text{Ga}_{0.74})_{2}\text{O}_{3}$ thin films and heterostructures grown by metalorganic vapor-phase epitaxy. <i>Applied Physics Express</i> , 2019, 12, 111004.	1.1	47
24	Electrical and optical properties of Zr doped $\text{In}^{2+}$ - $\text{Ga}_{2}\text{O}_{3}$ single crystals. <i>Applied Physics Express</i> , 2019, 12, 085502.	1.1	38