

# Praneeth Ranga

## List of Publications by Year in descending order

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papers

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566801

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#	ARTICLE	IF	CITATIONS
1	Effect of extended defects on photoluminescence of gallium oxide and aluminum gallium oxide epitaxial films. <i>Scientific Reports</i> , 2022, 12, 3243.	1.6	16
2	4.4 kV $\hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> MESFETs with power figure of merit exceeding 100 MW cm <sup>2</sup> . <i>Applied Physics Express</i> , 2022, 15, 061001.	1.1	40
3	Plasmon-Phonon Coupling in Electrostatically Gated $\hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> Films with Mobility Exceeding 200 cm <sup>2</sup> V <sup>−1</sup> s <sup>−1</sup> . <i>ACS Nano</i> , 2022, 16, 8812-8819. <sup>7,3</sup>		8
4	Lateral Gallium Oxide Field Effect Transistors with High Figure of Merit., 2022, .		0
5	Oxygen annealing induced changes in defects within $\hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> epitaxial films measured using photoluminescence. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 174004.	1.3	11
6	Impurity band conduction in Si-doped $\langle b \rangle \langle i \rangle \hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> films. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	11
7	Optical Characterization of Gallium Oxide $\hat{\pm}$ and $\hat{\square}$ Polymorph Thin-Films Grown on c-Plane Sapphire. <i>Journal of Electronic Materials</i> , 2021, 50, 2990-2998.	1.0	9
8	N-type doping of low-pressure chemical vapor deposition grown $\hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> thin films using solid-source germanium. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021, 39, .	0.9	14
9	130 Åm <sup>2</sup> $\hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> metal semiconductor field effect transistor with low-temperature metalorganic vapor phase epitaxy-regrown ohmic contacts. <i>Applied Physics Express</i> , 2021, 14, 076502.	1.1	39
10	In Situ Dielectric Al <sub>2</sub> O <sub>3</sub> / $\hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> Interfaces Grown Using Metal-Organic Chemical Vapor Deposition. <i>Advanced Electronic Materials</i> , 2021, 7, 2100333.	2.6	17
11	High-k Oxide Field-Plated Vertical (001) $\hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> Schottky Barrier Diode With Baliga's Figure of Merit Over 1 GW/cm <sup>2</sup> . <i>IEEE Electron Device Letters</i> , 2021, 42, 1140-1143.	2.2	86
12	Thermal Conductivity of $\hat{\square}$ -Phase Ga <sub>2</sub> O <sub>3</sub> and (Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> Heteroepitaxial Thin Films. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 38477-38490.	4.0	24
13	Multi-kV Class $\langle i \rangle \hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> MESFETs With a Lateral Figure of Merit Up to 355 MW/cm <sup>2</sup> . <i>IEEE Electron Device Letters</i> , 2021, 42, 1272-1275.	2.2	50
14	Growth and characterization of metalorganic vapor-phase epitaxy-grown $\hat{\square}$ -(Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> modulated doped field effect transistors. <i>Applied Physics Express</i> , 2021, 14, 025501.	1.1	40
15	Electro-thermal co-design of $\langle b \rangle \langle i \rangle \hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> modulation doped field effect transistors. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	35
16	Low temperature homoepitaxy of (010) $\langle b \rangle \langle i \rangle \hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> by metalorganic vapor phase epitaxy: Expanding the growth window. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	56
17	Compensation in (2̄01) homoepitaxial $\langle i \rangle \hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> thin films grown by metalorganic vapor-phase epitaxy. <i>Journal of Applied Physics</i> , 2020, 128, .	1.1	13
18	Delta-doped $\langle b \rangle \langle i \rangle \hat{\square}$ -Ga <sub>2</sub> O <sub>3</sub> films with narrow FWHM grown by metalorganic vapor-phase epitaxy. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	17

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19	Highly tunable, polarization-engineered two-dimensional electron gas in $\text{Al}_{\mu}(\text{GaO}_2)_3$ -Ga <sub>2</sub> O <sub>3</sub> heterostructures. Applied Physics Express, 2020, 13, 061009.	1.1	38
20	Delta-doped $\text{Al}_{0.26}\text{Ga}_{0.74}\text{O}_2$ thin films and $\text{Al}_{0.26}\text{Ga}_{0.74}\text{O}_2$ -Ga <sub>2</sub> O <sub>3</sub> heterostructures grown by metalorganic vapor-phase epitaxy. Applied Physics Express, 2020, 13, 045501.		38
21	Schottky Barrier Height Engineering in $\text{Al}_{\mu}(\text{GaO}_2)_3$ Using SiO <sub>2</sub> Interlayer Dielectric. IEEE Journal of the Electron Devices Society, 2020, 8, 286-294.	1.2	32
22	The anisotropic quasi-static permittivity of single-crystal $\text{Al}_{\mu}(\text{GaO}_2)_3$ measured by terahertz spectroscopy. Applied Physics Letters, 2020, 117, .	1.5	27
23	Si-doped $\text{Al}_{0.26}\text{Ga}_{0.74}\text{O}_2$ thin films and heterostructures grown by metalorganic vapor-phase epitaxy. Applied Physics Express, 2019, 12, 111004.	1.1	47