

# Praneeth Ranga

## List of Publications by Year in descending order

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23  
papers

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#	ARTICLE	IF	CITATIONS
1	High-k Oxide Field-Plated Vertical (001) $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ Schottky Barrier Diode With Baliga's Figure of Merit Over $1 \text{ GW/cm}^2$ . IEEE Electron Device Letters, 2021, 42, 1140-1143.	2.2	86
2	Low temperature homoepitaxy of (010) $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ by metalorganic vapor phase epitaxy: Expanding the growth window. Applied Physics Letters, 2020, 117, .	1.5	56
3	Multi-kV Class $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ MESFETs With a Lateral Figure of Merit Up to $355 \text{ MW/cm}^2$ . IEEE Electron Device Letters, 2021, 42, 1272-1275.	2.2	50
4	Si-doped $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ thin films and heterostructures grown by metalorganic vapor-phase epitaxy. Applied Physics Express, 2019, 12, 111004.	1.1	47
5	Growth and characterization of metalorganic vapor-phase epitaxy-grown $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ channels. Applied Physics Express, 2021, 14, 025501.	1.1	40
6	4.4 kV $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ MESFETs with power figure of merit exceeding $100 \text{ MW cm}^{-2}$ . Applied Physics Express, 2022, 15, 061001.	1.1	40
7	$130 \text{ mÅm}^{-1}$ $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ 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	Highly tunable, polarization-engineered two-dimensional electron gas in $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ heterostructures. Applied Physics Express, 2020, 13, 061009.	1.1	38
9	Delta-doped $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ thin films and $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}/\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ heterostructures grown by metalorganic vapor-phase epitaxy. Applied Physics Express, 2020, 13, 045501.		38
10	Electro-thermal co-design of $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ modulation doped field effect transistors. Applied Physics Letters, 2020, 117, .	1.5	35
11	Schottky Barrier Height Engineering in $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ Using $\text{SiO}_2$ Interlayer Dielectric. IEEE Journal of the Electron Devices Society, 2020, 8, 286-294.	1.2	32
12	The anisotropic quasi-static permittivity of single-crystal $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ measured by terahertz spectroscopy. Applied Physics Letters, 2020, 117, .	1.5	27
13	Thermal Conductivity of $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ and $\text{Al}_x\text{Ga}_{1-x}\text{O}_3$ Heteroepitaxial Thin Films. ACS Applied Materials & Interfaces, 2021, 13, 38477-38490.		24
14	Delta-doped $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ films with narrow FWHM grown by metalorganic vapor-phase epitaxy. Applied Physics Letters, 2020, 117, .	1.5	17
15	In Situ Dielectric $\text{Al}_x\text{Ga}_{1-x}\text{O}_3/\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ Interfaces Grown Using Metal-Organic Chemical Vapor Deposition. Advanced Electronic Materials, 2021, 7, 2100333.	2.6	17
16	Effect of extended defects on photoluminescence of gallium oxide and aluminum gallium oxide epitaxial films. Scientific Reports, 2022, 12, 3243.	1.6	16
17	N-type doping of low-pressure chemical vapor deposition grown $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ thin films using solid-source germanium. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	14
18	Compensation in (201) homoepitaxial $\text{In}_2\text{Ga}_{2-x}\text{O}_{3-x}$ thin films grown by metalorganic vapor-phase epitaxy. Journal of Applied Physics, 2020, 128, .	1.1	13

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19	Oxygen annealing induced changes in defects within $\text{In}^{2+}$ -Ga <sub>2</sub> O <sub>3</sub> epitaxial films measured using photoluminescence. Journal Physics D: Applied Physics, 2021, 54, 174004.	1.3	11
20	Impurity band conduction in Si-doped $\text{In}^{2+}$ -Ga <sub>2</sub> O <sub>3</sub> films. Applied Physics Letters, 2021, 118, .	1.5	11
21	Optical Characterization of Gallium Oxide $\text{In}^{2+}$ and $\text{In}^{3+}$ Polymorph Thin-Films Grown on c-Plane Sapphire. Journal of Electronic Materials, 2021, 50, 2990-2998.	1.0	9
22	Plasmon-Phonon Coupling in Electrostatically Gated $\text{In}^{2+}$ -Ga <sub>2</sub> O <sub>3</sub> Films with Mobility Exceeding $200 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$ . ACS Nano, 2022, 16, 8812-8819. <sup>7.3</sup>		8
23	Lateral Gallium Oxide Field Effect Transistors with High Figure of Merit. , 2022, , .		0