Apurba Chakraborty

List of Publications by Year in descending order

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Version: 2024-02-01

26 papers 160 citations

1307366 7 h-index 1199470 12 g-index

26 all docs

 $\begin{array}{c} 26 \\ \\ \text{docs citations} \end{array}$

times ranked

26

205 citing authors

#	Article	IF	CITATIONS
1	Enhancement of two dimensional electron gas concentrations due to Si3N4 passivation on Al0.3Ga0.7N/GaN heterostructure: strain and interface capacitance analysis. AIP Advances, 2015, 5, .	0.6	23
2	OFF-State Leakage and Current Collapse in AlGaN/GaN HEMTs: A Virtual Gate Induced by Dislocations. IEEE Transactions on Electron Devices, 2018, 65, 1333-1339.	1.6	21
3	Comprehensive strain and band gap analysis of PA-MBE grown AlGaN/GaN heterostructures on sapphire with ultra thin buffer. AlP Advances, 2014, 4, .	0.6	16
4	Comparison of trap characteristics between AlGaN/GaN and AlGaN/InGaN/GaN heterostructure by frequency dependent conductance measurement. Applied Physics Letters, 2015, 106, .	1.5	13
5	Comparison of different pathways in metamorphic graded buffers on GaAs substrate: Indium incorporation with surface roughness. Applied Surface Science, 2015, 324, 304-309.	3.1	12
6	Effects of threading dislocations on drain current dispersion and slow transients in unpassivated AlGaN/GaN/Si heterostructure field-effect transistors. Applied Physics Letters, 2014, 105, .	1.5	11
7	Temperature-dependent short-channel parameters of FinFETs. Journal of Computational Electronics, 2018, 17, 1001-1012.	1.3	10
8	RF/Analog performance of GaAs Multi-Fin FinFET with stress effect. Microelectronics Journal, 2021, 117, 105267.	1.1	9
9	Reverse bias leakage current mechanism of AlGaN/InGaN/GaN heterostructure. Electronic Materials Letters, 2016, 12, 232-236.	1.0	8
10	Evolution and analysis of nitride surface and interfaces by statistical techniques: A correlation with RHEED through kinetic roughening. Electronic Materials Letters, 2015, 11, 707-716.	1.0	7
11	A novel growth strategy and characterization of fully relaxed un-tilted FCC GaAs on Si(100). Journal of Crystal Growth, 2015, 418, 138-144.	0.7	7
12	Effect of Positive/Negative Interface Trap Charges on the Performance of Multi Fin FinFET (M-FinFET). Silicon, 2022, 14, 8557-8566.	1.8	5
13	Simplified gas sensor model based on AlGaN/GaN heterostructure Schottky diode. AIP Conference Proceedings, 2015, , .	0.3	4
14	Effect of trapped charge in AlGaN/GaN and AlGaN/InGaN/GaN heterostructure by temperature dependent threshold voltage analysis. Superlattices and Microstructures, 2018, 113, 147-152.	1.4	4
15	Impact of stress effect on triple material gate step-FinFET with DC and AC analysis. Microsystem Technologies, 2020, 26, 1813-1821.	1.2	4
16	Elimination of V-shaped pits in InGaN/GaN/AlN/GaN heterostructure by metal modulation growth technique. Semiconductor Science and Technology, 2018, 33, 035009.	1.0	3
17	Effect of longitudinal electric field and self heating of channel on linearity and gain of AlGaN/GaN HEMT on Sapphire (0001). , 2014, , .		1
18	Fowler–Nordheim Tunnelling Contribution in AlGaN/GaN on Si (111) Schottky Current. IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India), 2016, 33, 7-10.	2.1	1

#	Article	IF	CITATIONS
19	Impact of temperature on radio frequency/linearity and harmonic distortion characteristics of Ge multiâ€channel fin shaped fieldâ€effect transistor. International Journal of RF and Microwave Computer-Aided Engineering, 2022, 32, e22987.	0.8	1
20	Growth and characterization of Al <inf>0.15</inf> Ga <inf>0.85</inf> As/GaAs pseudomorphic heterostructure by MBE. , 2014, , .		0
21	Temperature dependent etching of Gallium Nitride layers grown by PA -MBE. , 2015, , .		O
22	Quantitative investigation into the source of current slump in AlGaN/GaN HEMT on both Si (111) and sapphire: Self-heating and trapping. AIP Conference Proceedings, 2015, , .	0.3	0
23	AlGaN barrier thickness dependent surface and interface trapping characteristics of AlGaN/GaN heterostructure. Chinese Journal of Physics, 2018, 56, 2365-2370.	2.0	O
24	Effect of AlGaN Barrier Thickness on Trapping Characteristics in AlGaN/GaN Heterostructures. Springer Proceedings in Physics, 2019, , 183-186.	0.1	0
25	Temperature Dependent Linearity/Harmonic Analysis for FinFET and Gate All Around (GAA) Nanowire FET., 2021,,.		0
26	Investigation of Step Fin (SF), Step Drain (SD) and Step Source (SS) FinFETs with Trap Effect. IETE Journal of Research, 0, , 1-9.	1.8	0