Akhilesh Pandey

List of Publications by Year
in descending order

58	836	471509 17	552781 26
papers	citations	h-index	g-index

59	59	59	817
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-quality AlN nucleation layer on SiC substrate grown by MOVPE: Growth, structural and optical characteristics. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2022, 278, 115635.	3.5	4
2	Suitability of thin-GaN for AlGaN/GaN HEMT material and device. Journal of Materials Science, 2022, 57, 5913-5923.	3.7	5
3	Investigation of carrier gas on morphological and structural characteristics of AlGaN/GaN HEMT. Materials Research Bulletin, 2022, 153, 111875.	5.2	2
4	Growth, structural and electrical properties of AlN/Si (111) for futuristic MEMS applications. Materials Science in Semiconductor Processing, 2021, 123, 105567.	4.0	9
5	Effect of surface phonon polariton in unimplanted and oxygen implanted GaN layers. Optik, 2021, 225, 165834.	2.9	1
6	Structural characterization of polycrystalline thin films by X-ray diffraction techniques. Journal of Materials Science: Materials in Electronics, 2021, 32, 1341-1368.	2.2	41
7	Investigating the growth of AlGaN/AlN heterostructure by modulating the substrate temperature of AlN buffer layer. SN Applied Sciences, 2021, 3, 1.	2.9	9
8	Overview of residual stress in MEMS structures: Its origin, measurement, and control. Journal of Materials Science: Materials in Electronics, 2021, 32, 6705-6741.	2.2	18
9	Evaluation of residual stress of c oriented AlN/Si (111) and its impact on mushroom-shaped piezoelectric resonator. Journal of Materials Science: Materials in Electronics, 2021, 32, 13499-13510.	2.2	2
10	Thermal evolution of morphological, optical, and photocatalytic properties of Auâ€“Cu2Oâ€“CuO nanocomposite thin film. Journal of Materials Science: Materials in Electronics, 2021, 32, 24058-24068.	2.2	0
11	Interface engineered MBE grown InAs/GaSb based type-II superlattice heterostructures. Journal of Alloys and Compounds, 2021, 889, 161692.	5.5	10
12	Improvement in surface morphology and 2DEG properties of AlGaN/GaN HEMT. Journal of Alloys and Compounds, 2020, 815, 152283.	5.5	29
13	Structural and optical characteristics investigations in oxygen ion implanted GaN epitaxial layers. Materials Science in Semiconductor Processing, 2020, 107, 104833.	4.0	10
14	Structural, transport, optical, and electronic properties of Sr2CoNbO6 thin films. Journal of Applied Physics, 2020, 128, .	2.5	9
15	Polytype switching identification in 4H-SiC single crystal grown by PVT. Journal of Materials Science: Materials in Electronics, 2020, 31, 16343-16351.	2.2	8
16	Cuâ€“CuO and Cuâ€“CuOâ€“ZnO hybrid nanostructures as photocatalysts and catalysts for efficient removal of pollutants. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	6
17	Effect of growth and residual stress in AlN (0002) thin films on MEMS accelerometer design. Journal of Materials Science: Materials in Electronics, 2020, 31, 17281-17290.	2.2	6
18	Effect of two step GaN buffer on the structural and electrical characteristics in AlGaN/GaN heterostructure. Vacuum, 2020, 178, 109442.	3.5	23

#	Article	IF	Citations
19	Optimization of AlN spacer layer in MOVPE grown AlGaN/AlN/InGaN/GaN high electron mobility heterostructure. AIP Conference Proceedings, 2020, , .	0.4	1
20	Current Transport and Band Alignment Study of MoS₂/GaN and MoS₂/AlGaN Heterointerfaces for Broadband Photodetection Application. ACS Applied Electronic Materials, 2020, 2, 710-718.	4.3	43
21	Anisotropic magnetoelectric functionality of ferromagnetic shape memory alloy heterostructures for MEMS magnetic sensors. Journal Physics D: Applied Physics, 2020, 53, 395302.	2.8	14
22	RF Sputtered MoO3 Thin Film on Si (100) for Gas Sensing Applications. Defence Science Journal, 2020, 70, 505-510.	0.8	5
23	Effect of fully strained AlN nucleation layer on the AlN/SiC interface and subsequent GaN growth on 4Hâ€“SiC by MOVPE. Journal of Materials Science: Materials in Electronics, 2019, 30, 18910-18918.	2.2	14
24	Preparation and properties of AlN (aluminum nitride) powder/thin films by single source precursor. New Journal of Chemistry, 2019, 43, 1900-1909.	2.8	14
25	Binder free and high performance of sputtered tungsten nitride thin film electrode for supercapacitor device. International Journal of Hydrogen Energy, 2019, 44, 10823-10832.	7.1	48
26	Influence of residual stress on performance of AlN thin film based piezoelectric MEMS accelerometer structure. Microsystem Technologies, 2019, 25, 3959-3967.	2.0	15
27	Oxygen Ion Implantation Induced Effects in GaN Epilayer. Springer Proceedings in Physics, 2019, , 301-305.	0.2	0
28	Study of organic pollutant removal capacity and work function of magnetite/graphene oxide nanocomposites. Materials Research Express, 2019, 6, 125039.	1.6	4
29	Thermal evolution of morphological, structural, optical and photocatalytic properties of CuO thin films. Nano Structures Nano Objects, 2019, 17, 92-102.	3.5	58
30	Growth and Comparison of Residual Stress of AlN Films on Silicon (100), (110) and (111) Substrates. Journal of Electronic Materials, 2018, 47, 1405-1413.	2.2	25
31	Zn interstitial defects and their contribution as efficient light blue emitters in Zn rich ZnO thin films. Journal of Alloys and Compounds, 2018, 735, 2318-2323.	5.5	24
32	Electrical and structural characteristics of sputtered c-oriented AlN thin films on Si (100) and Si (110) substrates. Thin Solid Films, 2018, 666, 143-149.	1.8	16
33	Influence of nickel doping on structural, morphological and mechanical properties of BiFeO3thin films. Materials Chemistry and Physics, 2018, 216, 47-50.	4.0	5
34	Growth assessment and scrutinize dielectric reliability of c-axis oriented insulating AlN thin films in MIM structures for microelectronics applications. Materials Chemistry and Physics, 2018, 219, 74-81.	4.0	27
35	Growth and morphological evolution of c-axis oriented AlN films on Si (100) substrates by DC sputtering technique. AIP Conference Proceedings, 2018, , .	0.4	3
36	Influence of temperature and Al/N ratio on structural, chemical & electronic properties of epitaxial AlN films grown via PAMBE. Applied Surface Science, 2018, 455, 919-923.	6.1	12

#	Article	IF	Citations
37	X-ray pole figure analysis of catalyst free InAs nanowires on Si substrate. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 225, 108-114.	3.5	5
38	Microstructure and improved electrical properties of Ti-substituted BiFeO3 thin films. Materials Research Bulletin, 2017, 95, 223-228.	5.2	15
39	Growth and characterization of ultrathin TiO2-Cr2O3 nanocomposite films. Journal of Alloys and Compounds, 2017, 696, 376-381.	5.5	12
40	Growth and evolution of residual stress of AlN films on silicon (100) wafer. Materials Science in Semiconductor Processing, 2016, 52, 16-23.	4.0	25
41	Optical and sensing properties of Fe doped ZnO nanocrystalline thin films. Materials Science-Poland, 2016, 34, 354-361.	1.0	6
42	Dislocation density investigation on MOCVD-grown GaN epitaxial layers using wet and dry defect selective etching. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	26
43	Deep boron diffusion induced surface damage in silicon. Materials Letters, 2016, 170, 76-79.	2.6	2
44	Improved electrical transport properties in high quality nanocrystalline silicon carbide (nc-SiC) thin films for microelectronic applications. Materials Letters, 2016, 164, 28-31.	2.6	21
45	Estimation of boron diffusion induced residual stress in silicon by wafer curvature technique. Materials Letters, 2016, 164, 316-319.	2.6	7
46	Structural And Optical Properties Of Bulk MoS2 For 2D Layer Growth. Advanced Materials Letters, 2016, 7, 777-782.	0.6	25
47	Optical and Sensing Properties of Cu Doped ZnO Nanocrystalline Thin Films. Journal of Nanotechnology, 2015, 2015, 1-10.	3.4	26
48	Optical properties of Pb (Zr0.52Ti0.48) O3/BiFeO3 multilayers with ZnO buffer layer. Applied Physics A: Materials Science and Processing, 2015, 120, 53-58.	2.3	12
49	Electrical properties of ultrathin titanium dioxide films on silicon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	2.1	19
50	Nanoharvesting of GaN nanowires on Si (211) substrates by plasma-assisted molecular beam epitaxy. Journal of Crystal Growth, 2014, 402, 37-41.	1.5	3
51	Estimation of bending of micromachined gold cantilever due to residual stress. Journal of Materials Science: Materials in Electronics, 2014, 25, 382-389.	2.2	12
52	X-ray photoelectron spectroscopy study and humidity sensing properties of Zn doped SnO2 thin films. Journal of Materials Science: Materials in Electronics, 2013, 24, 4951-4957.	2.2	8
53	Estimation of residual stress in Pb(Zr0.52Ti0.48)O3/BiFeO3multilayers deposited on silicon. Journal of Applied Physics, 2013, 114, 174103.	2.5	16
54	Growth and electrical properties of spin coated ultrathin ZrO2 films on silicon. Journal of Applied Physics, 2013, 114, 014105.	2.5	30

#	Article	IF	Citations
55	Improved electrical properties of PbZrTiO3/BiFeO3 multilayers with ZnO buffer layer. Journal of Applied Physics, 2012, 112, .	2.5	37
56	Characterization deep boron diffused p++ silicon layer. Journal of Materials Science: Materials in Electronics, 2012, 23, 1569-1574.	2.2	7
57	Effect of Colloidal Silver on Optical Transmittance Characteristics of Bulk Cadmium Zinc Telluride Crystals. Journal of Electronic Materials, 2009, 38, 2046-2051.	2.2	1
58	Growth of ZnO nano films on Sapphire/GaAs/ Si substrates. , 2007, , .		0