Pankaj Misra

List of Publications by Year
in descending order

119 papers	2,843 citations	136950 32 h-index	214800 47 g-index
119 all docs	119 docs citations	119 times ranked	3522 citing authors

#	Article	IF	Citations
1	Nano-like magnesium oxide films and its significance in optical fiber humidity sensor. Sensors and Actuators B: Chemical, 2004, 98, 5-11.	7.8	108
2	AMP activated protein kinase: a next generation target for total metabolic control. Expert Opinion on Therapeutic Targets, 2008, 12, 91-100.	3.4	105
3	Studies on structural, dielectric, and transport properties of Ni0.65Zn0.35Fe2O4. Journal of Applied Physics, 2014, 115, 243904.	2.5	102
4	Effect of Si doping on electrical and optical properties of ZnO thin films grown by sequential pulsed laser deposition. Journal Physics D: Applied Physics, 2009, 42, 165405.	2.8	99
5	Forming free resistive switching in graphene oxide thin film for thermally stable nonvolatile memory applications. Journal of Applied Physics, 2013, 114, 124508.	2.5	80
6	Multilevel resistive memory switching in graphene sandwiched organic polymer heterostructure. Carbon, 2014, 76, 341-347.	10.3	80
7	Development of a novel high optical quality ZnO thin films by PLD for IIIâ€“V opto-electronic devices. Current Applied Physics, 2006, 6, 103-108.	2.4	64
8	Tunable Power Switching in Nonvolatile Flexible Memory Devices Based on Graphene Oxide Embedded with ZnO Nanorods. Journal of Physical Chemistry C, 2014, 118, 21357-21364.	3.1	63
9	Cluster formation in UV laser ablation plumes of ZnSe and ZnO studied by time-of-flight mass spectrometry. Applied Physics A: Materials Science and Processing, 2004, 78, 641-644.	2.3	62
10	Transparent p-AgCoO2/n-ZnO diode heterojunction fabricated by pulsed laser deposition. Thin Solid Films, 2007, 515, 7352-7356.	1.8	62
11	Spectroscopic ellipsometry characterization of amorphous and crystalline TiO 2 thin films grown by atomic layer deposition at different temperatures. Applied Surface Science, 2014, 315, 116-123.	6.1	62
12	Pulsed laser deposition of TiO2 for MOS gate dielectric. Applied Surface Science, 2002, 187, 297-304.	6.1	61
13	Field emission studies of pulsed laser deposited films on W and Re. Ultramicroscopy, 2007, 107, 825-832.	1.9	56
14	Photovoltaic effect in transition metal modified polycrystalline BiFeO₃thin films. Journal Physics D: Applied Physics, 2014, 47, 075502.	2.8	54
15	Variable band gap ZnO nanostructures grown by pulsed laser deposition. Journal of Crystal Growth, 2004, 268, 531-535.	1.5	53
16	Field emission studies on well adhered pulsed laser deposited LaB6 on W tip. Applied Physics Letters, 2006, 89, 123510.	3.3	52
17	Multilevel unipolar resistive memory switching in amorphous SmGdO3 thin film. Applied Physics Letters, 2014, 104, 073501.	3.3	50
18	Study of iron nitride thin films deposited by pulsed laser deposition. Journal of Alloys and Compounds, 2001, 326, 265-269.	5.5	49

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19	Correlation of spectral features of photoluminescence with residual native defects of ZnO thin films annealed at different temperatures. Journal of Applied Physics, 2012, 112, .	2.5	48
20	Unipolar resistive switching behavior of amorphous YCrO3 films for nonvolatile memory applications. Journal of Applied Physics, 2014, 116, .	2.5	46
21	Room temperature photoluminescence from ZnO quantum wells grown on (0001) sapphire using buffer assisted pulsed laser deposition. Applied Physics Letters, 2006, 89, 161912.	3.3	45
22	Sequential pulsed laser deposition of CdxZn1-xO alloy thin films for engineering ZnO band gap. Applied Physics A: Materials Science and Processing, 2004, 78, 37-40.	2.3	44
23	Enhanced field emission from LaB6 thin films with nanoprotrusions grown by pulsed laser deposition on Zr foil. Applied Surface Science, 2008, 254, 3601-3605.	6.1	41
24	Observation of low resistivity and high mobility in Ga doped ZnO thin films grown by buffer assisted pulsed laser deposition. Journal of Alloys and Compounds, 2015, 638, 55-58.	5.5	41
25	Structural, electrical and optical properties of Dy doped ZnO thin films grown by buffer assisted pulsed laser deposition. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1838-1843.	2.7	40
26	Switchable photovoltaic effect in bilayer graphene/BiFeO3/Pt heterostructures. Applied Physics Letters, 2014, 105, .	3.3	39
27	Studies on nonvolatile resistance memory switching in ZnO thin films. Bulletin of Materials Science, 2009, 32, 247-252.	1.7	36
28	Studies of the switchable photovoltaic effect in co-substituted BiFeO3 thin films. Applied Physics Letters, 2014, 105, .	3.3	35
29	Temperature dependent photoluminescence processes in ZnO thin films grown on sapphire by pulsed laser deposition. Current Applied Physics, 2009, 9, 179-183.	2.4	34
30	Enhanced field emission from pulsed laser deposited nanocrystalline ZnO thin films on Re andÂW. Applied Physics A: Materials Science and Processing, 2009, 95, 613-620.	2.3	33
31	Valence and conduction band offset measurements in Ni0.07Zn0.93O/ZnO heterostructure. Current Applied Physics, 2014, 14, 171-175.	2.4	33
32	Enhanced resistive switching in forming-free graphene oxide films embedded with gold nanoparticles deposited by electrophoresis. Nanotechnology, 2016, 27, 015702.	2.6	33
33	Effect of growth temperature on diode parameters of n-ZnO/p-Si heterojuction diodes grown by atomic layer deposition. Materials Science in Semiconductor Processing, 2016, 54, 1-5.	4.0	32
34	Buffer-assisted low temperature growth of high crystalline quality ZnO films using Pulsed Laser Deposition. Thin Solid Films, 2005, 485, 42-46.	1.8	31
35	Correlation between electrical and optical properties of Cr:ZnO thin films grown by pulsed laser deposition. Physica B: Condensed Matter, 2011, 406, 4578-4583.	2.7	31
36	Effect of disorder on carrier transport in ZnO thin films grown by atomic layer deposition at different temperatures. Journal of Applied Physics, 2013, 114, 043703.	2.5	31

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37	Some aspects of pulsed laser deposited nanocrystalline LaB₆ film: atomic force microscopy, constant force current imaging and field emission investigations. Nanotechnology, 2008, 19, 265605.	2.6	30
38	Improved growth of GaN layers on ultra thin silicon nitride/Si (111) by RF-MBE. Materials Research Bulletin, 2010, 45, 1581-1585.	5.2	27
39	Studies on magnetoelectric coupling in PFN-NZFO composite at room temperature. Journal of Applied Physics, 2014, 115, 194105.	2.5	27
40	Epitaxial growth and band alignment properties of NiO/GaN heterojunction for light emitting diode applications. Applied Physics Letters, 2017, 110, .	3.3	27
41	Structural, electronic structure, and band alignment properties at epitaxial NiO/Al2O3 heterojunction evaluated from synchrotron based X-ray techniques. Journal of Applied Physics, 2016, 119, .	2.5	26
42	Alumina capped ZnO quantum dots multilayer grown by pulsed laser deposition. Solid State Communications, 2003, 127, 463-467.	1.9	25
43	Band alignment and interfacial structure of ZnO/Ge heterojunction investigated by photoelectron spectroscopy. Applied Physics Letters, 2012, 101, .	3.3	25
44	Studies on temperature dependent semiconductor to metal transitions in ZnO thin films sparsely doped with Al. Journal of Applied Physics, 2012, 112, .	2.5	25
45	Enhanced photoresponse in BiFeO3/SrRuO3 heterostructure. Journal of Alloys and Compounds, 2014, 609, 168-172.	5.5	25
46	Unipolar resistive switching in planar Pt/BiFeO3/Pt structure. AIP Advances, 2015, 5, .	1.3	25
47	Switching characteristics of ZnO based transparent resistive random access memory devices grown by pulsed laser deposition. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1718-1720.	0.8	23
48	Role of Al doping in structural, microstructural, electrical and optical characteristics of as-deposited and annealed ZnO thin films. RSC Advances, 2015, 5, 24178-24187.	3.6	23
49	Tunneling electroresistance in multiferroic heterostructures. Nanotechnology, 2014, 25, 495203.	2.6	21
50	Room temperature magnetoresistance in Sr₂FeMoO₆/SrTiO₃/Sr₂FeMoO₆trilayer devices. Journal Physics D: Applied Physics, 2014, 47, 065006.	2.8	20
51	Synthesis and characterization of LaB6 thin films on tungsten, rhenium, silicon and other substrates and their investigations asÂfield emitters. Applied Physics A: Materials Science and Processing, 2011, 104, 677-685.	2.3	19
52	Phase-coherent electron transport in (Zn, Al)Ox thin films grown by atomic layer deposition. Applied Physics Letters, 2014, 105, .	3.3	19
53	Studies on resistive switching times in NiO thin films grown by pulsed laser deposition. Journal Physics D: Applied Physics, 2017, 50, 415106.	2.8	19
54	Structural, morphological, and electrical characterization of heteroepitaxial ZnO thin films deposited on Si (100) by pulsed laser deposition: Effect of annealing (800Â°C) in air. Journal of Applied Physics, 2006, 99, 014907.	2.5	18

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55	Effects of swift heavy ion irradiation on La0.5Pr0.2Sr0.3MnO3 epitaxial thin films grown by pulsed laser deposition. Nuclear Instruments & Methods in Physics Research B, 2007, 256, 693-697.	1.4	18
56	Epi-n-IZO thin films/ã€˜100ã€‰ Si, GaAs and InP by L-MBEâ€“â€“a novel feasibility study for SIS type solar cells. Solar Energy, 2004, 77, 193-201.	6.1	17
57	Self-assembled flower-like nanostructures of InN and GaN grown by plasma-assisted molecular beam epitaxy. Bulletin of Materials Science, 2010, 33, 221-226.	1.7	17
58	Variation of bandgap with oxygen ambient pressure in MgxZn1â^'xO thin films grown by pulsed laser deposition. Solid State Communications, 2001, 117, 673-677.	1.9	16
59	Growth temperature induced effects in non-polar a-plane GaN on r-plane sapphire substrate by RF-MBE. Journal of Crystal Growth, 2011, 314, 5-8.	1.5	16
60	Band offset at TiO₂/MDMO PPV and TiO₂/PEDOT PSS interfaces studied using photoelectron spectroscopy. RSC Advances, 2015, 5, 97891-97897.	3.6	15
61	Enhancement of electronic transport and magnetoresistance of Al 2 O 3 -impregnated (La 0.5 Pr 0.2)Sr 0.3 MnO 3 thin films. Europhysics Letters, 2007, 79, 17005.	2.0	13
62	Advanced high-k gate dielectric amorphous LaGdO3 gated metal-oxide-semiconductor devices with sub-nanometer equivalent oxide thickness. Applied Physics Letters, 2013, 102, .	3.3	13
63	Properties of the new electronic device material La<scp>G</scp>dO₃. Physica Status Solidi (B): Basic Research, 2014, 251, 131-139.	1.5	13
64	Studies on dielectric, optical, magnetic, magnetic domain structure, and resistance switching characteristics of highly c-axis oriented NZFO thin films. Journal of Applied Physics, 2017, 122, 033902.	2.5	13
65	Low power high speed 3-bit multilevel resistive switching in TiO₂ thin film using oxidisable electrode. Journal Physics D: Applied Physics, 2020, 53, 225303.	2.8	13
66	Maxwellâ€“Wagner Relaxation-Driven High Dielectric Constant in Al₂O₃/TiO₂ Nanolaminates Grown by Pulsed Laser Deposition. ACS Applied Materials & Interfaces, 2022, 14, 12873-12882.	8.0	13
67	Temperature dependent photoluminescence from ZnO/MgZnO multiple quantum wells grown by pulsed laser deposition. Superlattices and Microstructures, 2007, 42, 212-217.	3.1	12
68	Advanced high-k dielectric amorphous LaGdO3 based high density metal-insulator-metal capacitors with sub-nanometer capacitance equivalent thickness. Applied Physics Letters, 2013, 102, .	3.3	12
69	Synchrotron based photoemission study on the band alignment and interface at ZnO/GaP hetero-junction. Applied Physics Letters, 2014, 104, 012109.	3.3	12
70	Studies on transient characteristics of unipolar resistive switching processes in TiO₂thin film grown by atomic layer deposition. Journal Physics D: Applied Physics, 2018, 51, 215101.	2.8	12
71	Epitaxial lattice matching between epi-n-IZO thin films and ã€˜100ã€‰ Si, GaAs and InP wafers with out any buffer layers by L-MBE technique: a novel development for IIIâ€“V opto-electronic devices. Materials Chemistry and Physics, 2004, 84, 14-19.	4.0	11
72	Nano-Engineering by Implanting Al2O3 Nano Particle as Sandwiched Scattering Centers in Between the La0.5Pr0.2Sr0.3MnO3 Thin Film Layers. Journal of Nanoscience and Nanotechnology, 2009, 9, 5687-5691.	0.9	11

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73	Temperature-dependent photoluminescence of GaN grown on Î²-Si3N4/Si (111) by plasma-assisted MBE. Journal of Luminescence, 2011, 131, 614-619.	3.1	11
74	Polycrystalline Sr2FeMoO6 thin films on Si substrate by pulsed laser deposition for magnetoresistive applications. Materials Letters, 2014, 118, 200-203.	2.6	11
75	Observation of dopant-profile independent electron transport in sub-monolayer TiOx stacked ZnO thin films grown by atomic layer deposition. Applied Physics Letters, 2016, 108, .	3.3	11
76	Determination of band offsets at strained NiO and MgO heterojunction for MgO as an interlayer in heterojunction light emitting diode applications. Applied Surface Science, 2016, 389, 835-839.	6.1	11
77	Polarization Characteristics Variation of Visible Light on Reflection from ZnO Based Amorphous Films. Japanese Journal of Applied Physics, 2010, 49, 062602.	1.5	10
78	Anomalous optical processes in photoluminescence from ultrasmall quantum dots of ZnO. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	2.1	10
79	On the Resistive Switching and Current Conduction Mechanisms of Amorphous LaGdO₃Films Grown by Pulsed Laser Deposition. ECS Transactions, 2013, 53, 229-235.	0.5	10
80	Effects of electron interference on temperature dependent transport properties of two dimensional electron gas at MgZnO/ZnO interfaces. Applied Physics Letters, 2015, 107, .	3.3	10
81	Enhanced Sheet Charge Density in DIBS Grown CdO Alloyed ZnO Buffer Based Heterostructure. IEEE Electron Device Letters, 2018, 39, 827-830.	3.9	10
82	A novel nano-architecture for ZnO thin films on Si, GaAs and InP single crystal wafers by L-MBE as value in nano-robotic (machining) device fabrication efforts. Materials Science in Semiconductor Processing, 2005, 8, 555-563.	4.0	9
83	Structural phase transition of ternary dielectric SmGdO3: Evidence from angle dispersive x-ray diffraction and Raman spectroscopic studies. Journal of Applied Physics, 2015, 117, 094101.	2.5	9
84	Dimensional crossover of electron weak localization in ZnO/TiOx stacked layers grown by atomic layer deposition. Applied Physics Letters, 2016, 108, .	3.3	9
85	Epi-n-ZnO/ã€ˆ100ã€‰ Si, GaAs and InP by L-MBE: a novel approach for IIIâ€“V devices. Materials Science in Semiconductor Processing, 2003, 6, 219-224.	4.0	8
86	Resistive memory switching in ultrathin TiO2 films grown by atomic layer deposition. AIP Conference Proceedings, 2016, , .	0.4	8
87	Surface Modification of Tool Steel Using Tungsten Arc Heat Source. Surface Engineering, 2004, 20, 215-219.	2.2	7
88	Development of a novel high speed (electron-mobility) epi-n-ZnO thin films by L-MBE for IIIâ€“V opto-electronic devices. Current Applied Physics, 2004, 4, 679-684.	2.4	7
89	Room temperature weak multiferroism and magnetodielectric effect in highly oriented (Y0.9Bi0.1)(Fe0.5Cr0.5)O3 thin films. Materials Research Bulletin, 2015, 68, 49-53.	5.2	7
90	UV light induced insulator-metal transition in ultra-thin ZnO/TiOx stacked layer grown by atomic layer deposition. Journal of Applied Physics, 2016, 120, 085704.	2.5	7

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91	Observation of weak localization and phase coherent electron transport in sparsely doped (Zn:Ga)O thin films. Journal of Alloys and Compounds, 2017, 708, 73-78.	5.5	7
92	Optimized dual temperature pulsed laser deposition of TiO2 to realize MTOS (metal-TiO2â€“SiO2â€“Si) capacitors with ultrathin gate dielectric. Semiconductor Science and Technology, 2005, 20, 38-43.	2.0	6
93	Effect of Mg diffusion on photoluminescence spectra of MgZnO/ZnO bi-layers annealed at different temperatures. Journal of Applied Physics, 2013, 114, 183103.	2.5	6
94	Effect of Poling on Photovoltaic Properties in Highly Oriented BiFeO₃ Thin Films. Integrated Ferroelectrics, 2014, 157, 168-173.	0.7	6
95	Studies on highly resistive ZnO thin films grown by DC-discharge-assisted pulsed laser deposition. Applied Physics A: Materials Science and Processing, 2014, 114, 1119-1128.	2.3	6
96	Growth-parameters-dependent magnetoresistance in pulsed-laser-deposited (La0.5Pr0.2)Ba0.3MnO3 thin films. Journal of Applied Physics, 2005, 98, 086111.	2.5	5
97	Investigating Optical Properties of Atomic Layer Deposited ZnO/TiO_x Multi-stacked Thin Films Above Mott Critical Density. Journal of Physical Chemistry C, 2017, 121, 18129-18136.	3.1	5
98	Laser induced oxidation for growth of ultrathin gate oxide. Electronics Letters, 2004, 40, 1606.	1.0	4
99	Growth of Sr2FeMoO6 Based Tri-layer Structure for Room Temperature Magnetoresistive Applications. Integrated Ferroelectrics, 2014, 157, 89-94.	0.7	4
100	Enhancing the Diode Characteristics of Pulsed Laserâ€“Deposited nâ€Mg_xZn_{1â^'x}O/pâ€Si Heterojunction: Role of Oxygen Ambient Pressure. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000440.	1.8	4
101	Resistive Switching and Current Conduction Mechanisms in Amorphous LaLuO₃ Thin Films Grown by Pulsed Laser Deposition. Integrated Ferroelectrics, 2014, 157, 47-56.	0.7	3
102	Comment on â€œStructural and Electrical Properties of Atomic Layer Deposited Alâ€Doped ZnO Filmsâ€. Advanced Functional Materials, 2018, 28, 1702875.	14.9	3
103	Nano - ZnO in Photonics Landscape. , 2008, , .		2
104	Unipolar Resistive Switching and Associated Photoresponse in Sm doped BiFeO3 Thin Film Grown by RF Sputtering. Materials Research Society Symposia Proceedings, 2013, 1577, m1.	0.1	2
105	Structural and Electrical Characteristics of Ternary Oxide SmGdO3 for Logic and Memory Devices. Materials Research Society Symposia Proceedings, 2014, 1633, 111-116.	0.1	2
106	Resistive switching characteristics of mixed oxides. Emerging Materials Research, 2015, 4, 18-31.	0.7	2
107	Disorder Driven Weak Localization and Phase Coherent Electron Transport in Ga Doped (Zn:V)O Thin Films. ECS Journal of Solid State Science and Technology, 2019, 8, Q61-Q65.	1.8	2
108	Unipolar resistive switching behavior of high-k ternary rare-earth oxide LaHoO3 thin films for non-volatile memory applications. Materials Research Society Symposia Proceedings, 2015, 1729, 23-28.	0.1	1

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109	Observation of disorder induced weak localization in Gd:ZnO thin films. Physica B: Condensed Matter, 2021, 619, 413218.	2.7	1
110	Photoluminescence Processes in ZnO Thin Films and Quantum Structures. Springer Series in Materials Science, 2014, , 49-89.	0.6	1
111	Field Emission from Nanocrystalline LaB6 Prepared by Laser Ablation. , 2006, , .		0
112	Response to â€œComment on â€˜Room temperature photoluminescence from ZnO quantum wells grown on (0001) sapphire using buffer assisted pulsed laser depositionâ€™â€•[Appl. Phys. Lett. 101, 256101 (2012)]. Applied Physics Letters, 2012, 101, 256102.	3.3	0
113	Nonvolatile Resistive Memory Switching in Amorphous LaGdO3 Thin Films. Materials Research Society Symposia Proceedings, 2013, 1562, 1.	0.1	0
114	Analysis of Leakage Currents through PLD Grown Ultrathin a-LaGdO3 Based High-k Metal Gate Devices. Materials Research Society Symposia Proceedings, 2013, 1561, 1.	0.1	0
115	Properties of the new electronic device material LaGdO3(Phys. Status Solidi B 1/2014). Physica Status Solidi (B): Basic Research, 2014, 251, n/a-n/a.	1.5	0
116	Studies on Resistive Switching of Cu/Ta2O5/Pt Devices for Non-volatile Memory Application. Springer Proceedings in Mathematics and Statistics, 2021, , 159-168.	0.2	0
117	Comment on â€œEnergy harvesting from shadow-effectâ€•by Q. Zhang, Q. Liang, D. K. Nandakumar, S. K. Ravi, H. Qu, L. Suresh, X. Zhang, Y. Zhang, L. Yang, A. T. S. Wee and S. C. Tan, Energy Environ. Sci., 2020, 13, 2404. Energy and Environmental Science, 2021, 14, 4125-4129.	30.8	0
118	Studies on structural, optical and electrical characteristics of zirconia thin films grown by pulsed laser deposition at different oxygen partial pressures. AIP Conference Proceedings, 2021, , .	0.4	0
119	Resistive switching characteristics of TiO2 thin films for nonvolatile memory applications. , 2022, , 413-451.		0