

Santanu Ghosh

List of Publications by Year in descending order

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51
papers

738
citations

471509

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h-index

580821

25
g-index

51
all docs

51
docs citations

51
times ranked

867
citing authors

#	ARTICLE	IF	CITATIONS
1	Study of ZnO and Ni-doped ZnO synthesized by atom beam sputtering technique. Applied Physics A: Materials Science and Processing, 2008, 90, 765-769.	2.3	54
2	Effect of grain size and microstructure on radiation stability of CeO ₂ : an extensive study. Physical Chemistry Chemical Physics, 2014, 16, 27065-27073.	2.8	49
3	Improved field emission from indium decorated multi-walled carbon nanotubes. Applied Surface Science, 2016, 383, 84-89.	6.1	44
4	Investigation of the growth mechanism of the formation of ZnO nanorods by thermal decomposition of zinc acetate and their field emission properties. CrystEngComm, 2017, 19, 2264-2270.	2.6	41
5	Existence of transient temperature spike induced by SHI: evidence by ion beam analysis. Nuclear Instruments & Methods in Physics Research B, 2004, 219-220, 206-214.	1.4	39
6	Vertically aligned cerium hexaboride nanorods with enhanced field emission properties. Journal of Materials Chemistry, 2012, 22, 6356.	6.7	34
7	Coexistence of intrinsic and extrinsic origins of room temperature ferromagnetism in as implanted and thermally annealed ZnO films probed by x-ray absorption spectroscopy. Journal of Applied Physics, 2013, 113, .	2.5	30
8	Defect controlled ferromagnetism in xenon ion irradiated zinc oxide. Journal of Magnetism and Magnetic Materials, 2015, 385, 318-325.	2.3	27
9	Role of temperature in the radiation stability of yttria stabilized zirconia under swift heavy ion irradiation: A study from the perspective of nuclear reactor applications. Journal of Applied Physics, 2017, 122, .	2.5	25
10	New low temperature environmental friendly process for the synthesis of tetragonal MoO ₂ and its field emission properties. Applied Surface Science, 2019, 467-468, 1148-1156.	6.1	25
11	Enhanced field emission from lanthanum hexaboride coated multiwalled carbon nanotubes: Correlation with physical properties. Journal of Applied Physics, 2014, 116, .	2.5	23
12	Large electronic sputtering yield of nanodimensional Au thin films: Dominant role of thermal conductivity and electron phonon coupling factor. Journal of Applied Physics, 2017, 121, .	2.5	22
13	Highly enhanced field emission from copper oxide nanoparticle decorated vertically aligned carbon nanotubes: Role of interfacial electronic structure. Applied Surface Science, 2020, 508, 145215.	6.1	22
14	Probing origin of room temperature ferromagnetism in Ni ion implanted ZnO films with x-ray absorption spectroscopy. Journal of Applied Physics, 2012, 111, .	2.5	20
15	Nanostructuring and wettability of ion treated Au thin films. Journal of Applied Physics, 2017, 122, .	2.5	19
16	Field emission properties of indium-decorated vertically aligned carbon nanotubes: an interplay between type of hybridization, density of states and metal thickness. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	19
17	Investigating the effect of material microstructure and irradiation temperature on the radiation tolerance of yttria stabilized zirconia against high energy heavy ions. Journal of Applied Physics, 2019, 125, .	2.5	19
18	Ion beam induced dissolution and precipitation of in situ formed Si-nanostructures in a-SiN _x :H matrix. Nuclear Instruments & Methods in Physics Research B, 2012, 276, 51-55.	1.4	18

#	ARTICLE	IF	CITATIONS
19	Oxygen vacancy mediated cubic phase stabilization at room temperature in pure nano-crystalline zirconia films: a combined experimental and first-principles based investigation. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 22482-22490.	2.8	16
20	Role of Coulomb blockade and spin-flip scattering in tunneling magnetoresistance of FeCo-Si-O nanogranular films. <i>Journal of Applied Physics</i> , 2011, 109, .	2.5	14
21	Enhanced field emission from cerium hexaboride coated multiwalled carbon nanotube composite films: A potential material for next generation electron sources. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	14
22	Unraveling The Origin of Enhanced Field Emission from Irradiated FeCo-SiO ₂ /Nanocomposites: A Combined Experimental and First-Principles Based Study. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 4994-5001.	8.0	14
23	Manipulating the anisotropy and field emission of lanthanum hexaboride nanorods. <i>RSC Advances</i> , 2012, 2, 7875.	3.6	13
24	Tuning of ferromagnetic behavior of GaN films by N ion implantation: An experimental and first principle-based study. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 523, 167630.	2.3	12
25	Grain size effect on the radiation damage tolerance of cubic zirconia against simultaneous low and high energy heavy ions: Nano triumphs bulk. <i>Scientific Reports</i> , 2021, 11, 10886.	3.3	11
26	Hydrogen plasma induced modification of photoluminescence from <i>a</i> -SiN _x :H thin films. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	10
27	Tuning vertical alignment and field emission properties of multi-walled carbon nanotube bundles. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	2.3	10
28	Microstructure, electrical, magnetic, and extraordinary Hall effect studies in Ni:SiO ₂ nanogranular films synthesized by atom beam sputtering. <i>Journal of Applied Physics</i> , 2010, 107, .	2.5	8
29	Highly enhanced and temporally stable field emission from MWCNTs grown on aluminum coated silicon substrate. <i>AIP Advances</i> , 2015, 5, .	1.3	8
30	Triggering of spin-flipping-modulated exchange bias in FeCo nanoparticles by electronic excitation. <i>Scientific Reports</i> , 2016, 6, 39292.	3.3	7
31	Radiation response of nano-crystalline cubic Zirconia: Comparison between nuclear energy loss and electronic energy loss regimes. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2018, 435, 19-24.	1.4	7
32	Insights into the Effect of Particle Size on the Low Energy Radiation Response of Ceria. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15489-15499.	3.1	7
33	A new process for the stabilization of vertically aligned GdB ₆ nanorods and their field emission properties. <i>CrystEngComm</i> , 2020, 22, 5473-5480.	2.6	6
34	Swift heavy ion irradiation induced microstructural modification and evolution of photoluminescence from Si rich <i>a</i> -SiN _x :H. <i>Materials Research Express</i> , 2015, 2, 046204.	1.6	5
35	Stabilization of Si rich nitride phase by swift heavy ion irradiation in non-stoichiometric <i>a</i> -SiN _x :H thin films. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2017, 410, 164-170.	1.4	5
36	Modeling of the <i>in-situ</i> nitrogen (N) doping of graphene-carbon nanotube (CNT) hybrids in a plasma medium and their field emission properties. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	5

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37	Defect mediated modification of structural, optical and magnetic properties of Xe ³⁺ ions irradiated GaN/sapphire films. Nuclear Instruments & Methods in Physics Research B, 2020, 466, 61-68.	1.4	5
38	Study of growth kinetics and depth resolved composition of a-SiN _x :H thin films by resonant soft X-ray reflectivity at the Si L _{2,3} -edge. Applied Surface Science, 2014, 305, 173-178.	6.1	4
39	A Study of Temperature-Dependent Photoluminescence from As-Deposited and Heavy-Ion-Irradiated Plasma-Enhanced Chemical Vapor Deposition-Grown Si-Rich SiN _x :H Thin Films.1.5 Physica Status Solidi (B): Basic Research, 2020, 257, 1900378.		4
40	Evidence of local structural influence on the shape driven magnetic anisotropy in electronically excited Ni nanoparticles embedded in SiO ₂ matrix. Scientific Reports, 2018, 8, 1040.	3.3	3
41	Graphene-CNT hybrids by thermal and plasma-enhanced chemical vapor deposition process: Numerical modeling of growth and energy kinetics. Plasma Processes and Polymers, 2019, 16, 1900013.	3.0	3
42	Highly enhanced field emission from vertically aligned carbon nanotubes grown on a patterned substrate via non-lithographic method. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 135, 114946.	2.7	3
43	Spectral weight shift in the valence band density of states and concurrent increase in field emission by hydrogenation of FeCo-SiO ₂ nanocomposites. RSC Advances, 2015, 5, 63377-63381.	3.6	2
44	Water-assisted growth of graphene-carbon nanotube hybrids in plasma. Physics of Plasmas, 2018, 25, 043503.	1.9	2
45	Angle dependent localized surface plasmon resonance from near surface implanted silver nanoparticles in SiO ₂ thin film. Journal of Applied Physics, 2018, 124, 063107.	2.5	2
46	Correlation between changes in nanoscale structural and optical properties upon swift heavy ion irradiation of SiN _x thin films. Journal of Applied Physics, 2021, 129, 035108.	2.5	2
47	An insight of enhanced field emission from vertically oriented La _x Nd _{1-x} B ₆ nanorods. Materials Chemistry and Physics, 2022, 279, 125694.	4.0	2
48	Study of "Thin Buffer" GaN on SiC HEMT and Effect of Bulk Traps on it. Silicon, 2022, 14, 12505-12512.	3.3	2
49	Modeling low and high temperature controls in the growth of graphene-CNT hybrids by PECVD: an interplay between process and plasma parameters. Plasma Research Express, 2021, 3, 035003.	0.9	1
50	Design of new process for stabilization of La _x Gd _{1-x} B ₆ nanorods and their Field Emission properties. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2022, 282, 115759.	3.5	1
51	Observation of exchange bias in nanoscale AuFe alloy film. Materials Research Express, 2020, 7, 076102.	1.6	0