

# Indra Sulania

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

958  
citations

361413

20  
h-index

526287

27  
g-index

82  
all docs

82  
docs citations

82  
times ranked

1093  
citing authors

#	ARTICLE	IF	CITATIONS
1	Formation of self-affine nanostructures on ZnO surfaces by swift heavy ions. Journal of Applied Physics, 2008, 104, 024304.	2.5	56
2	Effect of swift heavy ion irradiation on structural, optical and electrical properties of spray deposited CdO thin films. Radiation Physics and Chemistry, 2011, 80, 435-439.	2.8	49
3	Micro-Raman study on the softening and stiffening of phonons in rutile titanium dioxide film: Competing effects of structural defects, crystallite size, and lattice strain. Journal of Applied Physics, 2014, 115, .	2.5	44
4	Enhancement of wettability and antibiotic loading/release of hydroxyapatite thin film modified by 100MeV Ag <sup>7+</sup> ion irradiation. Materials Chemistry and Physics, 2012, 134, 464-477.	4.0	41
5	Structural, optical and magnetic properties of N ion implanted CeO <sub>2</sub> thin films. RSC Advances, 2017, 7, 9160-9168.	3.6	41
6	Study of humidity sensing properties and ion beam induced modifications in SnO <sub>2</sub> -TiO <sub>2</sub> nanocomposite thin films. Surface and Coatings Technology, 2020, 392, 125768.	4.8	39
7	Synthesis and Characterization of Gold Nanorings. Journal of Nanoscience and Nanotechnology, 2007, 7, 1878-1881.	0.9	38
8	Thermal and ion induced annealing of nanocrystalline ZnO thin film deposited by atom beam sputtering. Journal Physics D: Applied Physics, 2008, 41, 045305.	2.8	34
9	Tuning of fermi level in antimony telluride thin films by low-energy Fe <sup>2+</sup> -ion implantation. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	31
10	Study Of Surface Morphology And Grain Size Of Irradiated MgO Thin Films. Advanced Materials Letters, 2012, 3, 112-117.	0.6	28
11	Effect of low energy (keV) ion irradiation on structural, optical and morphological properties of SnO <sub>2</sub> -TiO <sub>2</sub> nanocomposite thin films. Journal of Materials Science: Materials in Electronics, 2018, 29, 13328-13336.	2.2	27
12	Microfluidic Affinity Sensor Based on a Molecularly Imprinted Polymer for Ultrasensitive Detection of Chlorpyrifos. ACS Omega, 2020, 5, 31765-31773.	3.5	27
13	Electronic excitations induced modifications of structural and optical properties of ZnO porous silicon nanocomposites. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2399-2402.	1.4	25
14	Effect of swift heavy ion irradiation on hydrothermally synthesized hydroxyapatite ceramics. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 911-917.	1.4	24
15	Swift heavy ion induced structural modification of atom beam sputtered ZnO thin film. Surface and Coatings Technology, 2009, 203, 2427-2431.	4.8	24
16	Swift heavy ion irradiation induced nanograin formation in CdTe thin films. Nuclear Instruments & Methods in Physics Research B, 2016, 387, 1-9.	1.4	24
17	Evidence of Ion-Beam-Induced Annealing in Graphene Oxide Films Using in Situ X-Ray Diffraction and Spectroscopy Techniques. Journal of Physical Chemistry C, 2018, 122, 9632-9640.	3.1	23
18	VLS-like growth and characterizations of dense ZnO nanorods grown by e-beam process. Journal Physics D: Applied Physics, 2009, 42, 035310.	2.8	20

#	ARTICLE	IF	CITATIONS
19	Effect of swift heavy ion irradiation on structural, optical and electrical properties of Cd <sub>2</sub> SnO <sub>4</sub> thin films. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 2391-2394.	1.4	20
20	Thickness dependent optical, structural, morphological, photocatalytic and catalytic properties of radio frequency magnetron sputtered nanostructured Cu <sub>2</sub> O/CuO thin films. Ceramics International, 2020, 46, 14902-14912.	4.8	20
21	AFM and photoluminescence studies of swift heavy ion induced nanostructured aluminum oxide thin films. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 1049-1054.	1.4	17
22	High-energy ion induced physical and surface modifications in antimony sulphide thin films. Current Applied Physics, 2010, 10, 1112-1116.	2.4	16
23	A study on 120MeV Ag <sup>9+</sup> irradiation induced modifications in structural, electrical and optical behavior of ZnSnO <sub>3</sub> thin films. Nuclear Instruments & Methods in Physics Research B, 2012, 285, 61-64.	1.4	16
24	125MeV Si <sup>9+</sup> ion irradiation of calcium phosphate thin film coated by rf-magnetron sputtering technique. Applied Surface Science, 2011, 257, 2134-2141.	6.1	12
25	Low Energy Bombardment Induced Formation Of Ge Nanoparticles. Advanced Materials Letters, 2013, 4, 402-407.	0.6	12
26	SHI induced modifications in SnO <sub>2</sub> thin films: Structural, optical and surface morphological studies. Nuclear Instruments & Methods in Physics Research B, 2012, 286, 295-298.	1.4	11
27	Structural investigation of low energy ion irradiated Al <sub>2</sub> O <sub>3</sub> . Ceramics International, 2019, 45, 20346-20353.	4.8	11
28	Topography evolution of 500 keV Ar <sup>4+</sup> ion beam irradiated InP(100) surfaces – formation of self-organized In-rich nano-dots and scaling laws. Physical Chemistry Chemical Physics, 2016, 18, 20363-20370.	2.8	10
29	Tuning the optical and electrical properties of magnetron-sputtered Cu/ZnO thin films using low energy Ar ion irradiation. Optical Materials, 2021, 114, 110985.	3.6	10
30	Surface Patterning On Indium Phosphide With Low Energy Ar Atoms Bombardment: An Evolution From Nanodots To Nanoripples. Advanced Materials Letters, 2010, 1, 118-122.	0.6	10
31	Effect Of Irradiation Of Si <sup>5+</sup> ion On Fe Doped Hydroxyapatite. Advanced Materials Letters, 2013, 4, 438-443.	0.6	10
32	Swift heavy ion induced effects at Mo/Si interface and silicide formation. Surface and Interface Analysis, 2009, 41, 746-752.	1.8	9
33	Thermal annealing induced competition of oxidation and grain growth in nickel thin films. Thin Solid Films, 2019, 680, 40-47.	1.8	9
34	Ion beam induced modifications in electron beam evaporated aluminum oxide thin films. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 1475-1479.	1.4	8
35	keV Ion-Induced Effective Surface Modifications on InP. Journal of Nanoscience and Nanotechnology, 2008, 8, 4163-4167.	0.9	8
36	Nano/micro-structuring of oxide thin film under SHI irradiation. Vacuum, 2011, 86, 96-100.	3.5	8

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37	Liquid phase epitaxial growth of II-V semiconductor compound Zn <sub>3</sub> As <sub>2</sub> . Journal Physics D: Applied Physics, 2007, 40, 5071-5074.	2.8	7
38	Investigations of ripple pattern formation on Germanium surfaces using 100-keV Ar <sup>+</sup> ions. Nanoscale Research Letters, 2015, 10, 88.	5.7	7
39	Medium energy ion irradiation of Ge surface - search for a better understanding of the surface nano-patterning. Surface and Interface Analysis, 2016, 48, 196-201.	1.8	7
40	Role of carrier concentration in swift heavy ion irradiation induced surface modifications. Surface Science, 2017, 664, 137-146.	1.9	7
41	Investigating the Nanocomposite Thin Films of Hematite $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> and Nafion for Cholesterol Biosensing Applications. Frontiers in Nanotechnology, 2020, 2, .	4.8	7
42	Swift ion irradiation effects on L-threonine amino acid single crystals. Journal of Physics Condensed Matter, 2007, 19, 466108.	1.8	6
43	Raman scattering and FTIR studies of 100 MeV Fe <sup>9+</sup> ion-irradiated gallium phosphide. Radiation Effects and Defects in Solids, 2011, 166, 743-748.	1.2	6
44	Synthesis of Pt nanoparticles and their burrowing into Si due to synergistic effects of ion beam energy losses. Beilstein Journal of Nanotechnology, 2014, 5, 1864-1872.	2.8	6
45	Crystallization of Ge in ion-irradiated amorphous-Ge/Au thin films. CrystEngComm, 2020, 22, 666-677.	2.6	6
46	Formation of self-organized nano-dimensional structures on InP surfaces using ion irradiation and their wettability: A study based on experimental and theoretical concepts of surface. Radiation Physics and Chemistry, 2022, 199, 110353.	2.8	6
47	Magnetic Force Microscopy of Nano-Size Magnetic Domain Ordering in Heavy Ion Irradiated Fullerene Films. Journal of Nanoscience and Nanotechnology, 2007, 7, 2201-2205.	0.9	5
48	Crystalline to amorphous phase transition of tin oxide nanocrystals induced by SHI at low temperature. AIP Conference Proceedings, 2012, , .	0.4	5
49	Fractal characterizations of energetic Si ions irradiated amorphized $\alpha$ -Si surfaces. Surface and Interface Analysis, 2019, 51, 817-825.	1.8	5
50	Modifications on CdS thin films due to low-energy ion bombardment. Radiation Effects and Defects in Solids, 2012, 167, 59-68.	1.2	4
51	Investigations of electrical and optical properties of low energy ion irradiated $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> (hematite) thin films. AIP Conference Proceedings, 2016, , .	0.4	4
52	Modification in the properties of SnO <sub>2</sub> and TiO <sub>2</sub> nanocomposite thin films by low energy ion irradiation. Integrated Ferroelectrics, 2018, 193, 88-99.	0.7	4
53	Synthesis of Controlled Diluted Magnetic Semiconductor by Ni Implantation in ZnO Crystal. Advanced Science Letters, 2009, 2, 324-328.	0.2	4
54	Modification Of Nanocrystalline RF Sputtered Tin Oxide Thin Film Using SHI Irradiation. Advanced Materials Letters, 2013, 4, 428-432.	0.6	4

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55	Thickness effect on scaling law and surface properties of nano-dimensional SnTe thin films. Journal of Applied Physics, 2021, 130, .	2.5	4
56	Formation of TiO <sub>2</sub> Nanorings Due to Rapid Thermal Annealing of Swift Heavy Ion Irradiated Films. Journal of Nanoscience and Nanotechnology, 2008, 8, 4387-4394.	0.9	3
57	Medium energy, heavy and inert ion irradiation of metallic thin films: studies of surface nanostructuring and metal burrowing. Surface and Interface Analysis, 2016, 48, 969-975.	1.8	3
58	Silicon negative ion implantation induced vacancy defects in thermally grown SiO <sub>2</sub> thin films. Radiation Effects and Defects in Solids, 2020, 175, 695-703.	1.2	3
59	An offline prediction of nanoscale ripples propagation under ion irradiation: A correlation between ripples velocity and surface erosion rate. Vacuum, 2021, 183, 109795.	3.5	3
60	Perpendicularly magnetized ferromagnetism in Mn/Al bilayer thin films on Si substrates induced by temperature dependent ion beam mixing. Physica Scripta, 2021, 96, 105806.	2.5	3
61	Effect of 150 keV Ti <sup>+</sup> ion implantation on the structural, optical, and electrical properties of nonstoichiometric WO <sub>2.72</sub> thin films. Materials Research Bulletin, 2022, 145, 111566.	5.2	3
62	Effect of 100 MeV Nickel Ion Beam Irradiation on CdTe Nanostructured Thin Films. Advanced Science Letters, 2016, 22, 1008-1012.	0.2	3
63	Nanopattern Formation on Indium Phosphide Using Energetic Ions: An Overview with Various Ion Beam Parameters. ECS Transactions, 2022, 107, 3107-3116.	0.5	3
64	Recharging processes, radiation induced strain and changes of OH <sup>-</sup> bands under H <sup>+</sup> ion implantation in Ti doped lithium niobate. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 172-177.	1.4	2
65	Swift Heavy Ion irradiation induced nanocrystallisation in Te/Cd/Te trilayer thin films. Thin Solid Films, 2017, 636, 403-411.	1.8	2
66	Atomic and Magnetic Force Studies of Co Thin Films and Nanoparticles: Understanding the Surface Correlation Using Fractal Studies. , 2018, , 263-291.		2
67	Effects of silicon negative ion implantation in semi-insulating gallium arsenide. Radiation Effects and Defects in Solids, 2019, 174, 636-646.	1.2	2
68	Studies of SiO <sub>2</sub> thin films implanted with 100keV silicon ions. Materials Today: Proceedings, 2020, 23, 345-351.	1.8	2
69	High-Quality Nanocrystalline ZnO Films Deposited by the Atom Beam Sputtering. Journal of Nanoengineering and Nanomanufacturing, 2013, 3, 331-336.	0.3	2
70	Structural and surface characteristics of room temperature and low temperature swift heavy ion implanted InAs and InSb wafers. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 1723-1728.	1.4	1
71	Studies of optical properties and SHI irradiation on PbS sensitized nanoporous TiO <sub>2</sub> network. Journal of Optics (India), 2009, 38, 169-176.	1.7	1
72	Ion Beam Induced Modification of Metal Nanoparticles Dispersed Polymeric Films. Integrated Ferroelectrics, 2010, 117, 97-103.	0.7	1

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73	Investigation of ion beam mixing threshold value in Mn/Si system using swift heavy ions. Radiation Effects and Defects in Solids, 2013, 168, 607-614.	1.2	1
74	Swift heavy ion beam stimulated epitaxial recrystallization of Si/SiO <sub>2</sub> heterostructure. Materials Letters, 2022, 308, 131153.	2.6	1
75	Modification of structural, topographical and magnetic properties induced by Ag ion irradiations in pure and divalent metal (Zn <sup>2+</sup> and Co <sup>2+</sup> )-doped iron oxide thin films. Journal of Materials Science: Materials in Electronics, 2022, 33, 5661-5677.	2.2	1
76	Formation of ZnS nanostructures in SiO <sub>2</sub> matrix by RF co-sputtering. , 2009, , .		0
77	Swift Heavy Ion induced interface mixing in a Te/Cd/Te trilayer thin film system. Materials Today: Proceedings, 2019, 9, 450-457.	1.8	0
78	Intersubband Absorption in Gallium Arsenide Implanted with Silicon Negative Ions. International Journal of Nanoscience, 2020, 19, 1950019.	0.7	0
79	Study of Low Energy (50 keV) Silicon Negative ion Implantation in GaAs. Materials Today: Proceedings, 2020, 23, 309-316.	1.8	0
80	Ion Beams Induced Modifications in Polysulphone Polymer. Advanced Science Letters, 2014, 20, 1151-1154.	0.2	0