

# 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  | 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. <i>Materials Research Bulletin</i> , 2022, 145, 111566.   | 5.2 | 3         |
| 2  | Swift heavy ion beam stimulated epitaxial recrystallization of Si/SiO <sub>2</sub> heterostructure. <i>Materials Letters</i> , 2022, 308, 131153.  | 2.6 | 1         |
| 3  | 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. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 5661-5677. | 2.2 | 1         |
| 4  | Nanopattern Formation on Indium Phosphide Using Energetic Ions: An Overview with Various Ion Beam Parameters. <i>ECS Transactions</i> , 2022, 107, 3107-3116.  | 0.5 | 3         |
| 5  | 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. <i>Radiation Physics and Chemistry</i> , 2022, 199, 110353.                                    | 2.8 | 6         |
| 6  | An offline prediction of nanoscale ripples propagation under ion irradiation: A correlation between ripples velocity and surface erosion rate. <i>Vacuum</i> , 2021, 183, 109795.  | 3.5 | 3         |
| 7  | Tuning the optical and electrical properties of magnetron-sputtered Cu <sup>2+</sup> ZnO thin films using low energy Ar ion irradiation. <i>Optical Materials</i> , 2021, 114, 110985.   | 3.6 | 10        |
| 8  | Perpendicularly magnetized ferromagnetism in Mn/Al bilayer thin films on Si substrates induced by temperature dependent ion beam mixing. <i>Physica Scripta</i> , 2021, 96, 105806.  | 2.5 | 3         |
| 9  | Thickness effect on scaling law and surface properties of nano-dimensional SnTe thin films. <i>Journal of Applied Physics</i> , 2021, 130, .   | 2.5 | 4         |
| 10 | Tuning of fermi level in antimony telluride thin films by low-energy Fe <sup>2+</sup> -ion implantation. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.  | 2.3 | 31        |
| 11 | Crystallization of Ge in ion-irradiated amorphous-Ge/Au thin films. <i>CrystEngComm</i> , 2020, 22, 666-677.   | 2.6 | 6         |
| 12 | Intersubband Absorption in Gallium Arsenide Implanted with Silicon Negative Ions. <i>International Journal of Nanoscience</i> , 2020, 19, 1950019.   | 0.7 | 0         |
| 13 | Microfluidic Affinity Sensor Based on a Molecularly Imprinted Polymer for Ultrasensitive Detection of Chlorpyrifos. <i>ACS Omega</i> , 2020, 5, 31765-31773.   | 3.5 | 27        |
| 14 | Investigating the Nanocomposite Thin Films of Hematite $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> and Nafion for Cholesterol Biosensing Applications. <i>Frontiers in Nanotechnology</i> , 2020, 2, .  | 4.8 | 7         |
| 15 | Silicon negative ion implantation induced vacancy defects in thermally grown SiO <sub>2</sub> thin films. <i>Radiation Effects and Defects in Solids</i> , 2020, 175, 695-703.   | 1.2 | 3         |
| 16 | Studies of SiO <sub>2</sub> thin films implanted with 100keV silicon ions. <i>Materials Today: Proceedings</i> , 2020, 23, 345-351.  | 1.8 | 2         |
| 17 | Study of Low Energy (50 keV) Silicon Negative ion Implantation in GaAs. <i>Materials Today: Proceedings</i> , 2020, 23, 309-316.   | 1.8 | 0         |
| 18 | Thickness dependent optical, structural, morphological, photocatalytic and catalytic properties of radio frequency magnetron sputtered nanostructured Cu <sub>2</sub> O/CuO thin films. <i>Ceramics International</i> , 2020, 46, 14902-14912.   | 4.8 | 20        |

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|----|---|-----|-----------|
| 19 | Study of humidity sensing properties and ion beam induced modifications in SnO <sub>2</sub> -TiO <sub>2</sub> nanocomposite thin films. <i>Surface and Coatings Technology</i> , 2020, 392, 125768.   | 4.8 | 39        |
| 20 | Effects of silicon negative ion implantation in semi-insulating gallium arsenide. <i>Radiation Effects and Defects in Solids</i> , 2019, 174, 636-646.  | 1.2 | 2         |
| 21 | Structural investigation of low energy ion irradiated Al <sub>2</sub> O <sub>3</sub> . <i>Ceramics International</i> , 2019, 45, 20346-20353.   | 4.8 | 11        |
| 22 | Swift Heavy Ion induced interface mixing in a Te/Cd/Te trilayer thin film system. <i>Materials Today: Proceedings</i> , 2019, 9, 450-457.   | 1.8 | 0         |
| 23 | Fractal characterizations of energetic Si ions irradiated amorphized Si surfaces. <i>Surface and Interface Analysis</i> , 2019, 51, 817-825.  | 1.8 | 5         |
| 24 | Thermal annealing induced competition of oxidation and grain growth in nickel thin films. <i>Thin Solid Films</i> , 2019, 680, 40-47.   | 1.8 | 9         |
| 25 | Evidence of Ion-Beam-Induced Annealing in Graphene Oxide Films Using in Situ X-Ray Diffraction and Spectroscopy Techniques. <i>Journal of Physical Chemistry C</i> , 2018, 122, 9632-9640.  | 3.1 | 23        |
| 26 | Modification in the properties of SnO <sub>2</sub> and TiO <sub>2</sub> nanocomposite thin films by low energy ion irradiation. <i>Integrated Ferroelectrics</i> , 2018, 193, 88-99.  | 0.7 | 4         |
| 27 | Atomic and Magnetic Force Studies of Co Thin Films and Nanoparticles: Understanding the Surface Correlation Using Fractal Studies. , 2018, , 263-291.   |     | 2         |
| 28 | 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. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 13328-13336. | 2.2 | 27        |
| 29 | Structural, optical and magnetic properties of N ion implanted CeO <sub>2</sub> thin films. <i>RSC Advances</i> , 2017, 7, 9160-9168.   | 3.6 | 41        |
| 30 | Swift Heavy Ion irradiation induced nanocrystallisation in Te/Cd/Te trilayer thin films. <i>Thin Solid Films</i> , 2017, 636, 403-411.  | 1.8 | 2         |
| 31 | Role of carrier concentration in swift heavy ion irradiation induced surface modifications. <i>Surface Science</i> , 2017, 664, 137-146.  | 1.9 | 7         |
| 32 | 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. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 20363-20370.                          | 2.8 | 10        |
| 33 | Medium energy, heavy and inert ion irradiation of metallic thin films: studies of surface nanostructuring and metal burrowing. <i>Surface and Interface Analysis</i> , 2016, 48, 969-975.   | 1.8 | 3         |
| 34 | Swift heavy ion irradiation induced nanograin formation in CdTe thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2016, 387, 1-9.  | 1.4 | 24        |
| 35 | Investigations of electrical and optical properties of low energy ion irradiated $\hat{1}\pm$ -Fe <sub>2</sub> O <sub>3</sub> (hematite) thin films. <i>AIP Conference Proceedings</i> , 2016, , .  | 0.4 | 4         |
| 36 | Medium energy ion irradiation of Ge surface - search for a better understanding of the surface nano-patterning. <i>Surface and Interface Analysis</i> , 2016, 48, 196-201.  | 1.8 | 7         |

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|----|--|-----|-----------|
| 37 | Effect of 100 MeV Nickel Ion Beam Irradiation on CdTe Nanostructured Thin Films. <i>Advanced Science Letters</i> , 2016, 22, 1008-1012.  | 0.2 | 3         |
| 38 | Investigations of ripple pattern formation on Germanium surfaces using 100-keV Ar <sup>+</sup> ions. <i>Nanoscale Research Letters</i> , 2015, 10, 88.   | 5.7 | 7         |
| 39 | Synthesis of Pt nanoparticles and their burrowing into Si due to synergistic effects of ion beam energy losses. <i>Beilstein Journal of Nanotechnology</i> , 2014, 5, 1864-1872.   | 2.8 | 6         |
| 40 | 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. <i>Journal of Applied Physics</i> , 2014, 115, .            | 2.5 | 44        |
| 41 | Ion Beams Induced Modifications in Polysulphone Polymer. <i>Advanced Science Letters</i> , 2014, 20, 1151-1154.  | 0.2 | 0         |
| 42 | Investigation of ion beam mixing threshold value in Mn/Si system using swift heavy ions. <i>Radiation Effects and Defects in Solids</i> , 2013, 168, 607-614.  | 1.2 | 1         |
| 43 | High-Quality Nanocrystalline ZnO Films Deposited by the Atom Beam Sputtering. <i>Journal of Nanoengineering and Nanomanufacturing</i> , 2013, 3, 331-336.  | 0.3 | 2         |
| 44 | Low Energy Bombardment Induced Formation Of Ge Nanoparticles. <i>Advanced Materials Letters</i> , 2013, 4, 402-407.  | 0.6 | 12        |
| 45 | Modification Of Nanocrystalline RF Sputtered Tin Oxide Thin Film Using SHI Irradiation. <i>Advanced Materials Letters</i> , 2013, 4, 428-432.  | 0.6 | 4         |
| 46 | Effect Of Irradiation Of Si <sup>5+</sup> Ion On Fe Doped Hydroxyapatite. <i>Advanced Materials Letters</i> , 2013, 4, 438-443.  | 0.6 | 10        |
| 47 | Crystalline to amorphous phase transition of tin oxide nanocrystals induced by SHI at low temperature. <i>AIP Conference Proceedings</i> , 2012, , .   | 0.4 | 5         |
| 48 | Modifications on CdS thin films due to low-energy ion bombardment. <i>Radiation Effects and Defects in Solids</i> , 2012, 167, 59-68.  | 1.2 | 4         |
| 49 | A study on 120MeV Ag <sup>9+</sup> irradiation induced modifications in structural, electrical and optical behavior of ZnSnO <sub>3</sub> thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2012, 285, 61-64. | 1.4 | 16        |
| 50 | SHI induced modifications in SnO <sub>2</sub> thin films: Structural, optical and surface morphological studies. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2012, 286, 295-298.                                    | 1.4 | 11        |
| 51 | Enhancement of wettability and antibiotic loading/release of hydroxyapatite thin film modified by 100MeV Ag <sup>7+</sup> ion irradiation. <i>Materials Chemistry and Physics</i> , 2012, 134, 464-477.                                  | 4.0 | 41        |
| 52 | Study Of Surface Morphology And Grain Size Of Irradiated MgO Thin Films. <i>Advanced Materials Letters</i> , 2012, 3, 112-117.   | 0.6 | 28        |
| 53 | Raman scattering and FTIR studies of 100MeV Fe <sup>9+</sup> ion-irradiated gallium phosphide. <i>Radiation Effects and Defects in Solids</i> , 2011, 166, 743-748.  | 1.2 | 6         |
| 54 | 125MeV Si <sup>9+</sup> ion irradiation of calcium phosphate thin film coated by rf-magnetron sputtering technique. <i>Applied Surface Science</i> , 2011, 257, 2134-2141.   | 6.1 | 12        |

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|----|---|-----|-----------|
| 55 | 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        |
| 56 | Nano/micro-structuring of oxide thin film under SHI irradiation. Vacuum, 2011, 86, 96-100.  | 3.5 | 8         |
| 57 | 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        |
| 58 | 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         |
| 59 | High-energy ion induced physical and surface modifications in antimony sulphide thin films. Current Applied Physics, 2010, 10, 1112-1116.   | 2.4 | 16        |
| 60 | Ion Beam Induced Modification of Metal Nanoparticles Dispersed Polymeric Films. Integrated Ferroelectrics, 2010, 117, 97-103.   | 0.7 | 1         |
| 61 | 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        |
| 62 | Formation of ZnS nanostructures in SiO <sub>2</sub> matrix by RF co-sputtering. , 2009, , .   |     | 0         |
| 63 | 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         |
| 64 | Swift heavy ion induced effects at Mo/Si interface and silicide formation. Surface and Interface Analysis, 2009, 41, 746-752.   | 1.8 | 9         |
| 65 | Electronic excitations induced modifications of structural and optical properties of ZnO <sup>+</sup> porous silicon nanocomposites. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2399-2402.                 | 1.4 | 25        |
| 66 | Swift heavy ion induced structural modification of atom beam sputtered ZnO thin film. Surface and Coatings Technology, 2009, 203, 2427-2431.  | 4.8 | 24        |
| 67 | 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        |
| 68 | Synthesis of Controlled Diluted Magnetic Semiconductor by Ni Implantation in ZnO Crystal. Advanced Science Letters, 2009, 2, 324-328.   | 0.2 | 4         |
| 69 | 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        |
| 70 | 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         |
| 71 | 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         |
| 72 | 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        |

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|----|--|-----|-----------|
| 73 | Formation of self-affine nanostructures on ZnO surfaces by swift heavy ions. Journal of Applied Physics, 2008, 104, 024304.  | 2.5 | 56        |
| 74 | 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        |
| 75 | keV Ion-Induced Effective Surface Modifications on InP. Journal of Nanoscience and Nanotechnology, 2008, 8, 4163-4167.   | 0.9 | 8         |
| 76 | 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         |
| 77 | Synthesis and Characterization of Gold Nanorings. Journal of Nanoscience and Nanotechnology, 2007, 7, 1878-1881.   | 0.9 | 38        |
| 78 | Liquid phase epitaxial growth of II-VI semiconductor compound Zn <sub>3</sub> As <sub>2</sub> . Journal Physics D: Applied Physics, 2007, 40, 5071-5074.                   | 2.8 | 7         |
| 79 | Swift ion irradiation effects on L-threonine amino acid single crystals. Journal of Physics Condensed Matter, 2007, 19, 466108.  | 1.8 | 6         |
| 80 | 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         |