

P K Giri

List of Publications by Year in descending order

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166
papers

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times ranked

8562
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| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Evidence of oxygen vacancy induced room temperature ferromagnetism in solvothermally synthesized undoped TiO ₂ nanoribbons. <i>Nanoscale</i> , 2013, 5, 5476. | 2.8 | 258 |
| 2 | Correlation between microstructure and optical properties of ZnO nanoparticles synthesized by ball milling. <i>Journal of Applied Physics</i> , 2007, 102, . | 1.1 | 228 |
| 3 | Interfacial charge transfer in oxygen deficient TiO ₂ -graphene quantum dot hybrid and its influence on the enhanced visible light photocatalysis. <i>Applied Catalysis B: Environmental</i> , 2018, 224, 960-972. | 10.8 | 198 |
| 4 | Diameter dependence of interwall separation and strain in multiwalled carbon nanotubes probed by X-ray diffraction and Raman scattering studies. <i>Diamond and Related Materials</i> , 2010, 19, 1281-1288. | 1.8 | 168 |
| 5 | High temperature ferromagnetism and optical properties of Co doped ZnO nanoparticles. <i>Journal of Applied Physics</i> , 2010, 108, . | 1.1 | 158 |
| 6 | Formation mechanism of graphene quantum dots and their edge state conversion probed by photoluminescence and Raman spectroscopy. <i>Journal of Materials Chemistry C</i> , 2016, 4, 10852-10865. | 2.7 | 157 |
| 7 | Signature of strong ferromagnetism and optical properties of Co doped TiO ₂ nanoparticles. <i>Journal of Applied Physics</i> , 2011, 110, . | 1.1 | 152 |
| 8 | Hydrogen Evolution Reaction Activity of Graphene@MoS ₂ van der Waals Heterostructures. <i>ACS Energy Letters</i> , 2017, 2, 1355-1361. | 8.8 | 141 |
| 9 | Solar light driven photoelectrocatalytic hydrogen evolution and dye degradation by metal-free few-layer MoS ₂ nanoflower/TiO ₂ (B) nanobelts heterostructure. <i>Solar Energy Materials and Solar Cells</i> , 2018, 185, 364-374. | 3.0 | 138 |
| 10 | Structural, optical, and magnetic properties of Ni doped ZnO nanoparticles: Correlation of magnetic moment with defect density. <i>Applied Surface Science</i> , 2015, 356, 804-811. | 3.1 | 133 |
| 11 | Enhanced UV photosensitivity from rapid thermal annealed vertically aligned ZnO nanowires. <i>Nanoscale Research Letters</i> , 2011, 6, 504. | 3.1 | 128 |
| 12 | Evidence for Ti Interstitial Induced Extended Visible Absorption and Near Infrared Photoluminescence from Undoped TiO ₂ Nanoribbons: An In Situ Photoluminescence Study. <i>Journal of Physical Chemistry C</i> , 2013, 117, 23402-23411. | 1.5 | 122 |
| 13 | Strain induced phase formation, microstructural evolution and bandgap narrowing in strained TiO ₂ nanocrystals grown by ball milling. <i>Journal of Alloys and Compounds</i> , 2016, 676, 591-600. | 2.8 | 121 |
| 14 | Oxygen vacancy-mediated enhanced ferromagnetism in undoped and Fe-doped TiO ₂ nanoribbons. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 235304. | 1.3 | 115 |
| 15 | Microscopic origin of lattice contraction and expansion in undoped rutile TiO ₂ nanostructures. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 215302. | 1.3 | 110 |
| 16 | Tuning the visible photoluminescence in Al doped ZnO thin film and its application in label-free glucose detection. <i>Sensors and Actuators B: Chemical</i> , 2018, 254, 681-689. | 4.0 | 96 |
| 17 | Role of Surface Plasmons and Hot Electrons on the Multi-Step Photocatalytic Decay by Defect Enriched Ag@TiO ₂ Nanorods under Visible Light. <i>Journal of Physical Chemistry C</i> , 2017, 121, 20016-20030. | 1.5 | 85 |
| 18 | Stable p-type conductivity and enhanced photoconductivity from nitrogen-doped annealed ZnO thin film. <i>Thin Solid Films</i> , 2012, 520, 5000-5006. | 0.8 | 82 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Origin of high photoluminescence yield and high SERS sensitivity of nitrogen-doped graphene quantum dots. Carbon, 2020, 160, 273-286. | 5.4 | 82 |
| 20 | Mechanism of strong visible light photocatalysis by Ag ₂ O-nanoparticle-decorated monoclinic TiO ₂ (B) porous nanorods. Nanotechnology, 2016, 27, 315703. | 1.3 | 79 |
| 21 | Room temperature ferromagnetism with high magnetic moment and optical properties of Co doped ZnO nanorods synthesized by a solvothermal route. Journal of Alloys and Compounds, 2014, 615, 378-385. | 2.8 | 73 |
| 22 | Defect Mediated Magnetic Interaction and High Temperature Ferromagnetism in Co Doped ZnO Nanoparticles. Journal of Nanoscience and Nanotechnology, 2011, 11, 9167-9174. | 0.9 | 69 |
| 23 | Graphene-Assisted Controlled Growth of Highly Aligned ZnO Nanorods and Nanoribbons: Growth Mechanism and Photoluminescence Properties. ACS Applied Materials & Interfaces, 2014, 6, 377-387. | 4.0 | 68 |
| 24 | Role of molecular interactions and structural defects in the efficient fluorescence quenching by carbon nanotubes. Carbon, 2012, 50, 4495-4505. | 5.4 | 67 |
| 25 | Diameter dependence of oxidative stability in multiwalled carbon nanotubes: Role of defects and effect of vacuum annealing. Journal of Applied Physics, 2010, 108, . | 1.1 | 66 |
| 26 | Evolution of Nitrogen-Related Defects in Graphitic Carbon Nitride Nanosheets Probed by Positron Annihilation and Photoluminescence Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 9209-9219. | 1.5 | 66 |
| 27 | Strong visible and near infrared photoluminescence from ZnO nanorods/nanowires grown on single layer graphene studied using sub-band gap excitation. Journal of Applied Physics, 2017, 122, . | 1.1 | 63 |
| 28 | Photoluminescence signature of silicon interstitial cluster evolution from compact to extended structures in ion-implanted silicon. Semiconductor Science and Technology, 2005, 20, 638-644. | 1.0 | 62 |
| 29 | On the origin of enhanced photoconduction and photoluminescence from Au and Ti nanoparticles decorated aligned ZnO nanowire heterostructures. Journal of Applied Physics, 2011, 110, 124317. | 1.1 | 60 |
| 30 | Isotype heterostructure of bulk and nanosheets of graphitic carbon nitride for efficient visible light photodegradation of methylene blue. RSC Advances, 2016, 6, 24976-24984. | 1.7 | 60 |
| 31 | Effect of ZnO seed layer on the catalytic growth of vertically aligned ZnO nanorod arrays. Materials Chemistry and Physics, 2010, 122, 18-22. | 2.0 | 58 |
| 32 | Plasmonic hole-transport-layer enabled self-powered hybrid perovskite photodetector using a modified perovskite deposition method in ambient air. Organic Electronics, 2019, 71, 175-184. | 1.4 | 58 |
| 33 | Origin of visible and near-infrared photoluminescence from chemically etched Si nanowires decorated with arbitrarily shaped Si nanocrystals. Nanotechnology, 2014, 25, 045703. | 1.3 | 54 |
| 34 | In situ decoration of plasmonic Au nanoparticles on graphene quantum dots-graphitic carbon nitride hybrid and evaluation of its visible light photocatalytic performance. Nanotechnology, 2017, 28, 395703. | 1.3 | 53 |
| 35 | Silicon nanowire heterostructures for advanced energy and environmental applications: a review. Nanotechnology, 2017, 28, 012001. | 1.3 | 51 |
| 36 | Solid-state synthesis of stable and color tunable cesium lead halide perovskite nanocrystals and the mechanism of high-performance photodetection in a monolayer MoS ₂ /CsPbBr ₃ vertical heterojunction. Journal of Materials Chemistry C, 2020, 8, 8917-8934. | 2.7 | 51 |

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|----|---|-----|-----------|
| 37 | Defect Enhanced Efficient Physical Functionalization of Graphene with Gold Nanoparticles Probed by Resonance Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 13833-13843. | 1.5 | 50 |
| 38 | Solvent dependent synthesis of edge-controlled graphene quantum dots with high photoluminescence quantum yield and their application in confocal imaging of cancer cells. <i>Journal of Colloid and Interface Science</i> , 2019, 541, 387-398. | 5.0 | 50 |
| 39 | Catalyst free growth of ZnO nanowires on graphene and graphene oxide and its enhanced photoluminescence and photoresponse. <i>Nanotechnology</i> , 2015, 26, 145601. | 1.3 | 49 |
| 40 | Strongly enhanced visible light photoelectrocatalytic hydrogen evolution reaction in an n-doped MoS ₂ /TiO ₂ (B) heterojunction by selective decoration of platinum nanoparticles at the MoS ₂ edge sites. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22681-22696. | 5.2 | 49 |
| 41 | Evidence for small interstitial clusters as the origin of photoluminescence W band in ion-implanted silicon. <i>Applied Physics Letters</i> , 2001, 78, 291-293. | 1.5 | 48 |
| 42 | Quantitative Understanding of Charge-Transfer-Mediated Fe ³⁺ Sensing and Fast Photoresponse by N-Doped Graphene Quantum Dots Decorated on Plasmonic Au Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 4755-4768. | 4.0 | 47 |
| 43 | Precise Tuning of the Thickness and Optical Properties of Highly Stable 2D Organometal Halide Perovskite Nanosheets through a Solvothermal Process and Their Applications as a White LED and a Fast Photodetector. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6283-6297. | 4.0 | 46 |
| 44 | Coupled Charge Transfer Dynamics and Photoluminescence Quenching in Monolayer MoS ₂ Decorated with WS ₂ Quantum Dots. <i>Scientific Reports</i> , 2019, 9, 19414. | 1.6 | 45 |
| 45 | Large exciton binding energy, high photoluminescence quantum yield and improved photostability of organo-metal halide hybrid perovskite quantum dots grown on a mesoporous titanium dioxide template. <i>Journal of Colloid and Interface Science</i> , 2019, 539, 619-633. | 5.0 | 43 |
| 46 | Mechanism of swelling in low-energy ion-irradiated silicon. <i>Physical Review B</i> , 2001, 65, . | 1.1 | 42 |
| 47 | Anomalous fluorescence enhancement and fluorescence quenching of graphene quantum dots by single walled carbon nanotubes. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 4527-4537. | 1.3 | 41 |
| 48 | ZnO Nanowire Heterostructures: Intriguing Photophysics and Emerging Applications. <i>Reviews in Nanoscience and Nanotechnology</i> , 2013, 2, 147-170. | 0.4 | 40 |
| 49 | Enhancing the Photostability of Poly(3-hexylthiophene) by Preparing Composites with Multiwalled Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2011, 115, 919-924. | 1.2 | 39 |
| 50 | Impact of reaction temperature, stirring and cosolvent on the solvothermal synthesis of anatase TiO ₂ and TiO ₂ /titanate hybrid nanostructures: Elucidating the growth mechanism. <i>Materials Chemistry and Physics</i> , 2013, 137, 928-936. | 2.0 | 38 |
| 51 | Mesoporous Si Nanowire Templated Controlled Fabrication of Organometal Halide Perovskite Nanoparticles with High Photoluminescence Quantum Yield for Light-Emitting Applications. <i>ACS Applied Nano Materials</i> , 2018, 1, 1551-1562. | 2.4 | 38 |
| 52 | Direct Chemical Vapor Deposition Growth of Monolayer MoS ₂ on TiO ₂ Nanorods and Evidence for Doping-Induced Strong Photoluminescence Enhancement. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15017-15025. | 1.5 | 38 |
| 53 | Evidence for plasmonic hot electron injection induced superior visible light photocatalysis by g-C ₃ N ₄ nanosheets decorated with Ag@TiO ₂ (B) and Au@TiO ₂ (B) nanorods. <i>Solar Energy Materials and Solar Cells</i> , 2019, 201, 110053. | 3.0 | 38 |
| 54 | On the origin and tunability of blue and green photoluminescence from chemically derived graphene: Hydrogenation and oxygenation studies. <i>Carbon</i> , 2015, 95, 228-238. | 5.4 | 37 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Crystalline to amorphous transition and band structure evolution in ion-damaged silicon studied by spectroscopic ellipsometry. Journal of Applied Physics, 2001, 90, 659-669. | 1.1 | 36 |
| 56 | Stacking sequence dependent photo-electrocatalytic performance of CVD grown MoS ₂ /graphene van der Waals solids. Nanotechnology, 2017, 28, 085101. | 1.3 | 36 |
| 57 | Trion-Inhibited Strong Excitonic Emission and Broadband Giant Photoresponsivity from Chemical Vapor-Deposited Monolayer MoS ₂ Grown in Situ on TiO ₂ Nanostructure. ACS Applied Materials & Interfaces, 2018, 10, 42812-42825. | 4.0 | 36 |
| 58 | Electrical characterization of MeV heavy-ion-induced damage in silicon: Evidence for defect migration and clustering. Journal of Applied Physics, 1998, 84, 1901-1912. | 1.1 | 35 |
| 59 | Multifunctional Ag nanoparticle decorated Si nanowires for sensing, photocatalysis and light emission applications. Journal of Colloid and Interface Science, 2018, 532, 464-473. | 5.0 | 35 |
| 60 | Evolution of room temperature ferromagnetism with increasing 1D growth in Ni-doped ZnO nanostructures. Journal of Alloys and Compounds, 2015, 647, 558-565. | 2.8 | 34 |
| 61 | Highly sensitive and selective label-free detection of dopamine in human serum based on nitrogen-doped graphene quantum dots decorated on Au nanoparticles: Mechanistic insights through microscopic and spectroscopic studies. Applied Surface Science, 2019, 490, 318-330. | 3.1 | 34 |
| 62 | Origin and tunability of dual color emission in highly stable Mn doped CsPbCl ₃ nanocrystals grown by a solid-state process. Journal of Colloid and Interface Science, 2020, 564, 357-370. | 5.0 | 34 |
| 63 | Evidence for fast decay dynamics of the photoluminescence from Ge nanocrystals embedded in SiO ₂ . Solid State Communications, 2005, 133, 229-234. | 0.9 | 33 |
| 64 | Size-dependent visible absorption and fast photoluminescence decay dynamics from freestanding strained silicon nanocrystals. Nanoscale Research Letters, 2011, 6, 320. | 3.1 | 33 |
| 65 | Improved fast photoresponse from Al doped ZnO nanowires network decorated with Au nanoparticles. Chemical Physics Letters, 2012, 541, 39-43. | 1.2 | 32 |
| 66 | Effect of Ag/Au bilayer assisted etching on the strongly enhanced photoluminescence and visible light photocatalysis by Si nanowire arrays. Physical Chemistry Chemical Physics, 2016, 18, 7715-7727. | 1.3 | 32 |
| 67 | Mechanism of defect induced ferromagnetism in undoped and Cr doped TiO ₂ nanorods/nanoribbons. Journal of Alloys and Compounds, 2016, 661, 331-344. | 2.8 | 32 |
| 68 | Strong Cathodoluminescence and Fast Photoresponse from Embedded CH ₃ NH ₃ PbBr ₃ Nanoparticles Exhibiting High Ambient Stability. ACS Applied Materials & Interfaces, 2019, 11, 14917-14931. | 4.0 | 31 |
| 69 | Recent advances in perovskite/2D materials based hybrid photodetectors. JPhys Materials, 2021, 4, 032008. | 1.8 | 31 |
| 70 | ZnO/anthracene based inorganic/organic nanowire heterostructure: Photoresponse and photoluminescence studies. Journal of Applied Physics, 2012, 111, . | 1.1 | 29 |
| 71 | Understanding the interfacial charge transfer in the CVD grown Bi ₂ O ₂ Se/CsPbBr ₃ nanocrystal heterostructure and its exploitation in superior photodetection: experiment vs. theory. Nanoscale, 2021, 13, 14945-14959. | 2.8 | 28 |
| 72 | RAPID THERMAL ANNEALING INDUCED ENHANCED BAND-EDGE EMISSION FROM ZnO NANOWIRES, NANORODS AND NANORIBBONS. Functional Materials Letters, 2011, 04, 25-29. | 0.7 | 25 |

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|----|---|-----|-----------|
| 73 | Freestanding Core-Shell Nanocrystals with Varying Sizes and Shell Thicknesses: Microstructure and Photoluminescence Studies. <i>Journal of Nanomaterials</i> , 2012, 2012, 1-5. | 1.5 | 25 |
| 74 | Quantitative analysis of the phonon confinement effect in arbitrarily shaped Si nanocrystals decorated on Si nanowires and its correlation with the photoluminescence spectrum. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 624-631. | 1.2 | 25 |
| 75 | Adsorption of Small Molecules on Niobium Doped Graphene: A Study Based on Density Functional Theory. <i>IEEE Electron Device Letters</i> , 2018, 39, 296-299. | 2.2 | 25 |
| 76 | Understanding the excitation wavelength dependent spectral shift and large exciton binding energy of tungsten disulfide quantum dots and its interaction with single-walled carbon nanotubes. <i>Journal of Colloid and Interface Science</i> , 2020, 561, 519-532. | 5.0 | 25 |
| 77 | Plasmon-enhanced strong visible light photocatalysis by defect engineered CVD graphene and graphene oxide physically functionalized with Au nanoparticles. <i>Catalysis Science and Technology</i> , 2016, 6, 7101-7112. | 2.1 | 24 |
| 78 | Aluminum doped core-shell ZnO/ZnS nanowires: Doping and shell layer induced modification on structural and photoluminescence properties. <i>Journal of Applied Physics</i> , 2013, 114, 134307. | 1.1 | 23 |
| 79 | Surface roughening and scaling behavior of vacuum-deposited SnCl ₂ Pc organic thin films on different substrates. <i>Applied Physics Letters</i> , 2015, 107, . | 1.5 | 23 |
| 80 | Photoluminescence signature of resonant energy transfer in ZnO coated Si nanocrystals decorated on vertical Si nanowires array. <i>Journal of Alloys and Compounds</i> , 2015, 638, 419-428. | 2.8 | 23 |
| 81 | Ultraviolet and blue photoluminescence from sputter deposited Ge nanocrystals embedded in SiO ₂ matrix. <i>Journal of Applied Physics</i> , 2008, 103, . | 1.1 | 22 |
| 82 | Evidence for Defect-Enhanced Photoluminescence Quenching of Fluorescein by Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2011, 115, 24067-24072. | 1.5 | 22 |
| 83 | Quick single-step mechanosynthesis of ZnO nanorods and their optical characterization: milling time dependence. <i>Applied Nanoscience (Switzerland)</i> , 2011, 1, 165-171. | 1.6 | 22 |
| 84 | Shape Tailored TiO ₂ Nanostructures and Their Hybrids for Advanced Energy and Environmental Applications: A Review. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 307-331. | 0.9 | 21 |
| 85 | Temperature-dependent Raman studies and thermal conductivity of direct CVD grown non-van der Waals layered Bi ₂ O ₂ Se. <i>Journal of Applied Physics</i> , 2021, 129, . | 1.1 | 21 |
| 86 | Strain Anisotropy in Freestanding Germanium Nanoparticles Synthesized by Ball Milling. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 5231-5236. | 0.9 | 20 |
| 87 | Size Dependent Anisotropic Strain and Optical Properties of Strained Si Nanocrystals. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 9215-9221. | 0.9 | 20 |
| 88 | Plasmonic Metal and Semiconductor Nanoparticle Decorated TiO ₂ -Based Photocatalysts for Solar Light Driven Photocatalysis. , 2018, , 786-794. | | 20 |
| 89 | Strain analysis on freestanding germanium nanocrystals. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 245402. | 1.3 | 18 |
| 90 | Density functional theory investigation of negative differential resistance and efficient spin filtering in niobium-doped armchair graphene nanoribbons. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 29685-29692. | 1.3 | 18 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Compensating defect in deep buried layers produced by MeV heavy ions in n-silicon. Applied Physics Letters, 1997, 71, 1682-1684. | 1.5 | 17 |
| 92 | Tunable and High Photoluminescence Quantum Yield from Self-Decorated TiO ₂ Quantum Dots on Fluorine Doped Mesoporous TiO ₂ Flowers by Rapid Thermal Annealing. Particle and Particle Systems Characterization, 2018, 35, 1800198. | 1.2 | 17 |
| 93 | Thermal stability of defect complexes due to high dose MeV implantation in silicon. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 71, 327-332. | 1.7 | 16 |
| 94 | Optical Signature of Structural Defects in Single Walled and Multiwalled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2009, 9, 5396-5401. | 0.9 | 16 |
| 95 | IMPROVED CHEMICAL SYNTHESIS OF GRAPHENE USING A SAFER SOLVOTHERMAL ROUTE. International Journal of Nanoscience, 2011, 10, 39-42. | 0.4 | 16 |
| 96 | Vacuum deposited Pbl ₂ film grown at elevated temperatures for improved efficiency of CH ₃ NH ₃ Pbl ₃ based planar perovskite solar cells. Materials Research Bulletin, 2021, 139, 111255. | 2.7 | 16 |
| 97 | High-Yield Chemical Synthesis of Hexagonal ZnO Nanoparticles and Nanorods with Excellent Optical Properties. Journal of Nanoscience and Nanotechnology, 2012, 12, 201-206. | 0.9 | 15 |
| 98 | Ti nanoparticles decorated ZnO nanowires heterostructure: photocurrent and photoluminescence properties. Journal of Experimental Nanoscience, 2013, 8, 332-340. | 1.3 | 15 |
| 99 | Early stages of growth of Si nanowires by metal assisted chemical etching: A scaling study. Applied Physics Letters, 2015, 107, . | 1.5 | 15 |
| 100 | Stable deep blue emission with unity quantum yield in organic-inorganic halide perovskite 2D nanosheets doped with cerium and terbium at high concentrations. Journal of Materials Chemistry C, 2021, 9, 2437-2454. | 2.7 | 15 |
| 101 | Low bias stress and reduced operating voltage in SnCl ₂ Pc based n-type organic field-effect transistors. Applied Physics Letters, 2014, 104, . | 1.5 | 14 |
| 102 | Temperature-dependent Raman study and determination of anisotropy ratio and in-plane thermal conductivity of low-temperature CVD-grown PdSe ₂ using unpolarized laser excitation. Journal of Materials Chemistry C, 2021, 9, 16693-16708. | 2.7 | 14 |
| 103 | Emerging doping strategies in two-dimensional hybrid perovskite semiconductors for cutting edge optoelectronics applications. Nanoscale Advances, 2022, 4, 995-1025. | 2.2 | 14 |
| 104 | Formation and annealing of defects during high-temperature processing of ion-implanted epitaxial silicon: the role of dopant implants. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 71, 186-191. | 1.7 | 13 |
| 105 | EFFECT OF RAPID THERMAL ANNEALING ON MICROSTRUCTURE AND OPTICAL PROPERTIES OF ZnO NANORODS. International Journal of Nanoscience, 2011, 10, 65-68. | 0.4 | 13 |
| 106 | Study of the Suitability of Selected Extractants for Determination of Plant-Available Arsenic in Some Inceptisols of West Bengal, India. Communications in Soil Science and Plant Analysis, 2012, 43, 2449-2466. | 0.6 | 13 |
| 107 | Efficient visible light photocatalysis and tunable photoluminescence from orientation controlled mesoporous Si nanowires. RSC Advances, 2016, 6, 35365-35377. | 1.7 | 13 |
| 108 | Growth kinetics of hybrid perovskite thin films on different substrates at elevated temperature and its direct correlation with the microstructure and optical properties. Applied Surface Science, 2020, 530, 147224. | 3.1 | 13 |

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|-----|--|-----|-----------|
| 109 | Nonexponentiality in photoinduced current transients in undoped semi-insulating gallium arsenide. <i>Journal of Applied Physics</i> , 1995, 78, 262-268. | 1.1 | 11 |
| 110 | Studies on the surface swelling of ion-irradiated silicon: Role of defects. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2005, 121, 238-243. | 1.7 | 11 |
| 111 | Intense Ultraviolet-Blue Photoluminescence from SiO ₂ Embedded Ge Nanocrystals Prepared by Different Techniques. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 5389-5395. | 0.9 | 11 |
| 112 | Distinguishing defect induced intermediate frequency modes from combination modes in the Raman spectrum of single walled carbon nanotubes. <i>Journal of Applied Physics</i> , 2012, 111, . | 1.1 | 11 |
| 113 | Facile synthetic route to exfoliate high quality and super-large lateral size graphene-based sheets and their applications in SERS and CO ₂ gas sensing. <i>RSC Advances</i> , 2021, 11, 9488-9504. | 1.7 | 11 |
| 114 | Simultaneous formation of Si and Ge nanocrystals in SiO ₂ by one step ion implantation. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2006, 128, 201-204. | 1.7 | 10 |
| 115 | Quantitative understanding of the ultra-sensitive and selective detection of dopamine using a graphene oxide/WS ₂ quantum dot hybrid. <i>Journal of Materials Chemistry C</i> , 2020, 8, 7935-7946. | 2.7 | 10 |
| 116 | Electrically active defects in as-implanted, deep buried layers in p-type silicon. <i>Journal of Applied Physics</i> , 1997, 81, 260-263. | 1.1 | 9 |
| 117 | Photoluminescence and structural studies on extended defect evolution during high-temperature processing of ion-implanted epitaxial silicon. <i>Journal of Applied Physics</i> , 2001, 89, 4310-4317. | 1.1 | 9 |
| 118 | Surface acoustic phonon modes of Ge nanocrystals embedded in SiO ₂ . <i>Solid State Communications</i> , 2005, 136, 36-40. | 0.9 | 9 |
| 119 | Studies on Zinc Oxide Nanorods Grown by Electron Beam Evaporation Technique. <i>Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry</i> , 2007, 37, 437-441. | 0.6 | 9 |
| 120 | Strain dependence of the nonlinear optical properties of strained Si nanoparticles. <i>Optics Letters</i> , 2014, 39, 3833. | 1.7 | 9 |
| 121 | Low operating voltage and low bias stress in top-contact SnCl ₂ /Pc/CuPc heterostructure-based bilayer ambipolar organic field-effect transistors. <i>Journal of Materials Chemistry C</i> , 2015, 3, 7118-7127. | 2.7 | 9 |
| 122 | Unusual features in trap emission characteristics of heavily damaged silicon induced by MeV ion implantation. <i>Semiconductor Science and Technology</i> , 2000, 15, 985-991. | 1.0 | 8 |
| 123 | Capacitance transient spectroscopy models of coupled trapping kinetics among multiple defect states: Application to the study of trapping kinetics of defects in heavy-ion-damaged silicon. <i>Physical Review B</i> , 2000, 62, 2496-2504. | 1.1 | 8 |
| 124 | Low energy oxygen implantation induced improved crystallinity and optical properties of surface modified ZnO single crystals. <i>Applied Surface Science</i> , 2009, 256, 384-388. | 3.1 | 8 |
| 125 | Effect of plasmonic metal nanoparticles on the performance of air processed inverted perovskite solar cells. <i>AIP Conference Proceedings</i> , 2019, , . | 0.3 | 8 |
| 126 | Exciton-plasmon coupling and giant photoluminescence enhancement in monolayer MoS ₂ through hierarchically designed TiO ₂ /Au/MoS ₂ ternary core-shell heterostructure. <i>Nanotechnology</i> , 2021, 32, 215201. | 1.3 | 8 |

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|-----|--|-----|-----------|
| 127 | Experimental and theoretical study of europium-doped organometal halide perovskite nanoplatelets for UV photodetection with high responsivity and fast response. <i>Nanoscale</i> , 2022, 14, 6402-6416. | 2.8 | 8 |
| 128 | Photoluminescence study of self-interstitial clusters and extended defects in ion-implanted silicon. <i>Physica B: Condensed Matter</i> , 2003, 340-342, 734-737. | 1.3 | 7 |
| 129 | EFFECT OF GROWTH TEMPERATURE ON THE CATALYST-FREE GROWTH OF LONG SILICON NANOWIRES USING RADIO FREQUENCY MAGNETRON SPUTTERING. <i>International Journal of Nanoscience</i> , 2011, 10, 13-17. | 0.4 | 7 |
| 130 | Co-DOPED ZnO NANOWIRES GROWN BY VAPOR-LIQUID-SOLID METHOD: STRUCTURAL, OPTICAL AND MAGNETIC STUDIES. <i>Nano</i> , 2012, 07, 1250028. | 0.5 | 7 |
| 131 | Label-free glucose detection over a wide dynamic range by mesoporous Si nanowires based on anomalous photoluminescence enhancement. <i>Sensors and Actuators B: Chemical</i> , 2018, 260, 693-704. | 4.0 | 7 |
| 132 | 3D/2D Bi ₂ S ₃ /SnS ₂ heterostructures: superior charge separation and enhanced solar light-driven photocatalytic performance. <i>CrystEngComm</i> , 2021, 23, 2276-2288. | 1.3 | 7 |
| 133 | Self-catalytic growth of horizontal and straight Si nanowires on Si substrates using a sputter deposition technique. <i>Solid State Communications</i> , 2010, 150, 1923-1927. | 0.9 | 6 |
| 134 | Highly Suppressed Dark Current and Fast Photoresponse from Au Nanoparticle-Embedded, Si/Au/WS ₂ Quantum-Dot-Based, Self-Biased Schottky Photodetectors. <i>ACS Applied Electronic Materials</i> , 2021, 3, 4891-4904. | 2.0 | 6 |
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