# Amitava Patra

## List of Publications by Year in descending order

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| 187 | 9,848 | 31976 | 43889 |
|---|---|---|---|
| papers | citations | 53 h-index | 91 g-index |

| 190 | 190 | 190 | 11239 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Nanoscale Strategies for Light Harvesting. Chemical Reviews, 2017, 117, 712-757. | 47.7 | 444 |
| 2 | Upconversion in Er3+:ZrO2Nanocrystals. Journal of Physical Chemistry B, 2002, 106, 1909-1912. | 2.6 | 375 |
| 3 | Surface Defect-Related Luminescence Properties of SnO<sub>2</sub> Nanorods and Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 118-124. | 3.1 | 304 |
| 4 | Photophysical Properties of Doped Carbon Dots (N, P, and B) and Their Influence on Electron/Hole Transfer in Carbon Dotsâ€“Nickel (II) Phthalocyanine Conjugates. Journal of Physical Chemistry C, 2014, 118, 20034-20041. | 3.1 | 274 |
| 5 | Er3+-doped BaTiO3 nanocrystals for thermometry: Influence of nanoenvironment on the sensitivity of a fluorescence based temperature sensor. Applied Physics Letters, 2004, 84, 4753-4755. | 3.3 | 273 |
| 6 | 2D Hybrid Nanostructure of Reduced Graphene Oxideâ€“CdS Nanosheet for Enhanced Photocatalysis. ACS Applied Materials & Interfaces, 2015, 7, 13251-13259. | 8.0 | 260 |
| 7 | Fluorescence Upconversion Properties of Er3+-Doped TiO2and BaTiO3Nanocrystallites. Chemistry of Materials, 2003, 15, 3650-3655. | 6.7 | 257 |
| 8 | Shell Thickness Dependent Photocatalytic Properties of ZnO/CdS Coreâ€“Shell Nanorods. Journal of Physical Chemistry C, 2012, 116, 23653-23662. | 3.1 | 249 |
| 9 | Effect of crystal nature on upconversion luminescence in Er3+:ZrO2 nanocrystals. Applied Physics Letters, 2003, 83, 284-286. | 3.3 | 244 |
| 10 | Band Gap Tuning of ZnO/In<sub>2</sub>S<sub>3</sub> Core/Shell Nanorod Arrays for Enhanced Visible-Light-Driven Photocatalysis. Journal of Physical Chemistry C, 2013, 117, 5558-5567. | 3.1 | 241 |
| 11 | Enhancement of Upconversion Emission of LaPO<sub>4</sub>:Er@Yb Coreâ^'Shell Nanoparticles/Nanorods. Journal of Physical Chemistry C, 2008, 112, 9650-9658. | 3.1 | 153 |
| 12 | Current status and prospects on chemical structure driven photoluminescence behaviour of carbon dots. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2018, 37, 1-22. | 11.6 | 147 |
| 13 | Synthesis and characterization of PVP-encapsulated ZnS nanoparticles. Optical Materials, 2006, 28, 1047-1053. | 3.6 | 145 |
| 14 | Impacts of coreâ€“shell structures on properties of lanthanide-based nanocrystals: crystal phase, lattice strain, downconversion, upconversion and energy transfer. Nanoscale, 2012, 4, 3608. | 5.6 | 130 |
| 15 | Fluorescence study of zirconia films doped by Eu3+, Tb3+ and Sm3+ and their comparison with silica films. Journal of Alloys and Compounds, 2000, 300-301, 147-151. | 5.5 | 126 |
| 16 | Au Nanoparticle-Based Surface Energy Transfer Probe for Conformational Changes of BSA Protein. Journal of Physical Chemistry C, 2008, 112, 17945-17951. | 3.1 | 123 |
| 17 | Hybrid Colloidal Au-CdSe Pentapod Heterostructures Synthesis and Their Photocatalytic Properties. ACS Applied Materials & Interfaces, 2012, 4, 6266-6272. | 8.0 | 118 |
| 18 | Interaction of Gold Nanoparticle with Human Serum Albumin (HSA) Protein Using Surface Energy Transfer. Journal of Physical Chemistry C, 2011, 115, 24037-24044. | 3.1 | 116 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Au@ZnO Coreâ"Shell Nanoparticles Are Efficient Energy Acceptors with Organic Dye Donors. Journal of Physical Chemistry C, 2008, 112, 11650-11656. | 3.1 | 106 |
| 20 | Tuning of Crystal Phase and Luminescence Properties of Eu<sup>3+</sup> Doped Sodium Yttrium Fluoride Nanocrystals. Journal of Physical Chemistry C, 2008, 112, 3223-3231. | 3.1 | 103 |
| 21 | Surface energy transfer from rhodamine 6G to gold nanoparticles: A spectroscopic ruler. Applied Physics Letters, 2007, 91, . | 3.3 | 100 |
| 22 | Optical and Electrical Properties of Eu<sup>3+</sup>-Doped SnO<sub>2</sub> Nanocrystals. Journal of Physical Chemistry C, 2009, 113, 4375-4380. | 3.1 | 100 |
| 23 | A Stochastic Model for Energy Transfer from CdS Quantum Dots/Rods (Donors) to Nile Red Dye (Acceptors). Journal of Physical Chemistry C, 2009, 113, 19488-19492. | 3.1 | 95 |
| 24 | Resonance Energy Transfer from Rhodamine 6G to Gold Nanoparticles by Steady-State and Time-Resolved Spectroscopy. Journal of Physical Chemistry C, 2008, 112, 3216-3222. | 3.1 | 93 |
| 25 | Detection of Hg<sup>2+</sup> and F<sup>â"</sup> Ions by Using Fluorescence Switching of Quantum Dots in an Auâ€Clusterâ€"CdTe QD Nanocomposite. Chemistry - A European Journal, 2013, 19, 5980-5987. | 3.3 | 91 |
| 26 | An overview on the current understanding of the photophysical properties of metal nanoclusters and their potential applications. Nanoscale, 2019, 11, 22685-22723. | 5.6 | 89 |
| 27 | Charge Carrier Transport in Poly(N-vinylcarbazole):CdS Quantum Dot Hybrid Nanocomposite. Journal of Physical Chemistry B, 2004, 108, 1556-1562. | 2.6 | 87 |
| 28 | Influence of Crystal Phase and Excitation Wavelength on Luminescence Properties of Eu<sup>3+</sup>-Doped Sodium Yttrium Fluoride Nanocrystals. Journal of Physical Chemistry C, 2008, 112, 19283-19292. | 3.1 | 87 |
| 29 | Surfactant-Assisted Porphyrin Based Hierarchical Nano/Micro Assemblies and Their Efficient Photocatalytic Behavior. ACS Applied Materials & Interfaces, 2014, 6, 130-136. | 8.0 | 87 |
| 30 | Blue upconversion emission of Tm3+â€"Yb3+ in ZrO2 nanocrystals: Role of Yb3+ ions. Chemical Physics Letters, 2005, 407, 477-481. | 2.6 | 86 |
| 31 | Energy transfer study between Ce3+ and Tb3+ ions in doped and core-shell sodium yttrium fluoride nanocrystals. Nanoscale, 2010, 2, 1196. | 5.6 | 86 |
| 32 | Nonlinear Optical Switching and Enhanced Nonlinear Optical Response of Auâ€"CdSe Heteronanostructures. Journal of Physical Chemistry C, 2014, 118, 30333-30341. | 3.1 | 86 |
| 33 | Core-Size Dependent Fluorescent Gold Nanoclusters and Ultrasensitive Detection of Pb<sup>2+</sup> Ion. ACS Sustainable Chemistry and Engineering, 2018, 6, 2334-2343. | 6.7 | 86 |
| 34 | Study of luminescence properties of Er3+-ions in new tellurite glasses. Optical Materials, 2004, 26, 267-270. | 3.6 | 81 |
| 35 | Engineering Atomically Precise Copper Nanoclusters with Aggregation Induced Emission. Journal of Physical Chemistry C, 2019, 123, 2506-2515. | 3.1 | 81 |
| 36 | Metal Conjugated Semiconductor Hybrid Nanoparticle-Based Fluorescence Resonance Energy Transfer. Journal of Physical Chemistry C, 2010, 114, 4869-4874. | 3.1 | 77 |

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| 37 | Red to Blue Tunable Upconversion in Tm3+-Doped ZrO2Nanocrystals. Journal of Physical Chemistry B, 2005, 109, 10142-10146. | 2.6 | 74 |
| 38 | Role of Surface Coating in ZrO2/Eu3+Nanocrystals. Langmuir, 2006, 22, 6321-6327. | 3.5 | 74 |
| 39 | Recent Advances in Energy Transfer Processes in Gold-Nanoparticle-Based Assemblies. Journal of Physical Chemistry C, 2012, 116, 17307-17317. | 3.1 | 72 |
| 40 | Fabrication and optical properties of core/shell CdS/LaPO<sub>4</sub>:Eunanorods. Journal of Materials Chemistry, 2010, 20, 916-922. | 6.7 | 71 |
| 41 | Recent development of coreâ€“shell SnO<sub>2</sub>nanostructures and their potential applications. Journal of Materials Chemistry C, 2014, 2, 6706-6722. | 5.5 | 71 |
| 42 | Luminescence of Ce3+in Y2SiO5Nanocrystals:Â Role of Crystal Structure and Crystal Size. Journal of Physical Chemistry B, 2005, 109, 2699-2702. | 2.6 | 68 |
| 43 | Photocatalytic properties of semiconductor SnO2/CdS heterostructure nanocrystals. RSC Advances, 2012, 2, 10222. | 3.6 | 66 |
| 44 | An efficient charge separation and photocurrent generation in the carbon dotâ€“zinc oxide nanoparticle composite. Nanoscale, 2017, 9, 6791-6799. | 5.6 | 66 |
| 45 | Influence of Size and Shape on the Photocatalytic Properties of SnO<sub>2</sub> Nanocrystals. ChemPhysChem, 2015, 16, 1017-1025. | 2.1 | 64 |
| 46 | Role of dopant concentration and surface coating on photophysical properties of CdS: Eu3+ nanocrystals. Physical Chemistry Chemical Physics, 2006, 8, 1329. | 2.8 | 57 |
| 47 | Size Dependent Resonance Energy Transfer between Semiconductor Quantum Dots and Dye Using FRET and Kinetic Model. Journal of Physical Chemistry C, 2010, 114, 3891-3897. | 3.1 | 57 |
| 48 | Formation of Heteroepitaxy in Different Shapes of Auâ€“CdSe Metalâ€“Semiconductor Hybrid Nanostructures. Small, 2013, 9, 3424-3432. | 10.0 | 57 |
| 49 | Structural interpretation of SnO<sub>2</sub>nanocrystals of different morphologies synthesized by microwave irradiation and hydrothermal methods. CrystEngComm, 2014, 16, 1079-1090. | 2.6 | 57 |
| 50 | Grapheneâ€“Porphyrin Nanorod Composites for Solar Light Harvesting. ACS Sustainable Chemistry and Engineering, 2016, 4, 1562-1568. | 6.7 | 57 |
| 51 | Influence of nanoenvironment on luminescence of Eu3+activated SnO2 nanocrystals. Solid State Communications, 2004, 131, 785-788. | 1.9 | 56 |
| 52 | Effect of crystal structure and concentration on luminescence in Er3+:ZrO2 nanocrystals. Chemical Physics Letters, 2004, 387, 35-39. | 2.6 | 56 |
| 53 | Shape controlled synthesis and luminescence properties of ZnO: Eu3+ nanostructures. Chemical Physics Letters, 2007, 440, 121-124. | 2.6 | 54 |
| 54 | Photophysical Properties, Self-Assembly Behavior, and Energy Transfer of Porphyrin-Based Functional Nanoparticles. Journal of Physical Chemistry C, 2012, 116, 11401-11407. | 3.1 | 54 |

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| 55 | Conjugated polymer P3HTâ€“Au hybrid nanostructures for enhancing photocatalytic activity. Physical Chemistry Chemical Physics, 2015, 17, 15392-15399. | 2.8 | 54 |
| 56 | Facile Chemical Synthesis of Nanocrystalline Thermoelectric Alloys Based on Biâ^'Sbâ^'Teâ^'Se. Crystal Growth and Design, 2010, 10, 3983-3989. | 3.0 | 52 |
| 57 | Structural and photoluminescence properties of doped and core-shell LaPO4:Eu3+ nanocrystals. Journal of Applied Physics, 2010, 108, . | 2.5 | 51 |
| 58 | Lanthanideâ€Doped Nanocrystals: Strategies for Improving the Efficiency of Upconversion Emission and Their Physical Understanding. ChemPhysChem, 2015, 16, 505-521. | 2.1 | 51 |
| 59 | Optical properties of CdS nanoparticles and the energy transfer from CdS nanoparticles to Rhodamine 6G. Chemical Physics Letters, 2005, 413, 311-314. | 2.6 | 49 |
| 60 | Fluorescence Dynamics and Stochastic Model for Electronic Interaction of Graphene Oxide with CdTe QD in Graphene Oxide-CdTe QD Composite. Journal of Physical Chemistry C, 2013, 117, 23987-23995. | 3.1 | 49 |
| 61 | Electroluminescence Properties of Systematically Derivatized Organic Chromophores Containing Electron Donor and Acceptor Groups. Chemistry of Materials, 2002, 14, 4044-4048. | 6.7 | 48 |
| 62 | Understanding the role of particle size on photophysical properties of CdS:Eu3+ nanocrystals. Journal of Luminescence, 2007, 126, 387-392. | 3.1 | 48 |
| 63 | Influence of Surface Coating on Physical Properties of TiO2/Eu3+Nanocrystals. Journal of Physical Chemistry C, 2007, 111, 7004-7010. | 3.1 | 47 |
| 64 | Understanding the Local Structures of Eu and Zr in Eu2O3Doped and Coated ZrO2Nanocrystals by EXAFS Study. Journal of Physical Chemistry C, 2007, 111, 571-578. | 3.1 | 47 |
| 65 | Hostâ^'Guest Energy Transfer: Semiconducting Polymer Nanoparticles and Au Nanoparticles. Journal of Physical Chemistry C, 2010, 114, 11787-11795. | 3.1 | 47 |
| 66 | Interactions of Ï€-conjugated polymers with inorganic nanocrystals. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2014, 20, 51-70. | 11.6 | 47 |
| 67 | Growth, Optical, and Field Emission Properties of Aligned CdS Nanowires. Crystal Growth and Design, 2009, 9, 4157-4162. | 3.0 | 46 |
| 68 | Fluorescent AuAg alloy clusters: synthesis and SERS applications. Journal of Materials Chemistry C, 2014, 2, 3005-3012. | 5.5 | 46 |
| 69 | Copper Nanocluster (Cu<sub>23</sub> NC)-Based Biomimetic System with Peroxidase Activity. ACS Sustainable Chemistry and Engineering, 2020, 8, 18335-18344. | 6.7 | 46 |
| 70 | Lattice Strain Controls the Carrier Relaxation Dynamics in Cd<sub>x</sub>Zn<sub>1â€“x</sub>S Alloy Quantum Dots. Journal of Physical Chemistry C, 2012, 116, 15167-15173. | 3.1 | 45 |
| 71 | Opportunities and challenges in energy and electron transfer of nanocluster based hybrid materials and their sensing applications. Physical Chemistry Chemical Physics, 2019, 21, 5863-5881. | 2.8 | 45 |
| 72 | Ultrafast Relaxation Dynamics of Luminescent Copper Nanoclusters (Cu<sub>7</sub>L<sub>3</sub>) and Efficient Electron Transfer to Functionalized Reduced Graphene Oxide. Journal of Physical Chemistry C, 2018, 122, 13354-13362. | 3.1 | 44 |

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| 73 | Synthesis and time-resolved photoluminescence spectroscopy of capped CdS nanocrystals. Journal of Luminescence, 2008, 128, 1235-1240. | 3.1 | 43 |
| 74 | Preparation and photoluminescence properties of Y2SiO5:Eu3+ nanocrystals. Physical Chemistry Chemical Physics, 2006, 8, 3342. | 2.8 | 42 |
| 75 | Donorâ€“Acceptor Systems: Energy Transfer from CdS Quantum Dots/Rods to Nile Red Dye. ChemPhysChem, 2008, 9, 2052-2058. | 2.1 | 42 |
| 76 | Fluorescence enhancement and quenching of Eu3+ ions by Auâ€“ZnO core-shell and Au nanoparticles. Applied Physics Letters, 2009, 95, 063103. | 3.3 | 42 |
| 77 | Design of a CdS/CdSe Heterostructure for Efficient H<sub>2</sub> Generation and Photovoltaic Applications. Journal of Physical Chemistry C, 2018, 122, 12158-12167. | 3.1 | 42 |
| 78 | Energy Transfer between Confined Dye and Surface Attached Au Nanoparticles of Mesoporous Silica. Journal of Physical Chemistry C, 2010, 114, 707-714. | 3.1 | 40 |
| 79 | Energy Transfer and Confined Motion of Dyes Trapped in Semiconducting Conjugated Polymer Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 20832-20839. | 3.1 | 40 |
| 80 | Influence of surface coating on the upconversion emission properties of LaPO4:Yb/Tm core-shell nanorods. Journal of Applied Physics, 2009, 105, 113532. | 2.5 | 39 |
| 81 | Fluorescence Switching of Quantum Dot in Quantum Dotâ€“Porphyrinâ€“Cucurbit [7] Uril Assemblies. Journal of Physical Chemistry C, 2013, 117, 3069-3077. | 3.1 | 39 |
| 82 | Study of photophysical properties of capped CdS nanocrystals. Journal of Luminescence, 2007, 124, 327-332. | 3.1 | 38 |
| 83 | Singlet Oxygen Generation from Polymer Nanoparticlesâ€“Photosensitizer Conjugates Using FRET Cascade. Journal of Physical Chemistry C, 2014, 118, 9733-9740. | 3.1 | 38 |
| 84 | Relaxation Dynamics of Anisotropic Shaped CdS Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 16867-16872. | 3.1 | 37 |
| 85 | Influence of shape on the carrier relaxation dynamics of CsPbBr<sub>3</sub> perovskite nanocrystals. Physical Chemistry Chemical Physics, 2019, 21, 19318-19326. | 2.8 | 37 |
| 86 | Hot Hole Cooling and Transfer Dynamics from Lead Halide Perovskite Nanocrystals Using Porphyrin Molecules. Journal of Physical Chemistry C, 2021, 125, 5859-5869. | 3.1 | 37 |
| 87 | Surface motifs regulated aggregation induced emission in goldâ€“silver nanoclusters. Chemical Communications, 2020, 56, 9292-9295. | 4.1 | 36 |
| 88 | Multichromophoric Organic Molecules Encapsulated in Polymer Nanoparticles for Artificial Light Harvesting. ChemPhysChem, 2015, 16, 796-804. | 2.1 | 35 |
| 89 | Photophysical and photoconductivity properties of thiol-functionalized grapheneâ€“CdSe QD composites. RSC Advances, 2014, 4, 13788. | 3.6 | 34 |
| 90 | Photophysical Properties of Auâ€CdTe Hybrid Nanostructures of Varying Sizes and Shapes. ChemPhysChem, 2012, 13, 3989-3996. | 2.1 | 33 |

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| 91 | Functionalized dye encapsulated polymer nanoparticles attached with a BSA scaffold as efficient antenna materials for artificial light harvesting. Nanoscale, 2016, 8, 16034-16043. | 5.6 | 33 |
| 92 | Light Harvesting and Whiteâ€Light Generation in a Composite of Carbon Dots and Dyeâ€Encapsulated BSAâ€Proteinâ€Capped Gold Nanoclusters. Chemistry - A European Journal, 2016, 22, 11699-11705. | 3.3 | 33 |
| 93 | Ultrafast Carrier Dynamics of Photo-Induced Cu-Doped CdSe Nanocrystals. Journal of Physical Chemistry C, 2018, 122, 16992-17000. | 3.1 | 32 |
| 94 | Antibacterial and Photocatalytic Properties of ZnOâ€“9-Aminoacridine Hydrochloride Hydrate Drug Nanoconjugates. ACS Omega, 2018, 3, 7962-7970. | 3.5 | 32 |
| 95 | Formation of Self-Assembled Au Nanoparticles and the Study of Their Optical Properties by Steady-State and Time-Resolved Spectroscopies. Journal of Physical Chemistry C, 2009, 113, 13125-13132. | 3.1 | 31 |
| 96 | Photophysics and Dynamics of Dye-Doped Conjugated Polymer Nanoparticles by Time-Resolved and Fluorescence Correlation Spectroscopy. Journal of Physical Chemistry C, 2013, 117, 26750-26759. | 3.1 | 31 |
| 97 | A study into the role of surface capping on energy transfer in metal clusterâ€“semiconductor nanocomposites. Nanoscale, 2015, 7, 20697-20708. | 5.6 | 31 |
| 98 | Graphene induced porphyrin nano-aggregates for efficient electron transfer and photocurrent generation. Journal of Materials Chemistry C, 2016, 4, 6027-6036. | 5.5 | 31 |
| 99 | Design of CdTeSeâ€“Porphyrinâ€“Graphene Composite for Photoinduced Electron Transfer and Photocurrent Generation. ACS Sustainable Chemistry and Engineering, 2017, 5, 3002-3010. | 6.7 | 31 |
| 100 | Silver(I)-Induced Conformation Change of DNA: Gold Nanocluster as a Spectroscopic Probe. Journal of Physical Chemistry C, 2017, 121, 4608-4617. | 3.1 | 31 |
| 101 | Photon Harvesting in Conjugated Polymer-Based Functional Nanoparticles. Journal of Physical Chemistry Letters, 2017, 8, 4608-4620. | 4.6 | 31 |
| 102 | Upconversion emission of BaTiO3: Er nanocrystals. Bulletin of Materials Science, 2008, 31, 461-465. | 1.7 | 30 |
| 103 | Size of CdTe Quantum Dots Controls the Hole Transfer Rate in CdTe Quantum Dotsâ€“MEHPPV Polymer Nanoparticle Hybrid. Journal of Physical Chemistry C, 2016, 120, 25142-25150. | 3.1 | 30 |
| 104 | Ultrafast Carrier Dynamics in 2D CdSe Nanoplateletsâ€“CsPbX<sub>3</sub> Composites: Influence of the Halide Composition. Journal of Physical Chemistry C, 2020, 124, 10252-10260. | 3.1 | 30 |
| 105 | Cadmium Sulfide Aggregates through Reverse Micelles. Journal of the American Ceramic Society, 2001, 84, 1439-1444. | 3.8 | 29 |
| 106 | A simple approach to generate efficient white light emission from a ZnOâ€“ionic liquid complex. RSC Advances, 2012, 2, 4879. | 3.6 | 29 |
| 107 | Hybrid Nanostructures of 2D CdSe Nanoplatelets for High-Performance Photodetector Using Charge Transfer Process. ACS Applied Nano Materials, 2020, 3, 4717-4727. | 5.0 | 29 |
| 108 | Self-Assembled Metal Nanoclusters: Driving Forces and Structural Correlation with Optical Properties. Nanomaterials, 2022, 12, 544. | 4.1 | 29 |

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| 109 | Single and multistep energy transfer processes within doped polymer nanoparticles. Photochemical and Photobiological Sciences, 2014, 13, 1241-1252. | 2.9 | 28 |
| 110 | A Brief Overview of Some Physical Studies on the Relaxation Dynamics and FÃ¶rster Resonance Energy Transfer of Semiconductor Quantum Dots. ChemPhysChem, 2013, 14, 2641-2653. | 2.1 | 27 |
| 111 | Recent Advances and Perspectives on Colloidal Semiconductor Nanoplatelets for Optoelectronic Applications. Journal of Physical Chemistry C, 2021, 125, 20-30. | 3.1 | 27 |
| 112 | Steady state and time resolved spectroscopic study of C-dotsâ€“MEHâ€“PPV polymer nanoparticles composites. Physical Chemistry Chemical Physics, 2013, 15, 16834. | 2.8 | 26 |
| 113 | Making and Breaking of DNA-Metal Base Pairs: Hg<sup>2+</sup> and Au Nanocluster Based Off/On Probe. Journal of Physical Chemistry C, 2016, 120, 17127-17135. | 3.1 | 26 |
| 114 | Deciphering the Relaxation Mechanism of Red-Emitting Carbon Dots Using Ultrafast Spectroscopy and Global Target Analysis. Journal of Physical Chemistry Letters, 2021, 12, 8080-8087. | 4.6 | 26 |
| 115 | Synthesis and spectroscopic study of high quality alloy Cd x Zn1â^'x S nanocrystals. Journal of Chemical Sciences, 2008, 120, 557-564. | 1.5 | 25 |
| 116 | Efficient Energy Transfer between Confined Dye and Y-Zeolite Functionalized Au Nanoparticles. Journal of Physical Chemistry C, 2010, 114, 19667-19672. | 3.1 | 25 |
| 117 | Efficient resonance energy transfer from dye to Au@SnO2 coreâ€“shell nanoparticles. Chemical Physics Letters, 2008, 462, 88-91. | 2.6 | 24 |
| 118 | Light Harvesting and Photocurrent Generation in a Conjugated Polymer Nanoparticleâ€“Reduced Graphene Oxide Composite. ChemPhysChem, 2017, 18, 1308-1316. | 2.1 | 23 |
| 119 | Structural Analysis and Carrier Relaxation Dynamics of 2D CsPbBr<sub>3</sub> Nanoplatelets. Journal of Physical Chemistry C, 2021, 125, 12214-12223. | 3.1 | 23 |
| 120 | Controlling Aggregation-Induced Emission in Bimetallic Goldâ€“Copper Nanoclusters via Surface Motif Engineering. Journal of Physical Chemistry C, 2022, 126, 2896-2904. | 3.1 | 23 |
| 121 | Recent Advances of Doping of SnO<sub>2</sub>Nanocrystals for Their Potential Applications. Transactions of the Indian Ceramic Society, 2013, 72, 89-99. | 1.0 | 22 |
| 122 | Ultrafast carrier dynamics in 2Dâ€“2D hybrid structures of functionalized GO and CdSe nanoplatelets. Physical Chemistry Chemical Physics, 2019, 21, 15568-15575. | 2.8 | 21 |
| 123 | Electronic Structure Modulation of 2D Colloidal CdSe Nanoplatelets by Au25 Clusters for High-Performance Photodetectors. Journal of Physical Chemistry C, 2020, 124, 19793-19801. | 3.1 | 20 |
| 124 | Composition effects on quantum dot-based resonance energy transfer. Applied Physics Letters, 2008, 93, 183104. | 3.3 | 19 |
| 125 | Structural evolution, photoinduced energy transfer in Au noclusterâ€“CdTe QD nanocomposites and amino acid sensing. Journal of Materials Chemistry C, 2016, 4, 486-496. | 5.5 | 19 |
| 126 | Porphyrin-Based Functional Nanoparticles: Conformational and Photophysical Properties of Bis-Porphyrin and Bis-Porphyrin Encapsulated Polymer Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 24029-24036. | 3.1 | 18 |

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| 127 | Energy/Hole Transfer Phenomena in Hybrid Î±â€Sexithiophene (Î±â€STH) Nanoparticleâ€“CdTe Quantumâ€Dot Nanocomposites. ChemPhysChem, 2012, 13, 4155-4162. | 2.1 | 18 |
| 128 | Modulating the Carrier Relaxation Dynamics in Heterovalently (Bi<sup>3+</sup>) Doped CsPbBr<sub>3</sub> Nanocrystals. Journal of Physical Chemistry Letters, 2022, 13, 5431-5440. | 4.6 | 18 |
| 129 | Quenching of Confined C480 Dye in the Presence of Metal-Conjugated Î³-Cyclodextrin. Journal of Physical Chemistry C, 2010, 114, 11409-11413. | 3.1 | 17 |
| 130 | Photoinduced energy transfer in dye encapsulated polymer nanoparticleâ€“CdTe quantum dot light harvesting assemblies. Materials Horizons, 2015, 2, 60-67. | 12.2 | 17 |
| 131 | Efficient Whiteâ€Light Generation from Ionically Selfâ€Assembled Triplyâ€Fluorescent Organic Nanoparticles. Chemistry - A European Journal, 2016, 22, 8855-8863. | 3.3 | 17 |
| 132 | Exciton Dynamics and Formation Mechanism of MEH-PPV Polymer-Based Nanostructures. Journal of Physical Chemistry C, 2017, 121, 21062-21072. | 3.1 | 17 |
| 133 | Ultrafast Energy Transfer Followed by Electron Transfer in a Polymeric Nanoantenna-Based Light Harvesting System. Journal of Physical Chemistry C, 2018, 122, 20144-20152. | 3.1 | 16 |
| 134 | Impacts of CsPbBr<sub>3</sub>/PbSe Heterostructures on Carrier Cooling Dynamics at Low Carrier Density. Advanced Optical Materials, 2022, 10, . | 7.3 | 16 |
| 135 | Silver Nanocluster/MoS<sub>2</sub> Heterostructures for Hydrogen Evolution. ACS Applied Nano Materials, 2022, 5, 7132-7141. | 5.0 | 15 |
| 136 | Study of photoluminescence properties of Er3+ ions in SiO2â€“GeO2 and Al2O3 nanoparticles. Solid State Communications, 2004, 132, 299-303. | 1.9 | 14 |
| 137 | Upconversion in Er3+-doped ZrO2 nanocrystals pumped at 1.426Î¼m. Journal of Applied Physics, 2008, 103, . | 2.5 | 14 |
| 138 | Coreâ€“shell nanostructures and nanocomposites of Ag@TiO2: effect of capping agent and shell thickness on the optical properties. Journal of Nanoparticle Research, 2010, 12, 1033-1044. | 1.9 | 14 |
| 139 | Lanthanide based resonance energy transfer (LRET) between Ce-doped LaPO4 nanorods and coumarin 440 dye. RSC Advances, 2013, 3, 13372. | 3.6 | 14 |
| 140 | Photophysical properties of ionic liquid-assisted porphyrin nanoaggregateâ€“nickel phthalocyanine conjugates and singlet oxygen generation. Journal of Materials Chemistry C, 2014, 2, 8691-8699. | 5.5 | 14 |
| 141 | Study of binding interactions between MPT63 protein and Au nanocluster. RSC Advances, 2014, 4, 35059-35066. | 3.6 | 14 |
| 142 | Influence of nanoenvironment on luminescence lifetime of Er^3+-activated ZrO_2 nanocrystals. Journal of the Optical Society of America B: Optical Physics, 2004, 21, 681. | 2.1 | 13 |
| 143 | Photoswitching and Thermoresponsive Properties of Conjugated Multiâ€chromophore Nanostructured Materials. Small, 2015, 11, 6317-6324. | 10.0 | 13 |
| 144 | Strategy toward Designing Semiconducting Polymer Nanoparticleâ€“Multichomophoric Dye Assembly. Journal of Physical Chemistry C, 2017, 121, 4050-4059. | 3.1 | 13 |

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| 145 | Perspective of dye-encapsulated conjugated polymer nanoparticles for potential applications. Bulletin of Materials Science, 2018, 41, 1. | 1.7 | 13 |
| 146 | Ultrafast Energy Flow Dynamics in a Conjugated Polymer-Based Hostâ€“Guest Light-Harvesting System. Journal of Physical Chemistry C, 2019, 123, 26727-26734. | 3.1 | 13 |
| 147 | Photoluminescence quenching of semiconducting polymer nanoparticles in presence of Au nanoparticles. Bulletin of Materials Science, 2012, 35, 719-725. | 1.7 | 12 |
| 148 | Non-radiative relaxation and rectification behavior of metal/semiconductor tetrapod heterostructures. Applied Physics Letters, 2014, 104, . | 3.3 | 12 |
| 149 | Ultrafast Relaxation Processes of Conjugated Polymer Nanoparticles in the Presence of Au Nanoparticles. Chemistry - an Asian Journal, 2019, 14, 4681-4687. | 3.3 | 11 |
| 150 | Structural Insight and Ultrafast Dynamics of 2D Porphyrin Nanostructures. Journal of Physical Chemistry C, 2019, 123, 15815-15826. | 3.1 | 11 |
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