

Publications in Peer-reviewed Journals:

1. *Large-area (over 50 cm × 50 cm) freestanding films of colloidal InP/ZnS quantum dots.*
E. Mutlugun, P. L. Hernandez-Martinez, C. Eroglu, Y. Coskun, T. Erdem, V. K Sharma, E. Unal, **Subhendu K. Panda**, S. G. Hickey, N. Gaponik, A. Eychmuller, and H. V. Demir, **Nano Lett.**, 2012, 12, 3986–3993.
2. *Emissive Semiconductor Nanocrystals: Recent Progress.*
Vladimir Lesnyak, **Subhendu K. Panda**, Stephen G. Hickey, Shiding Miao, Nikolai Gaponik and Alexander Eychmüller, **ECS Trans.** 2012, 45, 5, 61-66.
3. *Enhancing the efficiency of a dye sensitized solar cell due to the energy transfer between CdSe quantum dots and a designed squaraine dye.*
Lioz Etgar, Jinhyung Park, Claudia Barolo, Vladimir Lesnyak, **Subhendu K. Panda**, Pierluigi Quagliotto, Stephen G. Hickey, Md. K. Nazeeruddin, Alexander Eychmüller, Guido Viscardi and Michael Grätzel, **RSC advances**, 2012, 2, 2748-2752.
4. *Graded alloyed CdZnSe nanocrystals with high luminescence quantum yields and stability for optoelectronic and biological applications.*
Subhendu K. Panda, Stephen G. Hickey, Christian Waurisch and Alexander Eychmüller, **J. Mater. Chem.**, 2011, 21, 11550-11555.
5. *Bright White-Light Emitting Manganese and Copper Co-Doped ZnSe Quantum Dots.*
Subhendu K. Panda, Stephen G. Hickey, Hilmi V Demir and Alexander Eychmüller, **Angew. Chem. Int. Ed.**, 2011, 50, 4432-4436.
6. *Controlled Growth of Well-aligned GaS Nanohorn like Structures and Their Field Emission Properties.*
Godhuli Sinha, **Subhendu K. Panda**, Anuja Datta, Padmakar G. Chavan, Deodatta R. Shinde, Mahendra A. More, D. S. Joag, and Amitava Patra, **ACS Appl. Mater. Interfaces**, 2011, 3, 2130-2135.
7. *Role of fatty acid in controlling nucleation and growth of CdS nanocrystals in solution.*
Niladri S. Karan, Aritra Mandal, **Subhendu K. Panda** and Narayan Pradhan, **J. Phys. Chem. C**, 2010, 114, 8873–8876.
8. *Ordered fabrication of luminescent multilayered thin films of CdSe quantum dots.*
Oxana V. Vassiltsova, **Subhendu K. Panda**, Zhouying Zhao, Michael A. Carpenter and Marina A. Petrukhina, **Dalton Trans.**, 2009, 9426- 9432.
9. *Self-catalytic growth and field-emission properties of Ga₂O₃ nanowires.*
Godhuli Sinha, Anuja Datta, **Subhendu K Panda**, Padmakar G Chavan, Mahendra A More, Dilip S Joag and Amitava Patra **J. Phys. D: Appl. Phys.**, 2009, 42, 185409 (6pp).
10. *Growth, Optical, and electrical Properties of In₂S₃ Zigzag Nanowires.*
Anuja Datta, Godhuli Sinha, **Subhendu K. Panda** and Amitava Patra, **Crystal Growth Design**, 2008, 9, 427-431.

11. *Solvent controlled synthesis of TiO₂ 1D nanostructures: Growth mechanism and characterization.*
Kajari Das, **Subhendu K. Panda** and Subhadra Chaudhuri, **J. Crystal Growth**, 2008, 310, 3792– 3799.
12. *Phase transformation and optical properties of Cu-doped ZnS nanorods.*
Anuja Datta, **Subhendu K. Panda** and Subhadra Chaudhuri, **J. Solid State Chem.** 2008, 181, 2332– 2337.
13. *Synthesis of well-crystalline GaS Nanobelts and their unique field emission behavior.*
Subhendu K. Panda*, Anuja Datta, Godhuli Sinha, Subhadra Chaudhuri, Padmakar G. Chavan, Sandip S. Patil, Mahendra A. More and Dilip S. Joag. **J. Phys. Chem. C** 2008, 112, 6240-6244.
14. *Effect of Cu/In molar ratio on the microstructural and optical properties of microcrystalline CuInS₂ prepared by solvothermal route.*
Kajari Das, **Subhendu K. Panda**, Soma Gorai, Pratima Mishra and Subhadra Chaudhuri, **Mater. Res. Bull.** 2008, 43, 2742-2750.
15. *Room temperature synthesis of In₂S₃ micro- and nanorod textured thin films.*
Anuja Datta, **Subhendu K. Panda**, Soma Gorai, Dibyendu Ganguli and Subhadra Chaudhuri **Mater. Res. Bull.** 2008, 43, 983-989.
16. *Chelating ligand-mediated synthesis of hollow ZnS microspheres.*
Subhendu K. Panda and Subhadra Chaudhuri **J. Colloid. Interface. Sci.** 2007, 313, 338-344.
17. *Fabrication and luminescent properties of c-axis oriented ZnO-ZnS core- shell and ZnS nanorod arrays by sulfidation of aligned ZnO nanorod arrays.*
Subhendu K. Panda, Apurba Dev and Subhadra Chaudhuri **J. Phys. Chem. C** 2007, 111, 5039-5043.
18. *Nearly monodispersed ZnS nanospheres: synthesis and optical properties.*
Subhendu K. Panda, Anuja Datta and Subhadra Chaudhuri **Chem. Phys. Lett.** 2007, 440, 235-238.
19. *Synthesis, Optical and Electrical Properties of core-shell CdS-ZnS nanorods.*
Anuja Datta, **Subhendu K. Panda*** and Subhadra Chaudhuri, **J. Phys. Chem. C.** 2007, 111, 17260-17264.
20. *Optical properties of nanocrystalline SnS₂ thin films.*
Subhendu K. Panda, A. Antonakos, E. Liarokapis, S. Bhattacharya and S. Chaudhuri, **Mater. Res. Bull.** 2007, 42, 576-583. (IF- 1.879)
21. *Fabrication of nanostructured CuInS₂ thin films by ion layer gas reaction method.*
Kajari Das, **Subhendu K. Panda** and S. Chaudhuri, **Appl. Surf. Sci.** 2007, 253, 5166– 5172.
22. *In₂S₃ micropompons and their conversion to In₂O₃ nanobipyramids: simple synthesis approaches and characterization.*
Anuja Datta, **Subhendu K Panda**, Dibyendu Ganguli, Pratima Mishra and Subhadra Chaudhuri, **Crystal Growth Design** 2007, 7, 163-169.

23. *Optical Properties of monodispersed spherical aggregates and superstructures formed by self-assembly of ZnS nanoparticles.*
Subhendu K. Panda and Subhadra Chaudhuri, **Synth. Reactivity. Inorg. Matalorg. Nanomet. Chem.** 2007, 37, 397-401.
24. *Gallium nitride quantum dots in a nitrogen-bonded silica gel matrix.*
G. Sinha, **Subhendu K. Panda**, D. Ganguly, P. Mishra and S. Chaudhuri, **J. Phys: Condensed Matter.** 2007, 19, 346209-346218.
25. *Silica encapsulated Ni nanoparticles: variation of optical and magnetic properties with Particle Size.*
Soumen Das, **Subhendu K. Panda**, Prithiwish Nandi, Abhishek Pandey, R. Ranganathan and Subhadra Chaudhuri **J. Nanosci. Nanotechnol.** 2007, 7, 4447-4455.
26. *Shape selective solvothermal synthesis of SnS: Role of ethylenediamine–water solvent system.*
Subhendu K. Panda, S. Gorai and S. Chaudhuri, **Mater. Sci. Engg. B.** 2006, **129**, 265-269.
27. *Surfactant assisted synthesis of SnS nanowires grown directly on tin foils.*
Subhendu K. Panda, A. Datta, S. Gorai, A. Dev and S. Chaudhuri, **Crystal Growth Design** 2006, 6, 2177-2181.
28. *Surfactant assisted route to synthesize well-aligned ZnO nanorod arrays on sol-gel derived ZnO thin films.*
Apurba Dev, **Subhendu K. Panda**, Soumitra Kar, Supriya Chakrabarti and Subhadra Chaudhuri, **J. Phys. Chem. B.** 2006, 110, 14266-14272.
29. *Morphology and size dependent optical properties of CdS nanostructures.*
Soumitra Kar, **Subhendu K. Panda**, B. Satpati, P. V. Satyam, and S. Chaudhuri, **J. Nanosci. Nanotechnol.** 2006, 6, 771-776.
30. *A simple route to the synthesis of crystalline InS nanowires from Indium foil.*
Anuja Datta, Soma Gorai, **Subhendu K. Panda**, and Subhadra Chaudhuri, **Crystal Growth Design** 2006, 6, 1010-1013.
31. *Photoluminescence and Raman study of CdS-Al₂O₃ nanocomposite films prepared by sol-gel technique.*
S. K. Panda, S. Chakrabarti, A. Ganguly and S. Chaudhuri, **J. Nanosci. Nanotechnol.** 2005, 5, 459-465.
32. *Optical and microstructural characterization of CdS-ZnO nanocomposite thin films prepared by sol-gel technique.*
S. K. Panda, S. Chakrabarti, B. Satpati, P. V. Satyam and S Chaudhuri, **J. Phys. D: Appl. Phys.** 2004, 37, 628–633.

Papers Presented at Conferences:

1. *Synthesis, Spectroscopy and Applications of Semiconductor Nanocrystals*: Invited lecture presented at Seventeenth National Convention of Electrochemists (NCE-17) held at B.S. Abdur Rahman University, Chennai during September 14-15, 2012, organized by The Society for Advancement of Electrochemical Science and Technology (SAEST), India.
2. *Emissive Semiconductor Nanocrystals: Recent Progress*, Alexander Eychmüller, Subhendu K. Panda, Stephen G. Hickey, Shiding Miao, Vladimir Lesnyak, Nikolai Gaponik, 221st ECS Meeting - Seattle, Washington, USA during May 6 - May 10, 2012.
3. *White-light emitting doped ZnSe Quantum Dots*, Poster presented at 3rd European Chemistry Congress Conference at Nuremberg (Germany) during 30th Aug- 2nd Sept 2010.
4. *Next-Generation Non-Blinking QDs*, Oral presentation at Dept. of Modern Optics and Quantum Electronics, Konstanz University (Germany) as a visiting scientist on 25th Aug 2010.
5. *Energy transfer in highly-ordered multilayer thin films of CdSe quantum dots and Au nanoparticles*, Teresa M. Dansereau, Subhendu K. Panda, Marina A. Petrukhina, Abstracts of Papers, 240th ACS National Meeting, Boston, MA, United States, August 22-26, 2010
6. *Distance Dependence of the Phenyl Group from CdSe Quantum Dot Surface for Optical Detection of Aromatic Hydrocarbons*. Hasti Amiri, Zhouying Zhao, Teresa M Dansereau, Subhendu K Panda, Marina A Petrukhina and Michael A Carpenter. Poster presented at Materials research Society (MRS) fall meeting 2008 at Boston (USA) during 1st– 5th Dec 2008.
7. *Nanocrystalline SnS₂ thin films: synthesis and optical properties*, Subhendu K. Panda, S. C. Chaudhuri, Poster presented at International Conference on Recent Trends in Nanoscience and Technology (ICRTNT) 7th - 9th Dec. 2006.
8. *Optical properties of Monodispersed spherical aggregates formed by self-assembly of ZnS nanoparticles*, Subhendu K. Panda, S. C. Chaudhuri, Poster presented at International Conference on Nanomaterials for Electronics (ICNME) 27th -29th Nov. 2006.
9. Selected to participate in the 2nd *Advanced School on Nanoscience and Technology* held at Unit for Nanoscience and Technology, S. N. Bose National Centre for Basic Sciences, Kolkata, sponsored by Department of Science and Technology, India, during 7th- 21st February, 2005.
10. *Quantum confinement and Raman study of CdS nanoparticles embedded in Al₂O₃ matrix*, Subhendu K. Panda, S. C. Chaudhuri, Poster presented in International Conference on Nanomaterials: Synthesis, Characterization and Application, Organized by Institution of Engineers (India), during 4th – 6th Nov. 2004.
11. *Sol-gel derived CdS-Al₂O₃ nanocomposite thin films: Preparation and Characterization*, Subhendu K. Panda, S. C. Chaudhuri, Poster presented at 49th DAE Solid State

Physics Symposium held at Guru Nanak Dev University, Amritsar during 26th –30th Dec. 2004.

12. *CdS nanoparticles embedded in the ZnO matrix: synthesis by sol-gel technique*, Subhendu K. Panda, S. C. Chaudhuri, Poster presented in International Conference on Nano-Science and Technology (ICONSAT) during 16th –19th Dec. 2003.
13. *Optical and microstructural characterization of CdS-ZnO nanocomposite thin film prepared by Sol-Gel technique*, Subhendu K. Panda, S. C. Chaudhuri, Poster presented in Conference in Condensed Matter Physics (CMDAYS) during 26th -28th Aug. 2003.