

List of Publications

1. **“Keggin-lysine hybrid nanostructures in the shape modulation of gold”**

S. Das, T. Ghosh, B. Satpati, **Ambarish Sanyal**, T. Bala, *Materials Research Express*, 1 (2014) 015007

2. **“Organic–inorganic hybrid: a novel template for synthesis of nanostructured Ag”**

D. Sardar, B. Naskar, **Ambarish Sanyal**, S. P. Moulik, T. Bala, *RSC Adv.*, 4 (2014) 3521

3. **“Water Dispersible Semiconductor Nanorod Assemblies Via a Facile Phase Transfer and Their Application as Fluorescent Biomarkers”**

Ambarish Sanyal, K. M. Ryan *Springer Proceedings (Advanced Nanomaterials and Nanotechnology)* 143 (2013) 95

4. **“Fabrication of Noble metal-semiconductor hybrid nanostructures using phase transfer”**

T. Bala, A. Singh, **Ambarish Sanyal**, C. O’Sullivan, F. Laffir, C. Coughlan, K. M. Ryan, *Nano Research*, 6 (2013) 121

5. **“Liquid Foam: A Versatile Template for the Synthesis of Different Minerals”**

T. Bala, **Ambarish Sanyal**, J. Pant, B. L. V. Prasad, *Adv. Sci. Lett.*, 11 (2012) 91

6. **“Silver tip formation on colloidal CdSe nanorods by a facile phase transfer protocol”**

T. Bala, **Ambarish Sanyal**, A. Singh, D. Kelly, C. O’ Sullivan, F. Laffir, K. M. Ryan, *J. Mater. Chem.*, 21 (2011) 6815

7. **“Directing semiconductor nanorod assembly into 1D or 2D supercrystals by altering the surface charge”**

A. Singh, R. D. Gunning, **Ambarish Sanyal**, K. M. Ryan, *Chem. Commun.*, 46 (2010) 7193

8. **“Water Dispersible Semiconductor Nanorod Assemblies via a Facile Reverse Phase Transfer and Their Application as Fluorescent Biomarkers”**

Ambarish Sanyal, T. Bala, S. Ahmed, A. Singh, A. V. Piterina, T. M. McGloughlin, K. M. Ryan, *J. Mater. Chem.*, 19 (2009) 8974

9. **“Spontaneous Room Temperature Elongation of CdS and Ag₂S Nanorods via Oriented Attachment”**

C. O’Sullivan, R. D. Gunning, **Ambarish Sanyal**, C. A. Barrett, H. Geaney, F. R. Laffir, K. M. Ryan, *J. Am. Chem. Soc.*, 131 (2009) 12250

10. "Electrophoretic Deposition of Spherical and Rod-Shaped Nanocrystals into Close Packed Superlattices"

S. Ahmed, C. A. Barrett, C. O'Sullivan, **Ambarish Sanyal**, H. Geaney, A. Singh, R. D. Gunning, Kevin M. Ryan, **ECS Trans.**, 19 (2009) 209

11. "Facet Specific Gold Tip growth on Semiconductor Nanorod Assemblies"

C. O'Sullivan, S. Ahmed, C. A. Barrett, H. Geaney, R. D. Gunning, **Ambarish Sanyal**, A. Singh, K. M. Ryan, *Proceedings of the 216th Electrochemical Society Meeting (ECS Trans.) October 2009*

12. Processing of nanoparticles - United States Patent, Patent No.: US 8501432B2

13. "Synthesis and assembly of gold nanoparticles in quasi linear lysine-Keggin ion colloidal particles as a template"

Ambarish Sanyal, S. Mandal, M. Sastry, **Adv. Funct. Mater.**, 15 (2005) 273

14. "Biological synthesis of stable vaterite crystals by the reaction of calcium ions with germinating chickpea seeds"

D. Rautaray, **Ambarish Sanyal**, A. Ahmad, M. Sastry, **Cryst. Growth & Des.**, 5 (2005) 399

15. "Bioleaching of sand by the fungus Fusariumoxsporum as a means of producing extracellular silica nanoparticles"

V. Bansal, **Ambarish Sanyal**, D. Rautaray, A. Ahmad, M. Sastry, **Adv. Mater.**, 17 (2005) 889

Highlighted in nanotechweb.org news

(<http://nanotechweb.org/cws/article/tech/21988>)

16. "Fungus-mediated biosynthesis of silica and titania particles"

V. Bansal, D. Rautaray, A. Bharde, K. Ahire, **Ambarish Sanyal**, A. Ahmad, M. Sastry, **J. Mater. Chem.**, 15 (2005) 2583

17. "Heavy metal remediation by a fungus as a means of production of lead and cadmium carbonate crystals"

Ambarish Sanyal, D. Rautaray, V. Bansal, A. Ahmad, M. Sastry, **Langmuir**, 21 (2005) 7220

18. "Calcite growth in Cissusquadrangularis plant extract, a traditional Indian bone healing aid"

Ambarish Sanyal, A. Ahmad, M. Sastry, **Curr. Sci.**, 89 (2005) 1742

19. "Synthesis and Assembly of Gold Nanoparticles in Quasi-Linear Amino Acid-Keggin ion Colloidal Particles as a Template"

Ambarish Sanyal, S. Mandal, M. Sastry, *Proceedings of the International Conference On Nanomaterials NANO 2005 July 13-15, 2005 page no. 547-554.*

20. “Biological Synthesis of Strontium Carbonate Crystals Using the Fungus *Fusariumoxysporum*”

D. Rautaray, **Ambarish Sanyal**, S. D. Adyanthaya, A. Ahmad, M. Sastry, *Langmuir*, 20 (2004) 6827

21. “Synthesis and Assembly of CdS Nanoparticles in Keggin Ion Colloidal Particles as Templates”

S. Mandal, D. Rautaray, **Ambarish Sanyal**, M. Sastry, *J. Phys. Chem. B*, 108 (2004) 7126

22. “Gold nanosheets via reduction of aqueous chloroaurate ions by anthracene anions bound to a liquid– liquid interface”

Ambarish Sanyal, M. Sastry, *Chem. Commun.*, (2003) 1236

23. “Physicochemical Studies on Microemulsions: The Effects of Aromatic MethoxyHydrotropes on Droplet Clustering and Understanding of the Dynamics of Conductance Percolation in Water/Oil Microemulsion Systems”

S. K. Hait, **Ambarish Sanyal**, S. P. Moulik, *J. Phys. Chem. B*, 106 (2002) 12642

24. Biological process for the preparation of mineral crystals using seeds - United States Patent Application 20050214194