

Dr. Vinod Kumar. V

Academic Publication:

- [1] Muthukumar, P.; **Kumar, V.V.**; Rajendra, K. R. G.; Suresh, K. P.; Anthony. S. P.; Strong bifunctional electrocatalytic active hybrid Cu-Cu₂O nanoparticles fabrication in carbon matrix and comparing activity with pure Cu₂O and Cu Nanoparticles. *Catal. Sci. Technol.*, **2018**, Accepted Manuscript (IF-5.773)
- [2] **Kumar, V.V.**; Raman, T.; Anthony, S.P.; Fluorescent carbon quantum dots chemosensor for selective turn-on sensing of Zn²⁺ and turn-off sensing of Pb²⁺ in aqueous medium and Zebra fish egg. *New J. Chem.*, **2017**, **41**, 15157-15164. (IF: 3.269)
- [3] **Kumar, V. V.**; Rajmohan, R.; Vairaprakash, P.; Anthony, S.P.; Copper-Metal Organic Frameworks Controlled Cu@N-rGO or CuO@C Nanoparticles Formation: Reusable Green Catalyst for A-3 Coupling and Nitroarene Reduction. *Dalton Trans.*, **2017**, **46**, 11704-11714. (IF-4.029)
- [4] Raja, MRC.; **Kumar, V.V.**; Srinivasan, V.; Selvaraj, S.; Radhakrishnan, N.; Mukundan, R.; Subhashree, R.; Anthony, S. P.; Mahapatra, S. K.; ApAGP-fabricated silver nanoparticles induce amendment of murine macrophage polarization. *Journal of Materials Chemistry B*, **2017**, **5**, 3511-3520. (IF-4.543)
- [5] Yang-J.; Chao D- J.; **Kumar, V. V.**; Li, J-F.; Tian, Z. Q; Probing electrochemical interfaces using shell-isolated nanoparticles-enhanced Raman spectroscopy. *Current Opinion in Electrochemistry*, **2017**, **1**, 16–21. (IF-4.356)
- [6] Balmuri, S.R.; Selvaraj, U.; **Kumar, V.V.**; Anthony, S.P.; Tsatsakis, A.M.; Golokhvast, K.S.; Raman, T.; Effect of surfactant in mitigating cadmium oxide nanoparticle toxicity: Implications for mitigating cadmium toxicity in environment. *Environmental Research* **2017**, **152**, 141-149. (IF-3.835)
- [7] **Kumar, V. V.**; Dharani, A.; Mariappan, M.; Anthony, S. P.; Synthesis of CuO and Cu₂O NPs from single precursor: Effect of temperature on CuO/Cu₂O formation and morphology dependent nitroarenes reduction. *RSC Advances* **2016**, **6**, 85083-85090. (IF-3.108)
- [8] **Kumar, V. V.**; Christena, L. R.; Praveen, P.; Muthuraman, M. S.; Nagarajan, S.; Anthony, S. P.; L-Methionine Based Phenolic Compound Mediate Unusual Assembly of AgNPs and Exert Efficient anti-biofilm effect. *RSC Advances* **2016**, **6**, 45716 - 45726. (IF-3.108)

- [9] Srinithya, B.; **Kumar, V. V.**; Vadivel, V.; Pemaiah, B.; Anthony, S. P.; Muthuraman, M. S.; Synthesis of biofunctionalized AgNPs using medicinally important *Sidacordifolia* leaf extract for enhanced antioxidant and anticancer activities. *Materials Letters* **2016**, *170*, 101-104. ([IF-2.572](#))
- [10] **Kumar, V. V.**; Anthony, S. P.; Synthesis of α -MoO₃ nanoplates using organic aliphatic acids and investigation of sunlight enhanced photodegradation of organic dyes. *Materials Research Bulletin* **2016**, *76*, 147-154. ([IF-2.446](#))
- [11] **Kumar, V. V.**; Anthony, S. P.; Highly selective colorimetric sensing of Hg²⁺ ions by label free AuNPs in aqueous medium across wide pH range. *Sensors and Actuators B: Chemical* **2016**, *225*, 413-419. ([IF-5.401](#))
- [12] Raman, V.; Suresh, S.; Anthony, S. P.; Raman, T.; Tsatsakis, A. M.; Golokhvast, K. S.; **Kumar, V. V.** Synthesis of Co₃O₄ nanoparticles with block and sphere morphology, and investigation into the influence of morphology on biological toxicity. *Experimental and therapeutic medicine* **2015**, *11*, 553-560. ([IF-1.261](#))
- [13] Raman, R. P.; Parthibana, S.; Srinithya, B.; **Kumar, V. V.**; Anthony, S. P.; Sivasubramanian, A.; Muthuraman, M. S. Biogenic silver nanoparticles synthesis using the extract of the medicinal plant *Clerodendron serratum* and its in-vitro antiproliferative activity, *Materials Letters* **2015**, *160*, 400-403. ([IF-2.572](#))
- [14] **Kumar, V. V.**; Thenmozhi, M. K.; Ganesan, A.; S. S. Ganesan, S. S.; Anthony, S. P.; Hyperbranched polyethylenimine based sensor of multiple metal ions (Cu²⁺, Co²⁺ and Fe²⁺): colorimetric sensing via coordination or AgNP formation. *RSC Advances* **2015**, *5*, 88125–88132. ([IF-3.108](#))
- [15] **Kumar, V. V.**; Hariharan, P. S.; Eniyavan, D.; Hari, N.; Anthony, S. P.; Alanine based coordinating ligand mediated hydrothermal synthesis of CuS nano/microstructures and morphology dependent photocatalysis. *CrystEngComm*. **2015**, *17*, 3452-3459. ([IF: 3.474](#))
- [16] **Kumar, V. V.**; Anthony, S. P.; Heavy metal cation and anion sensing studies of N-(2-hydroxybenzyl) isopropyl amine surface functionalized AgNPs. *New J. Chem.* **2015**, *39*, 1308-1314. ([IF: 3.269](#))
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- [18] **Kumar, V. V.**; Anthony, S. P.; Highly selective silver nanoparticles based label free colorimetric sensor for nitrite anions. *Analytica Chimica Acta* **2014**, 842, 57–62. (IF-4.950)
- [19] Chakrapani, V.; Ahmed, K. B. A.; **Kumar, V. V.**; Ganapathy, V.; Anthony, S. P.; Anbazhagan, V.; A facile route to synthesize casein capped copper nanoparticles: an effective antibacterial agent and selective colorimetric sensor for mercury and tryptophan. *RSC Advances* **2014**, 4, 33215-33221. (IF-3.108)
- [20] Akshya, S.; Hariharan, P. S.; **Kumar, V. V.**; Anthony, S. P. Surface functionalized fluorescent CdS QDs: Selective fluorescence switching and quenching by Cu²⁺ and Hg²⁺ at wide pH range. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2015**, 135, 335-341. (IF:2.653)
- [21] **Kumar, V. V.**; Anbarasan, S.; Christena, L. R.; Nagarajan, S. S.; Anthony, S. P.; Biofunctionalized silver nanoparticles for selective colorimetric sensing of toxic metal ions and antimicrobial studies. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2014**, 129, 35-42, (IF-2.536)
- [22] **Kumar, V. V.**; Anthony, S. P.; AuNPs based selective colorimetric sensor for cysteine at wide pH range: Investigation of capping molecule structure on the colorimetric sensing and catalytic properties. *RSC Advances* **2014**, 4, 18467-18472. (IF-3.108)
- [23] **Kumar, V. V.**; Anthony, S. P.; Silver nanoparticles based selective colorimetric sensor for Cd²⁺, Hg²⁺ and Pb²⁺ ions: Tuning sensitivity and selectivity using co-stabilizing agents. *Sensors and Actuators B: Chemical* **2014**, 191, 31– 36. (IF- 5.401)
- [24] **Kumar, V. V.**; Nithya, S.; Shyam, A.; Nagarajan, S. S.; Anthony, S. P. Natural Amino Acid Based Phenolic Derivatives for Synthesizing Silver Nanoparticles with Tunable Morphology and Antibacterial Studies. *Bull. Korean Chem. Soc.* **2013**, 34, No. 9. (IF-0.602)

Book Chapter

- [1] **Kumar, V. V.**; Anthony, S. P. Antimicrobial studies of metal and metal oxides nanoparticles, Surface Chemistry of Nanobiomaterials. DOI: <http://dx.doi.org/10.1016/B978-0-323-42861-3.00009-1>, (brought by Elsevier Inc. publication) **2016**