

List of publications during past 5 years (Web of Science Indexed)

1. T Balakrishnan, S Sathiyarayanan, S Mayavan. Advanced Anticorrosion Coating Materials Derived from Sunflower Oil with Bifunctional Properties. ACS applied materials & interfaces 2015, 7 (35), 19781-19788. I.F = 5.9
2. T Bharathidasan, AdityaMandalam, M Balasubramanian, P Dhandapani, SadagopanSathiyarayanan, Sundar Mayavan. Zinc Oxide-Containing Porous Boron–Carbon–Nitrogen Sheets from Glycine–Nitrate Combustion: Synthesis, Self-Cleaning, and Sunlight-Driven Photocatalytic Activity. ACS Applied Materials & Interfaces 2015, 7 (33), 18450-18459. I.F = 5.9
3. Sundar Mayavan, AdityaMandalam, M Balasubramanian, Jun-Bo Sim, Sung-Min Choi. Facile approach to prepare Pt decorated SWNT/graphene hybrid catalytic ink. Materials Research Bulletin, 2015, 67, 215-219 I.F = 2.2
4. S Mayavan, M Ganesan, S Ambalavanan. Effect of using sonicated sulphuric acid as an electrolyte in a lead acid battery. RSC Advances, 2015, 5 (93), 76065-76067. I.F=3.7.
5. A Yamuna, AdityaMandalam, AKarthigaiselvi, M Balasubramanian, B Thiruparasakthi, SubbiahRavichandran, Sundar Mayavan. One-step synthesis of boron nitride carbon nanosheets containing zinc oxide for catalysis of the oxygen reduction reaction and degradation of organic dyes. RSC Advances, 2015, 5 (85), 69394-69399. I.F = 3.7.
6. JB Sim, S Mayavan, SM Choi. Scalable thermal synthesis of a highly crumpled, highly exfoliated and N-doped graphene/Mn-oxide nanoparticle hybrid for high-performance supercapacitors. RSC Advances, 2015, 5 (53), 42516-42525.I.F = 3.7.
7. T Siva, S Mayavan, SS Sreejakumari, S Sathiyarayanan. Mesoporous silica based reservoir for the active protection of mild steel in an aggressive chloride ion environment. RSC Advances, 5 (49), 39278-39284. I.F = I.F = 3.7.
8. SM Kumar, S Ambalavanan, S Mayavan. Effect of graphene and carbon nanotubes on the negative active materials of lead acid batteries operating under high-rate partial-state-of-charge operation. RSC Advances, 2014, 4 (69), 36517-36521. I.F = I.F = 3.7

9. S Mayavan, T Siva, S Sathiyarayanan. Graphene ink as a corrosion inhibiting blanket for iron in an aggressive chloride environment. RSC Advances, 2014, 3 (47), 24868-24871. I.F = 3.7
10. Naba K. DUTTA, Namita Roy CHOUDHURY, Sundar MAYAVAN, Rajkamal BALU, Jasmin WHITTAKER, Christopher M. ELVIN, Anita J. HILL. Template directed formation of metal nanoparticles and uses thereof. Patent Publication number WO2014071463 A1. Publication date 15 May 2014
11. S Mayavan, HS Jang, MJ Lee, SH Choi, SM Choi. Enhancing the catalytic activity of Pt nanoparticles using poly sodium styrene sulfonate stabilized graphene supports for methanol oxidation. Journal of Materials Chemistry A, 2013, 1 (10), 3489-3494. I.F = 6.6
12. S Mayavan, JB Sim, SM Choi. Easy synthesis of nitrogen-doped graphene–silver nanoparticle hybrids by thermal treatment of graphite oxide with glycine and silver nitrate. Carbon, 2012, 50, (14), 5148-5155. I.F = 6.1
13. S Mayavan, JB Sim, SM Choi. Simultaneous reduction, exfoliation and functionalization of graphite oxide into a graphene-platinum nanoparticle hybrid for methanol oxidation. Journal of Materials Chemistry, 2012, 22 (14), 6953-6958. I.F = 6.6
14. Naba K Dutta, My Y Truong, Sundar Mayavan, Namita Roy Choudhury, Christopher M Elvin, Misook Kim, Robert Knott, Kate M Nairn, Anita J Hill. A genetically engineered protein responsive to multiple stimuli. Angewandte Chemie International Edition, 2011, 50 (19), 4428-4431. I.F = 11.3
15. S Mayavan, NK Dutta, NR Choudhury, M Kim, CM Elvin, AJ Hill. Self-organization, interfacial interaction and photophysical properties of gold nanoparticle complexes derived from resilin-mimetic fluorescent protein rec1-resilin. Biomaterials, 2011, 32 (11), 2786-2796. I.F = 8.3
16. Naba K Dutta, My Y Truong, Sundar Mayavan, Namita Roy Choudhury, Misook Kim, Christopher M Elvin, Anita J Hill. Tunable interfaces and functional nano-objects derived from resilin-mimetic protein Rec1-resilin. ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY Volume: 240 Meeting Abstract: 453-POLY Published: AUG 22 2010.