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Area of specialization: Heterogeneous catalysis, Biofuels

List of publications for the last five years

- 1. Durai Mani, Durai Mathivanan, Ho Chang, Kumaravel Sakthivel, Erusappan Elangovan, **Thiripuranthagan Sivakumar**, Mukannan Arivanandhan, Ramasamy Jayavel, (2020) "A facile synthesis of novel ε-Fe 2 O 3 grafted 2D h-BN nanostructures for enhanced visible active photocatalytic applications", New Journal of Chemistry, Vol.44, 28, pp. 12289-12298.
- 2. V Sivasankar, E Senthilkumar, R Vivekananth, RA Kalaivani, **T Sivakumar** (2019), "Electrochemically Exfoliated Graphene for Nanosensor Applications" Journal of nanoscience and nanotechnology, Vol. 19, 11, pp. 7097-7104.
- 3. E Elangovan, **T Sivakumar**, A Brindha, K Thamaraiselvi, K Sakthivel, K Kathiravan, S Aishwarya (2019), "Visible active N-doped TiO2/WS2 heterojunction nano rods: synthesis, characterization and photocatalytic activity", Journal of nanoscience and nanotechnology, Vol.19,8,pp.4429-4437
- 4. Sudhakar Ranganathan and **Sivakumar Thiripuranthagan** (2019), "Synthesis of Nanosized ZSM-5/AlKIT-6 Composite Catalysts for Biofuel Production from Non-edible Jatropha Curcas Oil" J. Nanosci. Nanotechnol., Vol. 19, pp.4228-4236
- 5. **Sivakumar Thiripuranthagan** and Shanthi Subba Ramya Ganesan. (2019) "Synthesis and Characterization of Core-Shell Modeled AlMCM-48/HZSM-5 Composite Catalyst and Studies on Its Catalytic Activity in Cracking of Pongamia Oil into Bio Liquid Products" Bio Energy Research, Vol.12, pp.388-399.
- 6. K Thamaraiselvi, **T Sivakumar**, A Brindha, E Elangovan (2019) "Photocatalytic Degradation of Reactive Dyes Over Titanates", Journal of nanoscience and nanotechnology, Vol.19,4,pp.2087-2098.
- 7. J Joice, S Aishwarya, **T Sivakumar** (2019), "Nano Structured Ni and Ru Impregnated TiO2 Photocatalysts: Synthesis, Characterization and Photocatalytic Degradation of Neonicotinoid Insecticides", Journal of Nanoscience and Nanotechnology, Vol.19, 5, pp.2575-2589.
- 8. R Ramya, P Santhana Krishnan, M Neelaveni, M Gurulakshmi, **T Sivakumar**, K Shanthi (2019), "Enhanced Visible Light Activity of Pr–TiO2 Nanocatalyst in the Degradation of Dyes: Effect of Pr Doping and TiO2 Morphology", Journal of nanoscience and nanotechnology, Vol.19, 7,pp.3971-3981.

- 9. E Elangovan, **T Sivakumar**, A Brindha, K Thamaraiselvi, K Sakthivel, K Kathiravan, S Aishwarya (2019), :"Visible active N-doped TiO2/WS2 heterojunction nano rods: synthesis, characterization and photocatalytic activity", Journal of nanoscience and nanotechnology, Vol.19, 8, pp.4429-4437.
- 10. Paskalis Sahaya Murphin Kumar, Vinoth Kumar Ponnusamy, Deepthi Koolath Ramakrishnan, Gopalakrishnan kumar, Arivalagan Pugazhendhi, Hideki Abe, **Sivakumar Thiripuranthagan**, Umapada pal and Siva Kumar Krishnan (2018) "Controlled synthesis of Pt nanoparticle supported TiO2 nanorods as efficient and stable electrocatalyst for oxygen reduction reaction" Journal of Material Chemistry A, Vol.6,46, pp.23435-23444 DOI: 10.1039/x0xx00000x (Impact Factor = 9.931)
- 11. M. Esther Leena Preethi, A. Umasankari, C.H.Rekha, M. Palanichamy, **T. Sivakumar**, A. Pandurangan (2018), "Selective Oxidation of Cyclohexane to KA Oil Over Ce-Alpo-18 Molecular Sieves" International Journal of Engineering & Technology, 7 (4.5) (2018) 352-354
- 12. Amala Infant Joice J, Aishwarya S, **Sivakumar T**,(2018) "Nano structured Ni and Ru impregnated TiO2 photocatalysts: Synthesis, characterization and photocatalytic degradation of neonicotinoid insecticides, Journal of Nanoscience and nanotechnology, Vol.19, 5, pp.2575-2589
- 13. E. Elangovan, **T. Sivakumar**, A. Brindha, K. Thamaraiselvi, K. Sakthivel, K. Kathiravan and S. Aishwarya,(2018) "Visible active N-Doped TiO2/WS2 heterojunction nano rods: synthesis, characterization and photocatalytic activity. Journal of Nanoscience and nanotechnology, Vol.19(8), pp.4429-4437.
- 14. Sakthivel Kumaravel, **Sivakumar Thiripuranthagan**, Ramakrishnan Radhakrishnan, Elangovan Erusappan, Arulselvan Devarajana, Mani Durai and Arivanandhan Mukannan, (2018) "Liquid phase esterification of levulinic acid into ethyl levulinate over sulphobenzylated nanoporous SBA-15 catalyst" Journal of Nanoscience and nanotechnology, Vol.19(11), pp.6965-6977.
- 15. Ramya R, Santhana Krishnan P, Neelaveni M, Gurulakshmi M, **Sivakumar T**, Shanthi K,(2018) "Enhanced visible light activty of Pr-TiO2 nanocatalyst in the degradation of dyes: Effect of Pr doping and TiO2 morphology" Journal of Nanoscience and NanoTechnology, Vol.19(7),pp.3971-3981.
- 16. Paskalis Sahaya Murphin Kumar, **Thiripuranthagan Sivakumar**, Takeshi Fujita, Ramasamy Jayavel and Hideki Abe, (2017) Synthesis of Metastable Au-Fe Alloy Using Ordered Nanoporous Silica as a Hard Template, METALS Vol.8(1), 17 (Impact factor 1.984)
- 17. Thamaraiselvi, S, **Sivakumar, T**, Sahaya Murphin Kumar, P & Sakthivel, K 2018, 'Synthesis, characterization and photodegradation activity of graphitic C3N4-SrTiO3 nanocomposites', Journal of Photochemistry and Photobiology A:Chemistry, (DOI No: 10.1016/j.jphotochem.2018.01.027). Volume 356, 1 April 2018, Pages 425–439 (Impact factor-2.625)

- 18. Brindha, A, **Sivakumar. T**, Thamaraiselvi, K, Sakthivel, K & Elangovan, E,(2018) 'Facile synthesis, characterization and outstanding photocatalytic activities of NiWO4/nitrogen doped reduced graphene oxide nanocomposites', Journal of NanoScience and Nano technology, Accepted. (Annexure I, Impact Factor: 1.556)
- 19. Brindha, A, **Sivakumar**, **T**, Sudhakar, R, Elangovan, E & Kathiravan, K, (2018) 'BiVO4 /N-rGO nano composites as highly efficient visible active photocatalyst for the degradation of dyes and antibiotics in eco system', EES-S-17-01788, Journal of Ecotoxicology and Environmental Safety, 151, 118–126, (Impact Factor: 3.743)
- 20. Brindha, A, **T.Sivakumar**, T, Priyanka, Suresh & Pavitra, S,(2017) 'Novel band gap engineered Bi5Nb3O15 / N-rGO composite catalyst for photo degradation of reactive dyes', MSB-S-17-02114, Materials Science and Engineering: B, Under revision. (Impact Factor: 2.552)
- 21. Thamaraiselvi, K, **Sivakumar, T**, Brindha, A & Elangovan, E 2017, 'Photocatalytic degradation of reactive dyes and optimization studies over titania nanoparticles and metal perovskites', Journal of Nanoscience and Nanotechnology, (Accepted) (Impact factor-1.483)
- 22. Paskalis Sahaya Murphin Kumar, **Sivakumar Thiripuranthagan**, Tsubasa Imai, Gopalakrishnan Kumar, Arivalagan Pugazhendhi, Sriram Kumar Vijayan, Rodrigo Esparza, Hideki Abe, and Siva Kumar Krishnan (2017), "Pt nanoparticles supported on Mesoporous CeO2Nanostructures obtained through green approach for Efficient Catalytic Performance towards Ethanol Electrooxidation" ACS Sustainable Chem. Eng., 5 (12), 11290-11299 (Impact factor 5.951)
- 23. Arulselvan Devarajan, **Sivakumar Thiripuranthagan**, Ramakrishnan Radhakrishnan and Sakthivel Kumaravel, (2018) "Solvent free transesterification of glycerol into glycerol carbonate over nano structured CaAl hydrotalcite catalyst" Journal of Nanoscience and Nanotechnology. 18, 4588–4599
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- 25. R.Ramakrishnan, **T. Sivakumar**, D. Arulselvan, K. Sakthivel, E. Elangovan, K. Kathiravan, (2017) "Oxidative esterification of furfural by Au Nanoparticles supported CMK-3 mesoporous catalysts" Applied Catalysis A, General vol. 545 pp. 33–43 (Impact factor 4.354)
- 26. Thamaraiselvi Kanagaraj, **Thiripuranthagan Sivakumar**, Sahaya Murphin Kumar Paskalis, Hideki ABE, (2017) "Visible light photocatalytic activities of template free porous graphitic carbon nitride BiOBr composite catalysts towards the mineralization of reactive dyes" Applied Surface Science . vol. 426 pp. 1030–1045 (Impact factor 3.387)
- 27. Vaithiyanathan. R, Kathiravan.K, and **Sivakumar.T**, (2018) "Photocatalytic Degradation of Textile Reactive Dyes A Comparative Study Using Nano Silver Decorated Titania-Silica Composite Photocatalysts" Journal of Nanoscience and Nanotechnology. 18(4),2921-2930

- 28. Amala Infant Joice Joseph and **Sivakumar Thiripuranthagan**, (2018) "Non-metal doped titania photocatalysts for the degradation of neonicotinoid insecticides under visible irradiation" Journal of Nanoscience and Nanotechnology. 18 (5), 3158–3164
- 29. Brindha Appavu and **Sivakumar Thiripuranthagan**, (2017) "Visible active N, S codoped TiO2 / graphene photocatalysts for the degradation of hazardous dyes" Journal of Photochemistry and Photobiology A: Chemistry. Vol 340, pp. 146-156. (Impact factor 2.625)
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- 31. Thamaraiselvi Kanagaraj and **Sivakumar Thiripuranthagan**, (2017) "Photocatalytic activities of novel SrTiO3 BiOBr heterojunction catalysts towards the degradation of reactive dyes" Applied Catalysis B: Environmental Volume 207, Pages 218–232 (Impact factor 9.446)
- 32. Ramakrishnan. R, Kathiravan. K, Sakthivel. K and **Sivakumar. T**, (2016) "Oxidative esterification of furfural over Au–Pd/HAP-T and Au–Ag/HAP-T bimetallic catalysts supported on mesoporous hydroxyapatite nanorods" RSC Advances, Volume 6, pp. 45907-45922.
- 33. Brindha Appavu, Kathiravan Kannan, **Sivakumar Thiripuranthagan**, (2016) "Enhanced visible light photocatalytic activities of template free mesoporous nitrogen doped reduced graphene oxide/titania composite catalysts" Journal of Industrial and Engineering Chemistry, Volume 36, pp. 184–193.
- 34. R. Vaidhyanathan, K. Kathiravan, Amala Infant Joice, Thamarai selvi, and **T. Sivakumar**, (2016) "Photocatalytic degradation of acid orange dye using silver impregnated TiO2/SiO2 composite catalysts" Journal of Nano Science and Nanotechnology, Volume 16, Number 9, pp. 9980-9986(7).