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PUBLICATION IN LAST FIVE YEARS

1. B G Abraham, **R Chetty** “Design and fabrication of a quick-fit architecture air breathing direct methanol fuel cell” International journal of hydrogen energy 46 (9), 6845-6856 (**2021**)
2. B G Abraham, **R Chetty** “Influence of electrodeposition techniques and parameters towards the deposition of Pt electrocatalysts for methanol oxidation” Journal of applied electrochemistry, 1-18 (**2020**)
3. S Seetharaman, SV Selvaganesh, **R Chetty** “Tailored synthesis of hybrid iron-nitrogen-graphene with reduced carbon xerogel as an efficient electrocatalyst towards oxygen reduction” Ionics 26 (12), 6255-6264 (**2020**)
4. R Rajakumaran, M Kumar, **R Chetty** “Morphological effect of ZnO nanostructures on desalination performance and antibacterial activity of thin-film nanocomposite (TFN) membrane” Desalination 495, 114673 (**2020**)
5. A Parakh, M Vaidya, N Kumar, **R Chetty**, BS Murty “Effect of crystal structure and grain size on corrosion properties of AlCoCrFeNi high entropy alloy” Journal of alloys and compounds, 158056 (**2020**)
6. IJR Sarkar, SG Peera, **R Chetty** “Fe-N-C catalyst derived from solid-state coordination complex as durable oxygen reduction electrocatalyst in alkaline electrolyte” Ionics 26 (11), 5685-5696 (**2020**)

7. V Muthukumar, **R Chetty** “Impregnated electroreduced Pt on Ru/C as an anode catalyst for direct methanol fuel cells” *Journal of the electrochemical society* 166 (15), F1173 (2019)
8. R Rajakumaran, V Boddu, M Kumar, MS Shalaby, H Abdallah, **R Chetty** “Effect of ZnO morphology on GO-ZnO modified polyamide reverse osmosis membranes for desalination” *Desalination* 467, 245-256 (2019)
9. S Sriram, IM Nambi, **R Chetty** “Hexavalent chromium reduction through redox electrolytic cell with urea and cow urine as anolyte” *Journal of environmental management* 232, 554-563 (2019)
10. Volga Muthukumar, **Raghuram Chetty** “Electrodeposited Pt–Pd Dendrite on Carbon Support as Anode for Direct Formic Acid Fuel Cells” *Ionics*, (2018) 1-11
11. G Keerthiga, B Viswanathan, **Raghuram Chetty** “Effect of Bicarbonate and Chloride Electrolytes On Product Distribution for CO₂ Electrochemical Reduction On Cu Electrode, *Catalysis in Green Chemistry and Engineering* 1 (2018) 179-188.
12. SV Selvaganesh, P Dhanasekaran, **Raghuram Chetty**, SD Bhat “Microwave assisted poly (3, 4-ethylenedioxythiophene)–reduced graphene oxide nanocomposite supported Pt as durable electrocatalyst for polymer electrolyte fuel cells”, *New Journal of Chemistry* (2018).
13. IJR Sarkar, SG Peera, **Raghuram Chetty** “Manganese oxide nanoparticles supported nitrogen-doped graphene: a durable alkaline oxygen reduction electrocatalyst” *Journal of Applied Electrochemistry* (2018) 1-17.
14. Volga Muthukumar, **Raghuram Chetty**, “Morphological transformation of electrodeposited Pt and its electrocatalytic activity towards direct formic acid fuel cells”, *Journal of Applied Electrochemistry*, (2017).
15. Gopalram Keerthiga, **Raghuram Chetty**, “Electrochemical Reduction of Carbon Dioxide on Zinc-Modified Copper Electrodes”, *Journal of The Electrochemical Society*, (2017).

- 16.KS Rajmohan, **Raghuram Chetty**, “Enhanced nitrate reduction with copper phthalocyanine-coated carbon nanotubes in a solid polymer electrolyte reactor”, Journal of Applied Electrochemistry, (2017).
- 17.Kranthi Kumar Maniam, Volga Muthukumar, **Raghuram Chetty**, “Electrodeposition of dendritic palladium nanostructures on carbon support for direct formic acid fuel cells”, International Journal of Hydrogen Energy, (2016)
- 18.KS Rajmohan, M Gopinath, **Raghuram Chetty**, “Review on challenges and opportunities in the removal of nitrate from wastewater using electrochemical method”, Journal of Environmental Biology, (2016).
- 19.BG Abraham, KK Maniam, A Kuniyil, R Chett, Keerthiga Gopalram, **Raghuram Chetty**, “Electrocatalytic performance of palladium dendrites deposited on titania nanotubes for formic acid oxidation”, Fuel Cells, (2016).
- 20.B Ashraf Ali, **Raghuram Chetty**, S Pushpavanam, “Electrolytic Degradation of Uric Acid Using Nickel Electrodes in an Unpartitioned and Partitioned Batch Cell”, International Journal of Chemical Engineering and Processing, (2016)
- 21.Rangasamy Savitha, Ravikrishna Raghunathan, **Raghuram Chetty**, “Rutile nanotubes by electrochemical anodization”, RSC Advances,(2016)
- 22.Subash Rajasekar, **Raghuram Chetty**, Lakshman Neelakantan, “Low-nickel austenitic stainless steel as an alternative to 316L bipolar plate for proton exchange membrane fuel cells”,International Journal of Hydrogen Energy, (2015).
- 23.Kranthi Kumar Maniam, **Raghuram Chetty**, “Electrochemical synthesis of palladium dendrites on carbon support and their enhanced electrocatalytic activity towards formic acid oxidation”, Journal of Applied Electrochemistry, (2015).

- 24.**R Chetty**, KK Maniam, W Schuhmann, M Muhler, “Oxygen-Plasma-Functionalized Carbon Nanotubes as Supports for Platinum–Ruthenium Catalysts Applied in Electrochemical Methanol Oxidation”, ChemPlusChem, (2015).
- 25.A Fazil, **R Chetty**, “Synthesis and Evaluation of Carbon Nanotubes Supported Silver Catalyst for Alkaline Fuel Cell”, Electroanalysis, 26 (2014) 2380-2387.
- 26.KK Maniam, **R Chetty**, “Palladium Nanodendrites Deposited on Electrochemically Activated Carbon Based Support for Electrocatalytic Applications”, ECS Transactions, 61 (2014) 11-20.
- 27.KK Maniam, V Muthukumar, **R Chetty**, “Approaches towards Improving the Dispersion of Electrodeposited Palladium on Carbon Supports”, Energy Procedia 54 (2014) 281-291.
- 28.KS Rajmohan, **R Chetty**, “Nitrate Reduction at Electrodeposited Copper on Copper Cathode”, ECS Transactions 59 (2014) 397-407.