


**Faculty Profile**

Name	: Dr. S. RAJKUMAR		
Date of Birth	: 08-08-1995		
Highest Qualification	: M.Sc., Ph.D.,		
Date of Joining	: 09-09-2022		
Designation	: Assistant Professor		
Date of promotion (Present Designation)	: -		
Area of Interest	: Material Science & Energy Storage Devices		
Mobile No	: 9677441751	Email ID : rajkumar.s@trp.srmtrichy.edu.in	
Experience	: Teaching: 2.5 Yrs	Industry : NIL	Research: 4 Yrs
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**Association with Professional Bodies**

Name (Professional Body)	Materials Research Society of India (MRSI)	Institute of Scholars (InSc)	Institute For Engineering Research and Publication	All India Council For Technical Skill Development
Type of Membership and No.:	Life Member & LMB3468	Life Member & InSc2022E21D	Life Member & PM52398417	Life Member & AICTSD/PROFESSOR

**Research**

Ph. D Guidance			
Supervisor / Guide ship No.:		University:	No. of Scholars:
Publication*			
International Journals	: 35 (I.F.: 2.8 – 13.7)	National Journals	: -
International Conference	: 18	National Conference	: 9
Project Grants (Research projects guided or undertaken/ Sponsored Projects)			
Received (Amount)	: -	Applied (Amount)	: -
Patent			
Published	: -	Granted	: -

**Books**

Published	: -
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**FDPs / STTPs / Workshops / Seminars etc.,**

FDP		STTP		Workshop		Seminar		Others	
Attended :	10	Attended :		Attended :		Attended :	5	Attended :	
Organized :	1	Organized :		Organized :		Organized :		Organized :	

Online courses (NPTEL, MOOC etc.)	3
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**\*List of Publications: 35**

**35. S. Rajkumar**, M. Karthikeyan, A. Manohar, S. Dhineshkumar, and J. Princy Merlin, One-step synthesis and fabrication of ZrMo<sub>2</sub>O<sub>8</sub> nanostructures as advanced electrode material for energy storage applications Journal of Industrial and Engineering Chemistry, 5 Mar 2024. **(I.F.: 6.1)**.

34. N. Evangeline Jafneel, J. Abishek, Ren-Jei Chung, **S. Rajkumar** and J. Princy Merlin. "Antimony vanadate spheres: Synthesis, characterizations, and use as positive electrode in asymmetric supercapacitor systems." Journal of Electroanalytical Chemistry, 953 (2024): 118014. **(I.F.: 4.5)**

33. Sathiyar, A., **S. Rajkumar**, S. Dhineshkumar, and J. Princy Merlin. "Electrochemical Performance of SrMoO<sub>4</sub> as Electrode Material for Energy Storage Systems." Journal of Industrial and Engineering Chemistry, 129 (2024): 521-530. **(I.F.: 6.1)**.

**32. S. Rajkumar**, S. Gowri, J. Princy Merlin, Facile fabrication of ZrV<sub>2</sub>O<sub>7</sub> nanostructures as an Electrode Material for Supercapacitors. Inorganic Chemistry Communications, 110896, 2023. **(I.F.: 3.8)**.

**31. S. Rajkumar**, S. Dhineshkumar, Arun Prakash, Raychel, Anantha Kumar, J. Princy Merlin Fabrication of SrWO<sub>4</sub>/PPy Composite as Electrode Material for high-performance Supercapacitors, Optical Materials 142 (2023) 113934. **(I.F.: 3.9)**

30. M. D. Angelin, **S. Rajkumar**, S. Dhineshkumar, A.T. Ravichandran, A. Ravikumar, J. Princy Merlin, One-step facile synthesis of Sr-doped ZnO as electrode material for supercapacitors. Journal of Materials Science: Materials in Electronics, 34(13), 1107, 2023 **(I.F.: 2.8)**

29. Gowri, S., **Rajkumar, S.**, Dhineshkumar, S., Aarthi, J., Karthikeyan, M., Ravikumar, A., & Princy Merlin, J. Construction of CuV<sub>2</sub>O<sub>6</sub>-nanostructured electrode material for supercapacitors. MRS Communications, 1-6, 2023 **(I.F.: 1.9)**

28. E. Elanthamilan, **S. Rajkumar**, Sea-Fue Wang, J. Princy Merlin, "Facile Synthesis of platelet-like Zirconium tungstate nanostructures for High-performance Supercapacitors" International Journal of Energy Research, 46(12), 17113-17125. **(I.F.: 4.67)**.

27. P. Hepsiba, **S. Rajkumar**, E. Elanthamilan, Sea-Fue Wang and J. Princy Merlin, "Biomass-derived porous activated carbon from anacardium occidentale shell as electrode material for supercapacitors, New Journal of Chemistry 46, 18 (2022): 8863-8873. (I.F.: 3.591)
26. **S. Rajkumar**, Elanthamilan, S.F. Wang, H. Chryso, P. Vishal Deva Balan, P. Merlin "One-Pot Green Recovery of Copper Oxide nanoparticles from Discarded Printed Circuit Boards for electrode material in Supercapacitor Application", Resources, Conservation & Recycling, 180 (2022): 106180. (I.F.: 13.2)
25. **S. Rajkumar**, Ezhilarasi, J. C., Saranya, P., & Merlin, J. P. "Fabrication of CoWO<sub>4</sub>/PANI composite as electrode material for energy storage applications", Journal of Physics and Chemistry of Solids, 162, (2022)110500. (I.F.: 3.99)
24. **S. Rajkumar**, S. Gowri, S. Dhineshkumar, J. Princy Merlin, A. Sathiyar. "Investigation on NiWO<sub>4</sub>/PANI Composite as Electrode Material for Energy Storage Devices." New Journal of Chemistry 45(44), 20612-20623. (I.F.: 3.59)
23. **S. Rajkumar**, R. Subha, S. Gowri, A. Bella J. Princy Merlin. "Enhanced electrochemical performance of aminophenol-modified ZnO as electrode material for supercapacitors." Ionics Ionics, 28(2), 2021, 859-869. (I.F.: 2.81)
22. **S. Rajkumar**, E. Elanthamilan, J. Princy Merlin, A. Sathiyar "Enhanced electrochemical behaviour of FeCo<sub>2</sub>O<sub>4</sub>/PANI Electrode materials for Supercapacitors", Journal of Alloys and Compounds 874 (2021) 159876 (I.F.: 6.2)
21. **S. Rajkumar**, E. Elanthamilan, J. Princy Merlin, "Facile synthesis of Zn<sub>3</sub>V<sub>2</sub>O<sub>8</sub> Nanostructured material and its enhanced Supercapacitive Performance", Journal Alloys and Compounds, (2020), 157939. (I.F.: 6.2)
1. **S. Rajkumar**, E. Elanthamilan, J. Princy Merlin, and I. Sharmila Lydia. "Fabrication of CuCo<sub>2</sub>O<sub>4</sub>/PANI nanocomposite as advanced Electrode for High Performance Supercapacitor." Sustainable Energy & Fuels 4(10), (2020), 5313-5326. (I.F.: 5.6)
2. **S. Rajkumar**, E. Elanthamilan, T. Elango Balaji, A. Sathiyar, N. Evangeline Jafneel, and J. Princy Merlin. "Recovery of copper oxide nanoparticles from waste SIM cards for supercapacitor electrode material." Journal of Alloys and Compounds, 849 (2020): 156582. (I.F.: 6.2)

3. **S. Rajkumar**, E. Elanthamilan, A. Sathiyam, D. Barani kumar, and J. Princy Merlin. "Study on the electrochemical behavior of BiVO<sub>4</sub>/PANI composite as a high performance supercapacitor material with excellent cyclic stability." *Journal of Electroanalytical Chemistry* 861 (2020): 113972. (I.F.: 4.46)
4. **S. Rajkumar**, E. Elanthamilan, N. Evangeline Jafneel, I. Sharmila Lydia, and J. Princy Merlin, "Enhanced Electrochemical behaviour of Co-MOF/PANI composite Electrode for Supercapacitors." *Inorganica Chimica Acta* 502, (2019): 119393. (I.F.: 2.54)
5. **S. Rajkumar**, E. Elanthamilan, P. Hepsiba Paul, V. Renganathan, J. Princy Merlin, Shen-Ming Chen, and R. Karvembu. "Sustainable porous activated carbon from Polyalthia longifolia seeds as electrode material for supercapacitor application." *Journal of Electroanalytical Chemistry* 849, (2019): 113382. (I.F.: 4.5)
6. **S. Rajkumar**, E. Elanthamilan, A. Bella, A. Sathiyam, B. Meenatchi, J. Princy Merlin, "Electrochemical Performance of L-Tryptophanium picrate as an efficient electrode material for Supercapacitor Application". *Phys. Chem. Chem. Phys.*, (2019), 21, 11829. (I.F.: 3.3).
7. M. Dhivya, **S. Rajkumar**, A. T. Ravichandran, J. Princy Merlin, Systematic Investigation on the Electrochemical Performance of Cd-doped ZnO as a Novel Electrode Material for Energy Storage Devices, *Journal of Physics and Chemistry of Solids*, 161, 2022, 110486. (I.F.: 3.99)
8. P. Sabarison, **S. Rajkumar**, M. Shobana, Ho-Chiao Chuang, J. Princy Merlin. "Robust fabrication of silver pyro-vanadates via sonochemical approach for advanced energy storage application." *Journal of Alloys and Compounds* 893, (2021): 162268. (I.F.: 6.2)
9. Javeesh Alex, **S Rajkumar**, J PrincyMerlin, Arun Aravind, D Sajan, CS Praveen, Single step auto-igniting combustion technique grown CeO<sub>2</sub> and Ni-doped CeO<sub>2</sub> nanostructures for multifunctional applications, *Journal of Alloys and Compounds*, 882, (2021), 160409. (I.F.: 6.2)
10. E. Elanthamilan, **S. Rajkumar**, J. Princy Merlin, D. Sangeeth Jona, K. Monisha, and B. Catherin Meena. "Effect of decorating Cobalt ferrite spinel structures on Pistachio vera shell-derived Activated Carbon on Energy storage Applications." *Electrochimica Acta*, 359 (2020): 136953. (I.F.: 6.6)

11. M. Dhivya, **S. Rajkumar**, J. Princy Merlin, A. Robert Xavier, M. Franklin, and A. T. Ravichandran. "Electrochemical investigation of Zr-doped ZnO nanostructured electrode material for high-performance supercapacitor." *Ionics* 26(11), (2020) 5757-5772. **(I.F.: 2.81)**
12. S. Anjelin Ursula **S. Rajkumar**, E. Elanthamilan, J. Princy Merlin and K. Ramamoorthy. "Effect of annealing temperature on structural, optical and visible light photocatalytic performance of CaTiO<sub>3</sub> catalysts synthesized by simple sol-gel technique." *Inorganic Chemistry Communications* 119 (2020): 108051. **(I.F.: 2.49)**
13. S. Anjelin Ursula Portia, **S. Rajkumar**, E. Elanthamilan, J. Princy Merlin and K. Ramamoorthy, "Facile synthesis of Eu-doped CaTiO<sub>3</sub> and their enhanced supercapacitive performance." *Ionics*, 26(7), (2020) 3543-3554 **(I.F.: 2.81)**
14. E. Elanthamilan, **S. Rajkumar**, J. Yesuraj, D. Premkumar, M. Kumaresan, K. Karthikeyan, and J. Princy Merlin. "Low cost activated carbon derived from Cucumis melo fruit peel for electrochemical supercapacitor application." *Applied Surface Science*, 486 (2019): 527-538. **(I.F.: 6.70)**
15. E. Elanthamilan, **S. Rajkumar**, R. Rajavalli, J. Princy Merlin, Cost Effective Synthesis of Copper-1H-imidazole@ Activated Carbon Metal Organic Framework as the electrode material for Supercapacitor applications, *New Journal of Chemistry*, 42(2018), 10300-10308. **(I.F.: 3.59)**.
16. A. Robert Xavier, A. T. Ravichandran, S. Vijaykumar, M Dhivya Angelin, **S. Rajkumar**, J. Princy Merlin, Synthesis and Characterization of Sr-doped CdO nanoplatelets for supercapacitor applications, *Journal of Material Science: Materials in Electronics*, 33(11), 2021, 8426-8434 **(I.F.: 2.47)**
17. E. Elanthamilan, Sriram B, **S. Rajkumar**, Dhaneshwaran C, Nagaraj N, Merlin JP, Vijayan A, Wang SF. Couroupita guianensis dead flower derived porous activated carbon as efficient supercapacitor electrode material. *Materials Research Bulletin*, (2019) 112: 390-398. **(I.F.: 5.4)**.
18. E. Elanthamilan, N. Umesh, **S. Rajkumar**, J. Princy Merlin, and Sea-Fue Wang. "A fascinating multifunctional bis (2-(4, 5-diphenyl-1H-imidazol-2-yl) phenoxy) nickel complex: An excellent electrode material for supercapacitor and uric acid sensor." *Materials Research Bulletin*, 118 (2019): 110482. **(I.F.:5.4)**.

**19.** E. Elanthamilan, A. Sathiyar, **S. Rajkumar**, E. Joan Sheryl, J. Princy Merlin, Polyaniline based charcoal/Ni nanocomposite material for high performance supercapacitors. *Sustainable Energy Fuels*, 2, (2018), 811-819. (I.F.: 5.6).

**20.** E., A. Sathiyar, **S. Rajkumar**, E. Joan Sheryl, J. Princy Merlin, Polyaniline based Charcoal/Ni nanocomposite Material for High Performance Supercapacitor, Functional Nanostructures Proceedings, One Central Press, 11-13 September 2017