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**List of Publications in the last 5 years**

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1. D Manoharan, J Chandrasekaran, **S Maruthamuthu**, P Jayamurugan, Poly (aniline-co-o-toluidine): poly (styrene sulfonic acid) nanocolloidal self-assembled multilayer thin films as a hole transport layer in organic solar cells, **Materials Science in Semiconductor Processing**, 2015, 34, 382-389.<https://doi.org/10.1016/j.mssp.2015.02.079>**Impact Factor: 3.085**
2. D Manoharan, J Chandrasekaran, **S Maruthamuthu**, P Kathirvel, P Jayamurugan, Synthesis of poly (aniline-co-o-toluidine) nanocolloidal particles in aqueous poly (styrene sulfonic acid) by dispersion polymerization method, **Journal of Nanostructure in Chemistry**, 2015, v5, Issue 1, 115-122. **Impact Factor: 4.077**
3. **S. Maruthamuthu**, J. Chandrasekaran, D. Manoharan, S. N. Karthick and Hee-Je Kim, Multilayer photoactive nanocolloidal PPy:PSS as a novel substitute for Pt free counter electrode in DSSC, **Journal of Applied Polymer Science**, 2016, V-133, Issue 10, 43114.<https://doi.org/10.1002/app.43114>**Impact Factor: 2.52**
4. **S. Maruthamuthu**, J. Chandrasekaran, D. Manoharan, S. N. Karthick, Hee-Je Kim and B. Saravanakumar, CuBr<sub>2</sub>-induced charge screening on photoactive nanocolloidal polypyrrole: poly (styrene sulfonate) composite multilayer thin-film counter electrodes for high-efficiency dye-sensitized solar cells, **Polymer International**, 2016, V-65 Issue-5, 584-595, <https://doi.org/10.1002/pi.5098>**Impact Factor: 2.57**
5. **S. Maruthamuthu**, J. Chandrasekaran, D. Manoharan, S. N. Karthick and Hee-Je Kim, Effect of CuBr<sub>2</sub> salt treatment on the performance of nanocolloidal PPy:PSS multilayer thin film counter electrodes of dye-sensitized solar cells, **Journal of Applied Polymer Science**, 2016, V-133, Issue 32, 43772, <https://doi.org/10.1002/app.43772>.**Impact Factor: 2.52**
6. **S. Maruthamuthu**, J. Chandrasekaran, D. Manoharan and R. Magesh, Conductivity and dielectric analysis of nanocolloidal Polypyrrole particles functionalized with higher weight percentage of poly (styrene sulfonate) by dispersion polymerization method, **Journal of Polymer Engineering**, V-37, Issue 5, 2016, DOI 10.1515/polyeng-2015-0321.**Impact Factor: 1.126**
7. B Saravanakumar, **S Maruthamuthu**, V Umadevi, V Saravanan, CTAB-Aided Synthesis of Stacked V<sub>2</sub>O<sub>5</sub> Nanosheets: Morphology, Electrochemical Features and Asymmetric Device Performance. **International Journal of Nanoscience**, 2017 V-16(3), 1760009-1760019. <https://doi.org/10.1142/S0219581X17600092>. **Impact Factor: 0.11**

8. R. Marnadu, J. Chandrasekaran, M. Raja, M. Balaji, **S. Maruthamuthu**, P. Balraju, Influence of metal work function and incorporation of Sr atom on WO<sub>3</sub> thin films for MIS and MIM structured SBDs, **Superlattices and Microstructures**, Volume 119, July 2018, Pages 134-149. <https://doi.org/10.1016/j.spmi.2018.04.049>. **Impact Factor: 2.12**
9. P. Sumathi, J. Chandrasekaran, R. Marnadu, S. Muthukrishnan, **S. Maruthamuthu**, Synthesis and characterization of tungsten disulfide thin films by spray pyrolysis technique for n-WS<sub>2</sub>/p-Si junction diode application, **Journal of Materials Science: Materials in Electronics**, 2018, Issue 19, <https://doi.org/10.1007/s10854-018-9776-7>, **Impact Factor: 2.22**
10. R.Marnadu, J.Chandrasekaran, **S.Maruthamuthu**, V.Balasubramani, P.Vivek, R.Suresh, Ultra-high photoresponse with superiorly sensitive metal-insulator-semiconductor (MIS) structured diodes for UV photodetector application, **Applied Surface Science**, 480 (2019) 308–322 <https://doi.org/10.1016/j.apsusc.2019.02.214>, **Impact Factor: 6.182**
11. V. Balasubramani, J. Chandrasekaran, R. Marnadu, P. Vivek, **S. Maruthamuthu**, S. Rajesh, Impact of Annealing Temperature on Spin Coated V<sub>2</sub>O<sub>5</sub> Thin Films as Interfacial Layer in Cu/V<sub>2</sub>O<sub>5</sub>/n-Si Structured Schottky Barrier Diodes, **Journal of Inorganic and Organometallic Polymers and Materials**, <https://doi.org/10.1007/s10904-019-01117-z>, **Impact Factor: 1.941**
12. R. Marnadu, J. Chandrasekaran, P. Vivek, V. Balasubramani and **S. Maruthamuthu**, Impact of Phase Transformation in WO<sub>3</sub> Thin Films at Higher Temperature and its Compelling Interfacial Role in Cu/WO<sub>3</sub>/p-Si Structured Schottky Barrier Diodes, **International journal of research in physical chemistry and chemical physics**, Z. Phys. Chem. 2019 <https://doi.org/10.1515/zpch-2018-1289>, **Impact Factor: 1.35**
13. P.Vivek, J.Chandrasekaran, R.Marnadu, **S.Maruthamuthu**, V.Balasubramani, Incorporation of Ba<sup>2+</sup> ions on the properties of MoO<sub>3</sub> thin films and fabrication of positive photo-response Cu/Ba–MoO<sub>3</sub>/p-Si structured diodes, **Superlattices and Microstructures**, 133 (2019) 106197, <https://doi.org/10.1016/j.spmi.2019.106197>, Accepted 16 July 2019, **Impact Factor: 2.38**
14. R.Marnadu, J.Chandrasekaran, **S.Maruthamuthu**, P.Vivek, V.Balasubramani, P.Balraju, Jet Nebulizer Sprayed WO<sub>3</sub>-Nanoplate Arrays for High-Photoresponsivity Based Metal–Insulator–Semiconductor Structured Schottky Barrier Diodes, **Journal of Inorganic and Organometallic Polymers and Materials**, <https://doi.org/10.1007/s10904-019-01285-y>, Received: 20 March 2019 / Accepted: 16 August 2019, **Impact Factor: 1.941**
15. P.Vivek, J.Chandrasekaran, R.Marnadu, **S.Maruthamuthu**, V.Balasubramani, P. Balraju, Zirconia modified nanostructured MoO<sub>3</sub> thin films deposited by spray pyrolysis technique for Cu/MoO<sub>3</sub>-ZrO<sub>2</sub>/p-Si structured Schottky barrier diode application, **Optik - International Journal for Light and Electron Optics** 199(2019) 163351 <https://doi.org/10.1016/j.ijleo.2019.163351>, Accepted 2 September 2019, **Impact Factor: 2.187**
16. P.Vivek, J.Chandrasekaran, R.Marnadu, **S.Maruthamuthu**, Fabrication of Illumination-Dependent Cu/p-Si Schottky Barrier Diodes by Sandwiching MoO<sub>3</sub> Nanoplates as an Interfacial Layer via JNSP Technique, **Journal of ELECTRONIC MATERIALS**, accepted April 1, 2020, <https://doi.org/10.1007/s11664-020-08137-3>, **Impact Factor: 1.67**
17. R.Marnadu, J.Chandrasekaran, **S.Maruthamuthu**, and V. Elayappan, Superior photoresponse MIS Schottky barrier diodes with nanoporous:Sn-WO<sub>3</sub> films for ultraviolet photodetector

application, **New J. Chem.**, 2020, 44, 7708-7718, DOI: 10.1039/D0NJ00101E, ISSN: 1144-0546 (print); 1369-9261 (web), Accepted 7th April 2020, **Impact Factor: 3.288**

18. B. Suganya, J.Chandrasekaran, **S.Maruthamuthu**, B. Saravanakumar and V. Elayappan, Hydrothermally Synthesized Zinc Vanadate Rods for Electrochemical Supercapacitance Analysis in Various Aqueous Electrolytes, Accepted: 6 May 2020, **Journal of Inorganic and Organometallic Polymers and Materials**<https://doi.org/10.1007/s10904-020-01581-y>, **Impact Factor: 1.941**

19. R. Siva prakash, C. Mahendran, J. Chandrasekaran, R. Marnadu, **S. Maruthamuthu**, Influence of substrate temperature on the properties of rare-earth cerium oxide thin films and electrical performance of p-Si/n-CeO<sub>2</sub> junction diode, Accepted: 9 July 2020, Online 21 July 2020 **Journal of Inorganic and Organometallic Polymers and Materials**, <https://doi.org/10.1007/s10904-020-01667-7>, **Impact Factor: 1.941**

20.V.Balasubramani, J.Chandrasekaran, Tien Dai Nguyen **S.Maruthamuthu**, R.Marnadu, P.Vivek, S.Sugarthi, Colossal photosensitive boost in Schottky diode behaviour with Ce-V<sub>2</sub>O<sub>5</sub> interfaced layer of MIS structure, Accepted Sep 6<sup>th</sup>, Online Sep 15<sup>th</sup> Volume 315, 1 November 2020, 112333, **Journal of Inorganic and Organometallic Polymers and Materials**, <https://doi.org/10.1016/j.sna.2020.112333>, **Impact Factor: 3.1**