- 1. Synthesis and characterization of micro-porous hybrid nanocomposite membrane as potential hydrogen storage medium towards fuel cell applications, R.Naresh Muthu, S.Rajashabala, R.Kannan, 25, 8, 3561–3575, Ionics (2.354), 2018
- 2. Preparation and Characterization of PEO-based composite gel-polymer electrolytes complexed with lithium trifluoro methane sulfonate, AJ. Nagajothi, R Kannan, S Rajashabala, 36(2), 185-192, Mater.Sci-poland, 2018
- Aluminium doping makes Boron Nitride Nanotubes (BNNTs) an attractive adsorbent of Hydrazine(N₂H₄), M.Saraswathi, S. Rajashabala, Tapas Kar, DOI.10.1007/s 11224-017-1034- 8, Struct. Chem.(1.582), 2017
- 4. High conductive proton exchange membrane (SPEEK/MMT) and its characterization, S.Porchelvi, R.Kannan, P.Bahavan Palani, K.Sainul Abidin, S.Rajashabala, 1-6, Mater. Research Innov (0.37), 2017
- 5. Lithium ion conduction in plasticizer based composite gel polymer electrolytes with the addition of SiO₂, AJ. Nagajothi, R.Kannan, S.Rajashabala, 1-5, Mater. Research Innov (0.37),2017
- 6. Effect of target power on the physical properties of Ti thin films prepared by DC magnetron sputtering with supported discharge, A Kavitha, R Kannan, S Rajashabala, 173-180 Mater. Sci-Poland (0.610), 2017
- 7. Effect of Nitrogen Content on Physical and Chemical Properties of TiN Thin Films Prepared by DC Magnetron Sputtering with Supported Discharge, A.Kavitha, R Kannan, KR Gunasekhar, S.Rajashabala, 1-8, Jrnl .Elec. Mater,(1.579), 2017
- 8. Electrochemical performance of plasticized PEO-LiTf complex-based composite gel polymer electrolytes with the addition of barium titanate AJ Nagajothi, R Kannan, S Rajashabala,, 1-8, Ionics, (2.062), 2017
- 9. Dielectric Dispersion and Relaxation Behaviour Of Synthesized Polymer Electrolyte Membrane For Electrochemical Applications, Porchelvi, S, Kannan, R,Rajashabala, S, Bahavan palani, P& Sainul Abidin, K, ISSN: 2395-0056, vol. 04, Special Issue: 09, International Research Journal of Engineering and Technology (IRJET) (6.171), 2017
- 10. Role of structural modifications of montmorillonite, electrical properties effect, physical behavior of nanocomposite proton conducting membranes for direct methanol fuel cell

- applications, K.SainulAbidin ,P. R.Kannan, Bahavan Palani, S. Rajashabala, 35(4), 707-716, Mater. SciPoland, 2017
- 11. Studies on electrical properties of poly (ethylene oxide)-based gel polymer electrolytes with the effect of chitosan for lithium-sulfur batteries, A.J.Nagajothi, R.Kannan, and S. Rajashabala, DOI 10.1007/s00289-017-1993-3, Polym. Bull, 2017
- 12. Hydrogen storage performance of lithium boro hydride decorated activated hexagonal boron nitride nanocomposite for fuel cell applications, R. Naresh Muthu, S. Rajashabala and R. Kannan, 1-11, Int. J.Hydrogen Energy (3.313), 2017
- 13. Effect of modified nanoclay composite on blended PVDF/PEG electrolyte membranes for fuel cell applications, P. Bahavan Palani, K.SainulAbidin, R.Kannan, and S. Rajashabala, 16,4, 1760042, Int.J.Nanosci., 2017
- 14. Facile Synthesis and Characterization of Reduced Graphene Oxide / Halloysite Nanotubes / Hexagonal Boron Nitride (RGO/HNT/h-BN) Hybrid Nanocomposite and its Potential Application as Hydrogen Storage, R. Naresh Muthu, S. Rajashabala and R. Kannan, 6, (79072-79084), RSC Advances (3.289), 2016
- 15. Synthesis, Characterization of Hexagonal Boron Nitride Nanoparticles Decorated Halloysite Nanoclay Composite and Its Application as Hydrogen Storage Medium, R. Naresh Muthu, S. Rajashabala and R.Kannan, 90, (554 564), Renew. Energy (3.476), 2016
- 16. Hexagonal Boron Nitride (h-BN) decorated Multiwalled Carbon Nanotubes (MWCNT) for Hydrogen storage, R. Naresh Muthu, S. Rajashabala and R.Kannan, 85,(387 394), Renew. Energy (3.476), 2016
- 17. The effect of annealing on the structural, optical and electrical properties of titanium nitride (TiN) thin films prepared by DC magnetron sputtering with supported discharge, A.Kavitha, R.Kannan, P.Sreedhara Reddy & S.Rajashabala, 27:10427, J Mater Sci: Mater Electron, 2016
- 18. Effect of adsorption time on structural, optical and electronic properties of SILAR deposited CuO thin films, S.Visalakshi, R.Kannan, S.Valanarasu, S.Rajashabala, doi:10.1007/s10854-016-4954-y, J Mater Sci: Mat. Electronics, 2016

- 19. Studies on optical and electrical properties of SILAR-deposited CuO thin films, S.Visalakshi, R.Kannan, S.Valanarasu, S.Rajashabala, http://dx.doi.org/10.1080/14328917.2016.1194586, JMat.sci: Res. Innovations, 2016
- 20. Synthesis and Characterization of Polymer (Sulfonated poly-ether-ether-ketone) based Nanocomposite (h-Boron Nitride) Membrane for Hydrogen Storage, R. Naresh Muthu, S. Rajashabala and R.Kannan, 40, 1836-1845, Int.J. Hydrogen Energy (3.313), 2015
- 21. Synthesis, Structural and optical properties of Perovskite type CH₃NH₃PbI₃ nanorods, N. Rajamanickamn, S. Rajashabala and K. Ramachandran,1665, 080034, AIP Conf Proc, 2015
- 22. Room Temperature Ferromagnetism and structural properties of Nano BaTiO₃, N. Rajamanickamn, S. Rajashabala and K. Ramachandran,1665, 130002, AIP Conf Proc, 2015
- 23. Influence of Sr doping on structural, optical and magnetic properties of TiO2 nanoparticles, N. Rajamanickamn, S.S. Kanmani, S. Rajashabala and K. Ramachandran, 161, 520 522, Mater. Lett. (2.489), 2015
- 24. Site and chirality selective chemical modifications of boron nitride nanotubes (BNNTs) via Lewis acid–base interactions, Rajashabala Sundaram, Steve Scheiner, Ajit K. Roy, Tapas Kar, 17, (3850-3866), Phys. Chem. Chem. Phys. (4.493), 2015
- 25. B=N Bond Cleavage and BN Ring Expansion at the Surface of Boron Nitride Nanotubes by Iminoborane, Rajashabala Sundaram, Steve Scheiner, Ajit K. Roy and Tapas Kar, 119,(3253 3259), J. Phys. Chem. C (4.772), 2015
- 26. Enhanced Proton Conductivity by the Influence of Modified Montmorillonite on Poly (Vinyl alcohol) Based Blend Composite Membranes, P.Bahavan Palani, K. Sainul Abidin, R. Kannan, S. Rajashabala, M. Sivakumar, 1731, 110028, AIP Conf Proc, 2015
- 27. Effect of nanocomposite on polyvinyl alcohol-based proton conducting membrane for direct methanol fuel cell applications, P. Bahavan Palani, R. Kannan, S. Rajashabala, S. Rajendran and G. Velraj, (DOI 10.1007/s11581-014-1193-1), Ionics (1.754), 2015
- 28. Experimental Investigation on Hydrogen Storage in Polymer Based Nanocomposite, R. Naresh Muthu, S. Rajashabala, and R. Kannan, 1665, 050092, AIP Conf Proc (1.49), 2015

- 29. Hexagonal Boron Nitride Nanoparticles Decorated Halloysite Clay Nanotubes as a Potential Hydrogen Storage Medium, R. Naresh Muthu, S. Rajashabala, and R. Kannan, AIP Conf Proc, 2015
- 30. Studies on PVA based nanocomposite Proton Exchange membrane for direct methanol fuel cell (DMFC) Applications, P. Bahavan Palani, R.Kannan, S. Rajashabala and G. Velraj, 73, 012128, IOP Conf. Ser.:Mater.Sci. Eng, 2015