- 1. J, Jayachandiran & Yesuraj, J. & Arivanandhan, Mukannan & Muthuraaman, B. & Jayavel, R. & Damodaran, Nedumaran., 2021. Bifunctional investigation of ultra-small SnO 2 nanoparticle decorated rGO for ozone sensing and supercapacitor applications. *RSC Advances*, 11, pp.856-866.
- 2. Kaliammal, R. & Parvathy, G. & Maheshwaran, G. & Sankaranarayanan, K. & Arivanandhan, Mukannan & Sudhahar, S., 2020. Crystal growth, structural, optical, thermal, and mechanical properties of new bis(2-amino-6-methyl pyridinium barbiturate) tetrahydrate organic single crystal for nonlinear optical applications. *Chinese Journal of Physics*, 68, pp.436-460.
- 3. Devi, N & Vijayakumar, K & Rajasekaran, P & Nedunchezhian, Alagar & Sidharth, D. & Masaru, Shimomura & Arivanandhan, Mukannan & Jayavel, R. & Masaru, S., 2020. Effect of Gd and Nb co-substitution on enhancing the thermoelectric power factor of nanostructured SrTiO3. *Ceramics International*, 10.1016/j.ceramint.2020.09.158.
- 4. Ismail, Mohamed & Vigneshwaran, J & Durai, Mani & Arivanandhan, Mukannan & Jose, Sujin & Jayavel, R. & Arunbalaji, Subramanian., 2020. Antimonene nanosheets with enhanced electrochemical performance for energy storage applications. *Dalton Transactions*. 49. 10.1039/D0DT01753A.
- P Rajasekaran, M Arivanandhan, Y Kumaki, Ramasamy Jayavel, Yasuhiro Hayakawa and Masaru Shimomura., 2020. Facile synthesis of morphology-controlled La:BaSnO3 for the enhancement of thermoelectric power factor. *CrystEngComm*, 22, pp.5363-5374.
- 6. Selvarajan, R., Vadivel, S., **Arivanandhan, M.** and Jayavel, R., 2019. Facile synthesis of pervoskite type BiYO3 embedded reduced graphene oxide (RGO) composite for supercapacitor applications. *Ceramics International*.
- 7. Padmalaya, G., Sreeja, B.S., Kumar, P.D., Radha, S., Poornima, V., Arivanandan, M., Shrestha, S. and Uma, T.S., 2019. A facile synthesis of cellulose acetate functionalized zinc oxide nanocomposite for electrochemical sensing of cadmium ions. *Journal of Inorganic and Organometallic Polymers and Materials*, 29(3), pp.989-999.
- 8. Yu, J., Inatomi, Y., Kumar, V.N., Hayakawa, Y., Okano, Y., **Arivanandhan, M.**, Momose, Y., Pan, X., Liu, Y., Zhang, X. and Luo, X., 2019. Homogeneous InGaSb crystal grown under microgravity using Chinese recovery satellite SJ-10. *NPJ microgravity*, *5*(1), p.8.

- 9. Dhanasekar, K., Sridaran, M., **Arivanandhan, M.** and Jayavel, R., 2019. A facile preparation, performance and emission analysis of pongamia oil based novel biodiesel in diesel engine with CeO2: Gd nanoparticles. *Fuel*, 255, p.115756.
- 10. Suresh, S., Devi, S.R., Sornamurthy, B.M., **Arivanandhan, M.** and Kumar, R.M., 2019. Growth, structural and optical studies of a novel nonlinear optical material: p-Toluidinium L-Tartrate. *Optik*, *185*, pp.651-656.
- 11. Mani, D., Tsunoji, N., Yumauchi, Y., Arivanandhan, M., Jayavel, R. and Ide, Y., 2018. Templated synthesis of atomically thin platy hematite nanoparticles within a layered silicate exhibiting efficient photocatalytic activity. *Journal of Materials Chemistry A*, 6(12), pp.5166-5171.
- 12. Saravanan, T., Anandan, P., Shanmugam, M., Jayakumari, T., **Arivanandhan, M.**, Azhagurajan, M., Hayakawa, Y. and Jayavel, R., 2018. Impact of graphene on the enhancement of electrochemical and photocatalytic performance of Gd2O3-Graphene nanocomposites. *Solid State Sciences*, 83, pp.171-180.
- 13. Chinnu, M.K., Anandan, P., **Arivanandhan, M.**, Venkatesan, A., Kumar, R.M. and Jayavel, R., 2018. Effect of rare earth doping on the enhancement of photocatalytic performance of ceria nanocrystals under natural sunlight. *Journal of Materials Science: Materials in Electronics*, 29(11), pp.9564-9572.
- 14. Thangappan, R., **Arivanandhan, M.**, Kumar, R.D. and Jayavel, R., 2018. Facile synthesis of RuO2 nanoparticles anchored on graphene nanosheets for high performance composite electrode for supercapacitor applications. *Journal of Physics and Chemistry of Solids*, *121*, pp.339-349.
- 15. Jayachandiran, J., Yesuraj, J., Arivanandhan, M., Raja, A., Suthanthiraraj, S.A., Jayavel, R. and Nedumaran, D., 2018. Synthesis and Electrochemical Studies of rGO/ZnO Nanocomposite for Supercapacitor Application. *Journal of Inorganic and Organometallic Polymers and Materials*, 28(5), pp.2046-2055.
- 16. Jayachandiran, J., Raja, A., Arivanandhan, M., Jayavel, R. and Nedumaran, D., 2018. A facile synthesis of hybrid nanocomposites of reduced graphene oxide/ZnO and its surface modification characteristics for ozone sensing. *Journal of Materials Science: Materials in Electronics*, 29(4), pp.3074-3086.
- 17. Thangappan, R., **Arivanandhan, M.**, Kalaiselvam, S., Jayavel, R. and Hayakawa, Y., 2018. Molybdenum oxide/graphene nanocomposite electrodes with enhanced

- capacitive performance for supercapacitor applications. *Journal of Inorganic and Organometallic Polymers and Materials*, 28(1), pp.50-62.
- 18. Karthick, N.A., Thangappan, R., **Arivanandhan, M.**, Gnanamani, A. and Jayavel, R., 2018. A Facile Synthesis of Ferrocene Functionalized Graphene Oxide Nanocomposite for Electrochemical Sensing of Lead. *Journal of Inorganic and Organometallic Polymers and Materials*, 28(3), pp.1021-1028.
- 19. Vadivel, M., Babu, R.R., Ramamurthi, K. and **Arivanandhan, M.**, 2017. Enhanced dielectric and magnetic properties of polystyrene added CoFe2O4 magnetic nanoparticles. *Journal of Physics and Chemistry of Solids*, *102*, pp.1-11.
- 20. Murugan, R., Vijayaprasath, G., Thangaraj, M., Mahalingam, T., Rajendran, S., **Arivanandhan, M.**, Loganathan, A., Hayakawa, Y. and Ravi, G., 2017. Defect assisted room temperature ferromagnetism on rf sputtered Mn doped CeO2 thin films. *Ceramics International*, *43*(1), pp.399-406.
- 21. Chandrasekaran, P., **Arivanandhan, M.**, Jayakumari, T. and Anandan, P., 2017. The impact of sintering temperature on structural, morphological and thermoelectric properties of zinc titanate nanocrystals. *Materials Research Express*, 4(7), p.075036.
- 22. Vadivel, M., **Arivanandhan, M.** and Ramamurthi, K., 2017. Structural, Spectral, Morphological, Dielectric, Magnetic, and Optical Properties of La-Ni ions cosubstituted CoFe 2 O 4 Nanoparticles. *Journal of Superconductivity and Novel Magnetism*, 30(2), pp.441-453.
- 23. Thangappan, R., Kalaiselvam, S., Elayaperumal, A., Jayavel, R., **Arivanandhan, M.,** Karthikeyan, R. and Hayakawa, Y., 2016. Graphene decorated with MoS 2 nanosheets: a synergetic energy storage composite electrode for supercapacitor applications. *Dalton transactions*, 45(6), pp.2637-2646.
- 24. Velusamy, P., Babu, R.R., Ramamurthi, K., Elangovan, E., Viegas, J., Dahlem, M.S. and **Arivanandhan, M.**, 2016. Characterization of spray pyrolytically deposited high mobility praseodymium doped CdO thin films. *Ceramics International*, 42(11), pp.12675-12685.
- 25. Gandhi, T.I., Babu, R.R., Ramamurthi, K. and **Arivanandhan, M.**, 2016. Effect of Mn doping on the electrical and optical properties of SnO2 thin films deposited by chemical spray pyrolysis technique. *Thin Solid Films*, 598, pp.195-203.

- 26. Kanchana, P., Radhakrishnan, S., Navaneethan, M., Arivanandhan, M., Hayakawa, Y. and Sekar, C., 2016. Electrochemical sensor based on fe doped hydroxyapatite-carbon nanotubes composite for l-dopa detection in the presence of uric acid. *Journal of nanoscience and nanotechnology*, 16(6), pp.6185-6192.
- 27. Kumar, V.N., **Arivanandan, M.**, Koyoma, T., Udono, H., Inatomi, Y. and Hayakawa, Y., 2016. Effects of varying indium composition on the thermoelectric properties of In x Ga 1– x Sb ternary alloys. *Applied Physics A*, *122*(10), p.885.
- 28. Gandhi, T.I., Babu, R.R., Ramamurthi, K. and **Arivanandhan, M.**, 2016. Electrical and optical properties of Co 2+: SnO 2 thin films deposited by spray pyrolysis technique. *Journal of Materials Science: Materials in Electronics*, 27(2), pp.1662-1669.