

Thiagarajar College of Engineering, Madurai-625015

Department of Chemistry



Publications

Journals

1. A. Ramalinga Chandra Sekar, M. Mahendran, R. Vasudevan, R. Velkennedy "Polymer Modified Bitumen Prepared Using Abs Polymer- Characterization and Application In Flexible Pavement"; ARPN Journal of Engineering and Applied Sciences. Vol. 10. No.8. May 2015. P. No. 3786 – 3792
2. Vasudevan R., Ramalinga Chandra Sekar, A. Velkennedy R, and Sundarakannan. B 2012, A technique to dispose waste plastics in an ecofriendly way – Application in construction of flexible pavements, " Construction and Building Materials ; Vol. 28, no. 1, pp. 311-320
3. Effect of annealing temperature on the band gap of ZnO and Carbon doped ZnO thin films. A. L. Subramaniyan, J. Sabareswaran, M. Kottaisamy, and R. Ilangovan, Journal of Nanoelectronics and Optoelectronics Vol. 10, 1–4, 2015
4. Optical sensing of TiO₂ nanofluids for self stability, A.L.Subramaniyan,M.Kottaisamy and R.Ilangovan, Materials Science Forum, Vol. 87, 143-149, 2015
5. Investigations on the absorption spectrum of TiO₂ nanofluids, A. L.Subramaniyan, Lakshmi priya, M. Kottaisamy and R. Ilangovan, Journal of Energy in South Africa, Vol.25, No.4, pp-123-127,2014
6. Synthesis of few layer graphene by direct exfoliation of graphite and a Raman spectroscopic study S.Gayathri, P.Jayabal, M.Kottaisamy and V.RamakrishnanAIP ADVANCES 4, 027116, 2014
7. Synthesis of ZnO decorated graphene nano-composite for enhanced photocatalytic properties S.Gayathri, P.Jayabal, M.Kottaisamy and V.Ramakrishnan. J. Appl. Phys. 115, 173504 (2014)
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9. Structure, morphology and thermal characteristics of banana nano fibers obtained by steam explosion, Deepa, B., Abraham, E., Cherian, B.M., Bismarck, A., Blaker, J.J., Pothan, L.A., Leao, A.L. Kottaisamy.M. Bio-resource Technology 102, 1988-1997, 2011
10. Dynamic quenching study of 2-amino-3-bromo-1,4-naphthoquinone by titanium dioxide nano particles in solution (methanol)S.Pushpam, M. Kottaisamy and V.Ramakrishnan, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 114, 272-276, 2013
11. Comparative study of the Adsorption Efficiency of the synthetic nano Iron oxide and Commercial activated charcoal towards the removal of Nickel(II) ions, Kanthimathi.G, Kotteeswaran.P, Thillai Arasu.P, Govindaraj.P and Kottaisamy.M,E-J.Chem 9, 2384-2393, 2012
12. Aomic Absorption Spectral studies for the removal of Lead(II) ion by using synthetic nano and macro Fe₃O₄", Kanthimathi. G, Kotteeswaran.P and Kottaisamy.M, (2012), Advanced Materials Research (Recent trends in Advanced Materials), 584,173-177,2012
13. Structure, morphology and thermal characteristics of banana nano fibers obtained by steam explosion, Deepa, B., Abraham E., Cherian, B.M., Bismarck, A., Blaker, J.J., Pothan, L.A., Leao, A.L. Kottaisamy, M. Bio-resource Technology 102, 1988-1997, 2011
14. Photoluminescence efficiencies of Nanocrystalline versus bulk Y₂O₃:Eu phosphor– Revisited

15. V.Sivasankar, S.Rajkumar, S.Murugesh and A.Darchen, "Tamarind (Tamarindus Indica) Fruit shell carbon: A calcium rich promising adsorbent for fluoride removal from ground water", J.Hazard.Mater., Vol.225-226, pp. 164-172,2012. (Impact Factor – 4.331)
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22. S.Balaji, M.Ananda Kumar and T.Mani Chandran, "Electrodeposited Three Dimensional Tin Nano Wire Anode for Thin Fil Li ion Micro Batteries" *Russian journal of Electrochemistry* (accepted) 2015 (0.9)
23. T.Mani Chandran, S.Balaji and D.Mutharasu,"Sputtering Deposition of Aluminum Molybdenum alloy thinfilm anode for thinfilm micro batteries" *Electronic Materials Letters*,Vol.11,pp. 416-423,2015. (1.980)
24. T.Mani Chandran, S.Balaji,"Structural and Electrochemical performance of Al-Mo thinfilm alloy anodes for Li ion Batteries" *International journal of Chem Tech Research*, Vol.6, pp.2162-2164, 2014 (0.5)
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26. S.Balaji, T.Mani Chandran and D.Mutharasu,"A comprehensive study on influence of Nd³⁺ substitution on properties of LiMn₂O₄",*Bulletin of Materials Science*,Vol.35,pp.471-480, 2012 (1.017)
27. S.Balaji, R. Vasukib, D. Mutharasu, "A feasibility study of SnO₂/NiFe₂O₄ nanocomposites as anodes for Li ion batteries" *Journal of alloys and Compounds*, Vol.554, pp.25-31, 2013 (2.999)
28. S.T. Senthilkumar, B. Senthilkumar, S. Balaji, C. Sanjeeviraja and R. Kalai Selvan, " Preparation of activated carbon from sorghum pith and its structural and electrochemical properties" *Materials Research Bulletin* Vol. 46, pp.413-419, 2011 (2.29)
29. B. S. Kalnoor, P.B. Bisht, K. C. Jena, V. Velkannan and P. Bhyrappa, "Mixed β Pyrrole Substituted meso-Tetraphenylporphyrins and Their Metal Complexes: Optical Nonlinearity Using Degenerate Four Wave Mixing Technique", *The Journal of Physical Chemistry A*, Vol, 117, page 8216- 8221 ,2013 (2.69)
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31. S.Gopalakrishnan, G.Viswanathan, S. Siva Ilango,Prevalence of fluorosis and identification of fluoride endemic areas in Manur block of Tirunelveli District, Tamil Nadu, South India *Applied Water Science*,ISSN 2190-5487,Volume 2,Number 4, 2012
32. A J Sunija, S. Siva Ilango and K P Vinod Kumar, Synthesis and characterization of bio-based polyurethane from benzoylated cashewnut husk tannins, *Bull.Mater. Sci.* Vol. 37, No. 3, May 735– 741 2014.
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34. A J Sunija, S.Siva Ilango and K P Vinod Kumar Thespesia populnea reinforced Cashew nut Husk Tannin based Polyurethane Composites Accepted for publication in Journal of Natural Fibers
35. S.Balaji, M.Ananda Kumar and T.Mani Chandran, "Electrodeposited Three Dimensional Tin Nano Wire Anode for Thin Fil Li ion Micro Batteries" *Russian journal of Electrochemistry* (accepted) 2015 (0.9)
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Conferences

- Y₂O₂S:Eu³⁺ -Polyurethane -A novel near UV excitable white light emitting phosphor composites for phosphor converted white light emitting diodes (*pcWLEDs*), B.Sundarakannan and M.Kottaisamy, ICFM-2014(05-02-14 to07-02-14), IIT Kharagpur

2. Synthesis and Characterization of white light emitting Nano ZnO/Polyvinyl alcohol composites for luminescent conversion light emitting diodes (LUCOLEDs), B.Sundarakannan and M.Kottaisamy, ICAFM-2014(19-02-14 to 21-02-14), CSIR-IISER Trivandrum
3. *Synthesis of Near UV and Blue Light Excitable White Light Emitting ZnO for Luminenscent Converted Light Emitting Diodes(LUCOLEDs)*, B.Sundarakannan and M.Kottaisamy, 59th DAE Solid State Physics Symposium December 16-20.2014, VIT University Vellore.
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8. Influence of graphene on the photocatalytic performance of ZnO, Shunmugiah Gayathri, Palanisamy Jayabal, Muniasamy Kottaisamy, Veerabahu Ramakrishnan, National Seminar on X-ray Crystallography (NSXC-2014), School of Physics, Madurai Kamaraj University, Madurai, Sept 29-Oct 1, 2014.
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14. A.L.Subramaniyan, M.S.Govaradhan, Lokesh, MuthRakappan, D.Sundharakannan, M.Kottaisamy, R.Ilangovan Investigation of thermal performance of copper heat pipe with TiO₂ nanoparticles,IEEE Proceedings, 712-716 (2013)

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18. J.Shanmugapriya and S.Muthusubramanian, "An Efficient four component synthesis of 6-aryl-2-alkoxy-5-(iH imidazole-1-yl)-4-aryl pyridine-3-carbonitrile" *Proceedings on International Conference on solution to Ecological Challenges: Multidimensional perspectives, Fatima College, Madurai.*
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Conferences Proceedings (held abroad)

1. M.Kottaisamy, B.Sunadrakannan, B.Vigneshkumar, H.Kominami, K.Hara and Y.Nakanishi, " Development of zinc oxide and allied material composites for display devices and white light emitting diodes", International symposium toward the future of Advanced Researches in Shizuoaka University and Joint International workshops on Advanced Nanovision Science/Advanced Green Science/promotion of global young researches in Shizuoaka University, Japan, 95-98, Jan, 27-29, 2015
2. M.Kottaisamy, H.Kominami, Y.Nakanishi and K.Hara, "Development of encapsulated diband and triband phosphors for LED lighting and display devices", International Workshop on Advanced Nanovision Science, Shizuoaka University, Japan, 22-26,Jan 23-24, 2012