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**PUBLICATIONS:**

1. Krithikadevi R, Siva C, **Balraj B**, Arulmozhi M, “One pot polyol synthesis of CuO-CuFe<sub>2</sub>O<sub>4</sub> nanocomposites and their structural, optical and electrical property studies”, Elsevier-Materials Letters, Vol. 175, pp. 106-109, 2016, Impact Factor: 2.687. ISSN: 0167-577X.
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3. **Balraj B**, Arulmozhi M, Siva C, Krithkadevi R, “Synthesis, characterization and electrochemical analysis of hydrothermal synthesized AgO incorporated ZrO<sub>2</sub> nanostructures”, Springer-Journal of Materials Science: Materials in Electronics, Vol. 28, No. 8, pp. 5906-5912, 2017, Impact Factor: 2.324. ISSN: 1573-482X.
4. Krithikadevi R, Arulmozhi M, **Balraj B**, Siva C, “Optical and Electrical Characteristics of n-Zn Sm O/p-Si Heterojunction diodes”, Elsevier - Applied Surface Science, Vol. 418, No. Part A, pp. 312-317, 2017, Impact Factor: 4.439, ISSN: 0169-4332.
5. Krithikadevi R, Arulmozhi M, Siva C, **Balraj B**, “Optical and electrical properties of n-ZnAgAuO/p-Si heterojunction diodes”, Springer-Journal of Materials Science: Materials in Electronics, Vol. 28, No. 7, pp. 5440-5445, 2017, Impact Factor: 2.324.
6. Krithikadevi R, Siva C, **Balraj B**, Arulmozhi M, John Berchmans L, “Investigations on Structural, Optical, Magnetic Properties of Solution Combustion Synthesized Nanocrystalline Iron Molybdate”, Springer-Bulletin of Materials Science, Vol. 40, No. 1, pp. 87-92, 2017, Impact Factor: 0.925, ISSN: 0973-7669.
7. **Balraj B**, Senthilkumar N, Julie A, VethaPotheher I, Arulmozhi M, “Synthesis and characterization of Zinc Oxide nanoparticles using marine Streptomyces sp. with its investigations on anticancer and antibacterial activity”, Springer-Research on Chemical Intermediates, Vol. 43, No. 4, pp. 2367-2376, 2017, Impact Factor: 1.674, ISSN: 1568-5975.

8. **Balraj B**, Arulmozhi M, “Isolation, characterization and enzymatic activity of *Streptomyces* sp. and its pH control during fermentation process”, *IET-Systems Biology*, Vol. 11, No. 4, pp. 114-118, 2017, Impact Factor: 0.873.
9. Yuvarani P, **Balraj B**, Vijayachitra S, Siva C, “Green synthesis and characterization of silver nanomaterials using leaf extract of *Prosopis cineraria* (L) for antibacterial and anti-cancer applications”, *IOP - Materials Research Express*, Vol. 5, No. 10, ID. 105402, Impact Factor: 1.449, 2018, DOI: 10.1088/2053-1591/aadb4f, ISSN: 2053-1591.
10. **Balraj B**, Arulmozhi M, Jayapriya M, “Biological fabrication of silver nanomaterials and its applications in Pharmaceutical Fields”, *Inderscience - Int. J. of Computational Materials Science and Surface Engineering*, Vol. 7, No. 2, pp. 79-88, 2018, SNIP: 0.332, DOI: 10.1504/IJCMSSE.2018.092532, ISSN:1753-3473.
11. Jayapriya M, Arulmozhi M, **Balraj B**, “Optical, biological and catalytic properties of ZnO incorporated MgO nanostructures using *Musa paradisiaca* bract extract”, *Elsevier – Ceramics International*, Vol 44, No. 11, pp. 13152-13160, 2018, Impact Factor: 3.059. ISSN: 0272-8842
12. **B. Balraj**, V. Subbu Chidambaram, M. Pari, B. Gokul, N. Prasath, “Detection for Power Theft prior to feeding energy Meter and Intimating to Control Room”, *International Journal of Pure and Applied Mathematics*, Vol. 118, No. 20, pp. 2055-2064, 2018, SNIP: 0.394.
13. Gomathi E, **Balraj B**, Kumaraguru K, “Electrochemical degradation of scarlet red dye from aqueous environment by titanium based dimensionally stable anodes with SS electrodes”, *Springer - Applied Biological Chemistry*, Vol. 61, No. 3, pp. 289-293, 2018, Impact Factor: 1.362.
14. Amuthamena S, **Balraj B**, “Implementation and Study of Conventional Surface Sliding Mode Controller for an Interacting Level System”, *International Journal of Pure and Applied Mathematics*, Vol. 118, No. 8, pp. 445-450, 2018, SNIP: 0.394.
15. S. Kiruthika, **B. Balraj**, “Design of 4×4 wallace tree multiplier based on 0.12μm CMOS technology using GDI full adder”, *International Journal of Pure and Applied Mathematics*, Vol. 119, No. 15, pp. 3293-3300, 2018, SNIP: 0.394. ISSN: 1314-3395.
16. **Balraj B**, Senthilkumar N, VethaPotheher I, Arulmozhi M, “Characterization, antibacterial, anti-arthritis and in-vitro cytotoxic potentials of biosynthesized Magnesium Oxide nanomaterials”, *Elsevier - Materials Science & Engineering - B*,

Vol. 231, pp. 121-127, 2018, Impact Factor: 3.316, DOI: 10.1016/j.mseb.2018.10.011, ISSN: 0921-5107

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18. **Balraj B**, Amuthameena S, Rajangam K, “Water Based Cooling Cum Fire Extinguisher System for Motor Vehicles” Indian Patent office, Application No. 201941011375 on 24.03.2019,
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20. K. Rajangam, K. SwethaGowri, R. Prem Kumar, L.M. Surriya, S. Vishnu Raj, **B. Balraj**, “Green mediated fabrication and characterization of ZnO/Ag nanocomposite for energy storage applications”, IOP - Materials Research Express, , Vol. 6, No. 9, ID. 095524, 2019, Impact Factor: 1.449, DOI: 10.1088/2053-1591/ab3334, ISSN: 2053-1591.
21. Vivek C, **Balraj B**, Thangavel S, “Structural, optical and electrical behavior of ZnO@Ag core-shell nanocomposite synthesized via novel plasmon-green mediated approach”, Springer-Journal of Materials Science: Materials in Electronics, Vol. 30, No. 12, pp. 11220–11230, 2019, DOI: 10.1007@s10854-019-01467-x, Impact Factor: 2.324.
22. Sridevi A, Siva C, **Balraj B**, G.K.D. PrasannaVenkatesan, “Green Synthesis and Electrical Properties of p-CuO/n-ZnOHeterojunction Diodes”, Springer - Journal of Inorganic and Organometallic Polymers and Materials, Vol. 29, No. 2, pp. 535-540, 2019, DOI: 10.1007/s10904-018-1026-1, Impact Factor: 1.754, ISSN: 1574-1451.
23. Jayapriya M, Arulmozhi M, **Balraj B**, “Fabrication of silver nanoparticles using Musa aradisiacal for its synergistic combating effect on Phytopathogens and free radical scavenging activity”, IET Nanobiotechnology, Vol. 13, No. 2, pp.134-143, 2019, DOI: 10.1049/iet-nbt.2018.5136, Impact Factor: 2.059, ISSN: 1751-875X.
24. A.Sankarana, K. Kumaraguru, **Balraj Baskaran**, Annathurai Sridevi, “Investigation on catalytic activity of CuO/La<sub>2</sub>O<sub>3</sub>, CuO/Gd<sub>2</sub>O<sub>3</sub> and CuO/La<sub>2</sub>O<sub>3</sub>/Gd<sub>2</sub>O<sub>3</sub>

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28. K. Rajangam, S. Amuthameena, S. Thangavel, V.S. Sanjanadevi, **B. Balraj**, ”Synthesis and characterisation of Ag incorporated TiO<sub>2</sub> nanomaterials for supercapacitor applications”, Journal of Molecular Structure ( IF 2.463 ) Volume 1219, 5 November 2020, 128661, <https://doi.org/10.1016/j.molstruc.2020.128661>.