

LIST OF PUBLICATIONS

1. **“Structural, Dielectric Permittivity and Optical Characteristics of Casting Poly Vinyl Alcohol/Calcium Nickel Aluminate Nanocomposit Films”**, H. M. Gayitri, Murad Al-Gunaid, B. S. Madhukar, Siddaramaiah and A. P. Gnana Prakash , Polymer –Plastic Technology and Materials, Vol.58, pp.1110-1124,(2019) (Taylor &Francis) IF : 3.267
2. **“Investigation of triplex $\text{CaAl}_2\text{ZnO}_5$ nanocrystals on electrical permittivity, optical and structural characteristics of PVA nanocomposite films”**, H. M. Gayitri, Murad Al-Gunaid, Siddaramaiah and A. P. Gnana Prakash , Polymer Bulletin, Vol.77: pp.5005–5026 (2020) (Springer) IF: 2.87
3. **“Optical, structural and thermal properties of hybrid PVA/ $\text{CaAl}_2\text{ZrO}_6$ nanocomposite films “** H. M. Gayitri, Murad Al-Gunaid, Siddaramaiah and A. P. Gnana Prakash, Indian Journal of Engineering and Materials Sciences, Vol. 27, , pp. 320-332, (2020) (NISCAIR) IF:0.88
4. **”Optimized nano-perovskite lanthanum cuprate decorated PVA based solid polymer electrolyte”** Gayitri H.M, Murad Q.A. Al-Gunaid, Somesh T.E, Fares Hezam Al-Ostoot and Siddaramaiah, Polymer–Plastic Technology and Materials. Polymer-Plastics Technology and Materials, 59 (2), pp. 215-229. (2020). (Taylor &Francis) IF: 3.267
5. **“Impact of nano-perovskite La_2CuO_4 on dc-conduction, opto-electrical sensing and thermal behavior of PVA nanocomposite films”** Gayitri H.M, Murad Q.A. Al-Gunaid, Somesh T.E, and Siddaramaiah, Polymer-Plastics Technology and Materials 59, no. 5 (2020): 469-483. (Taylor &Francis) IF: 3.267
6. **“Ga-ZnO/PVDF Nanogenerator”** H. M. Gayitri, M.V. Yathish Kumar, Manjunath Kambar, D.K. Shubhang, S.U. Rudraswamy and B.S. Madhukar, *Journal of Emerging Technologies and Innovative Research*, Vol. 6, pp.406-408, 2019. IF:7.95
7. **“Design and Implementation of Supervisory Control and Data Acquisition system for Paint shop”** Gayitri H M, Shwetha , *International Journal of Research and Analytical Reviews*, Vol. 5 , 3 2018
8. **“Automatic Back-Wash Filtering System”** Gayitri H M , Supriya L C, *International Journal of Pure and Applied Mathematics* ,Vol. 120, 6, 2018, pp.6385-6400
9. **”Investigation on opto-Electrical, structural and electrochemical performance of PVA/ ZnBiMoO_7 hybrid nanocomposites”**, Polymer Bulletin (1-22), 022 (Springer) IF: 2.87, <https://doi.org/10.1007/s00289-021-04056-3>

10. "AI Based Advanced Navigation Assistant For The Visually Impaired" H. M. Gayitri, Xavier fernandis, srikant, Ujwal naik, *Mathematical Statistician and Engineering Applications*, Vol. 71 No. 4 (2022) pp. 2754-2764

11." Hand Guesture recognition and Voice Conversion for Speech Impaired" H. M. Gayitri, Harshitha C A, *Mathematical Statistician and Engineering Applications*, Vol, 71, 4, 2022 pp. 2739-2746

12."Synthesis and characterization of PVA/ ZnWMoO₇ nanocomposites for opto electronics and super capacitor applications", H. M. Gayitri, Kumar J R, Murad Al-Gunaid, *Polymer Bulletin* (In production) (Springer) IF: **2.87** DoI : [10.1007/s00289-022-04458-x](https://doi.org/10.1007/s00289-022-04458-x)

13."Smart Robot for restaurant Food Delivery" H. M. Gayitri, Suhaas Adhikari, *Mathematical Statistician and Engineering Applications*, Vol. 71 No. 4 (2022) pp.2747-2753

14.Characterization of Opto-Electrical, Electrochemical and Mechanical Behaviors of Flexible PVA/(PANI+La₂CuO₄)/LiClO₄-PC Polymer Blend Electrolyte Films Murad Q. A. Al-Gunaid, Gayitri H. M., Khaled Alkanad, Nabil Al-Zaqri, Ahmed Boshala, and Fares H. Al-Ostoot, *Macromol. Res.*, 30, 00 (2022) (Springer- IF-2.227)

Papers Presented in Conference

1. **H. M. Gayitri**, Murad Al-Gunaid, B. S. Madhukar, Siddaramaiah and A. P. Gnana Prakash, **"Effect of lithium chloride content on spectral, electrical and microstructural behaviours of polyvinyl alcohol composites"**, Intl. Conf. on Advanced Materials and Tech. (ICMAT-16), held at Sri Jayachamarajendra College of Engineering, Mysuru, May 26-28, 2016.

2. **H. M. Gayitri**, B. S. Madhukar, Siddaramaiah and A. P. Gnana Prakash, **"Effect of gamma irradiation on crystalline and conducting properties of polymer nanocomposite films"**, organized by XL Indian Social Science Congress, and University of Mysore, Mysore, December 19-23, 2016.

3. **H. M. Gayitri**, T. S. Vinay, Siddaramaiah and A. P. Gnana Prakash, **"Lithium barium doped cerium oxide nano materials for dye synthesized solar cell applications"**, 7th Natl. Conf. on Novel Polymeric Materials (Synthesis, processing & characterization). Polycon-2017, held at Sri Jayachamarajendra College of Engineering, Mysuru, Sept.15- 16, 2017.

4. **H. M. Gayitri**, M. D. Ayub, and materials Siddaramaiah and A. P. Gnana Prakash, **"Synthesis and characterization of nano hybrid materials for super capacitor applications"** Innovative Design, Analysis and Development Practices in Aeronautical and Automobile Engineering

(IDAD), Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, Avadi, Chennai, India. February 22-24, 2018.

5. **H. M. Gayitri**, Murad Al-Gunaid, B. S. Madhukar, Siddaramaiah and A. P. Gnana Prakash, "**Interactive effect of nano-CaCdAl₂O₅ contents on opto-electrical constants of PVA-OH nanocomposites**", Intl. Conf. on Advanced Materials and Tech. (ICMAT-20), held at Sri Jayachamarajendra College of Engineering, Mysuru, January 16 -18, 2020.