List of Publications

International Journals:

1. Bandgap and electrochemical engineering for disordered $LaFeO_3$, **Uma Sharma**, U.K. Kailash Veerappan, Pardeep K. Jha, Priyanka A. Jha, and Prabhakar Singh, Journal of Applied Physics,131 (2), 024901.

2. Charge particle dynamics and electrochemical behavior of $SrTiO_{3-\delta}$ as anode material for IT-SOFC applications, **Uma Sharma**, Vani Pawar, Prabhakar Singh, International Journal of Hydrogen Energy, Pages 1278-1289.

3. Highly efficient and robust bifunctional environmental friendly $LaSrFeTiO_3$ catalyst for H2/O2 fuel cells, **Uma Sharma**, Priyanka A. Jha, Pardeep K. Jha, Prabhakar Singh, (Under Review).

4. Advancements in Bifunctional Catalysts for Unitized Regenerative Fuel Cells: Exploring Polaronic Conduction and Heterostructure Designs, **Uma Sharma**, Priyanka A. Jha, Pardeep K. Jha, Prabhakar Singh, (**Accepted** in Journal of Physics D: Applied Physics).

5. To examine the effect of synthesis techniques on the physical and electrochemical properties of Lanthanum Strontium Ferrite (LSF), **Uma Sharma**, Jay N. Mishra, Vani Pawar, Prabhakar Singh (Under Preparation).

Papers Published as Conference Proceedings:

- Properties of $La_xSr_{1-x}TiO_{3-}$ as SOFC Electrode Material, **Uma Sharma,** Priyanka A. Jha, Pardeep K. Jha and Prabhakar Singh Electrical Materials Today: Proceedings, July 22.

National/International Conference Presentations:

1. 13th National conference on Solid State Ionics, Department of Physics, IIT Roorkee (Poster Presentation).

2. National webinar series on experimental and computational tools for material research, (ICTMR 2020), Central University of Rajasthan.
3. International e-Conference on Advanced Functional Materials and Optoelectronic Devices, Centre for Renewable Energy, RBIPS, VBS Purvanchal University, Jaunpur (Poster Presentation).
4. E- international symposium on synthesis and characterization of smart materials and their potential applications, Guru Govind Singh Indraprastha University, New Delhi.
5. Online Workshop on Rietveld Refinement Method, organized by UGC-DAE Consortium for Scientific Research, Mumbai Centre in association with Indore Centre.
6. International Conference on Energy Materials and Devices (ICEMD-2022), Department of Physics (MMV) Banaras Hindu University, Varanasi (Oral Presentation, Paper Published in Materials Today: Proceedings, July 22).
7. Two-day workshop on "Electrochemistry Techniques" organised by Sophisticated Analytic and Technical Help Institute (SATHI), Banaras Hindu University, Varanasi.
8. International Union of Materials Research Society, Materials Research Society of India
9. International Conference in Asia-2022, (IUMRS-ICA 2022), IIT Jodhpur (Poster-Presentation).
10. 9-day Online hands-on Training on Rietveld Refinement conducted by SIAS Research Forum in collaboration with Department of Physics, PSMO College, Tirurangadi.

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