

### List of Publications (Research Articles)

1. **Satyendra Kumar Satyarthi**, Vishwa Pratap Singh, Chandra Bhal Singh, “Enhanced dielectrics, ferroelectric and optical properties of lithium niobate for high temperature applications using potassium oxide ( $K_2O$ ) additive”. **Ceramic International (2024)** <https://doi.org/10.1016/j.ceramint.2024.03.161> (Impact Factor = 5.2).
2. **Satyendra Kumar Satyarthi**, Vishwa Pratap Singh, Harish Verma, Akhilesh Kumar Singh, “Electrical and Optical Properties of Environmental Friendly  $Li_{(1-x)}Sm_{x/3}NbO_3$  Ceramics for High Temperature Energy Storage Applications”, **Energy Storage (Wiley Publications 2024)**, <https://doi.org/10.1002/est2.642> (Impact Factor = 3.32).
3. Vishwa Pratap Singh, **Satyendra Kumar Satyarthi**, Ankit Dwivedi, Akansha Dwivedi, Akhilesh Kumar Singh, “Boosting Energy Storage of PVDF Nanocomposite Based Flexible Self-Standing Film with Low Amount of Hydroxylated  $V_2O_5$ ” **ACS Applied Energy Materials (2022)**. <https://doi.org/10.1021/acsaem.2c02425> (Impact Factor = 6.95).
4. Vishwa Pratap Singh, Chandra Bhal Singh, **Satyendra Kumar Satyarthi**, Dinesh Kumar, Akhilesh Kumar Singh, “Highly enhanced energy storage properties of  $H_2O_2$  Hydroxylated rare-earth ferrites ( $LaFeO_3$  and  $GdFeO_3$ ) Nanofillers in Poly (Vinylidene Fluoride) based Nanocomposite Film” **J Mater Sci: Mater Electron (2022)**. <https://doi.org/10.1007/s10854-022-08836-z> (Impact Factor = 2.78)
5. Vishwa Pratap Singh, **Satyendra Kumar Satyarthi**, Srishti Paliwal, Akhilesh Kumar Singh “Enhancement in Polarization and Energy Density of PVDF Matrix Using Hydroxylated  $CeO_2$ -NPs as Filler in Nanocomposite Thick Film, 2023 **IEEE International Symposium on Applications of Ferroelectrics (ISAF)** <https://doi.org/10.1109/ISAF53668.2023.10265521>.
6. **Satyendra Kumar Satyarthi**, Vishwa Pratap Singh, Chandra Bhal Singh, Dinesh Kumar, Akhilesh Kumar Singh, “Holistic investigation of Multifaceted Properties for Environment friendly  $(1-x)LiNbO_3-x(Li_{0.5}Dy_{0.5})TiO_3$  Solid Solutions for high temperature energy storage applications” (To be communicated).
7. Vinod Kumar, **Satyendra Kumar Satyarthi**, Biswajit Jena, Harish Verma, Shail Upadhyay, Akhilesh Kumar Singh, Sumit Chaudhary, R.N. Rai, Yashwant Pratap Kharwar, Kothandaraman Ramanujam, Indra Bahadur, N.B.Singh, Dhanesh Tiwari, K.D. Mandal, "Evidence of a half-filled orbital more stable ( $3d^5$ ) in Mn-doped CCTO ceramic with varying sintering temperature" (To be communicated).
8. Harish Verma, Pramod Kumar, **Satyendra Kumar Satyarthi**, Bhaskar Bhattacharya, Akhilesh Kumar Singh, Shail Upadhyay, “Investigation of  $La_2FeO_4$ -Rgo as an Environmentally Friendly Material for Symmetric and Asymmetric Super capacitor: An Electrochemical Study”. (Under revision to **The Journal of Energy Storage**).
9. Ankit Dwivedi, **Satyendra Kumar Satyarthi**, Vishwa Pratap Singh, Akhilesh Kumar Singh, “Improved Dielectric and Energy Storage Properties of hydroxylated  $BaZrO_3$ / Poly (Vinylidene difluoride) nanocomposites for High Energy Density Capacitor Application”, (To be communicated).
10. Devendra Kumar Gond, **Satyendra Kumar Satyarthi**, Vishwa Pratap Singh, Vandna, Akhilesh Kumar Singh, S. N. Upadhyay, Pradeep Kumar Mishra, Vijay Laxmi Yadav” Optimization and Assessment of Alkali treatment for Enhanced Performance of PVA/Flax Fiber Biocomposite Films for Sustainable Packaging Applications, (Under Revision **Polymer Composite, Wiley**).



## **List of Publications (Book Chapters)**

1. Chapter Name: **Nanotechnology's Utility in Renewable Energy**

**Book Title:** Nanotechnology Applications for Industry Revolution 4.0

**Authors:** **Satyendra Kumar Satyarthi**, Ishani Mishra, Vishwa Pratap Singh, Kamal Arora, RamaNand Rai, Akhilesh Kumar Singh

**Publisher:** CRC Press, Taylor and Francis Group, USA

**Status:** Under Revision

2. Chapter Name: **Uncovering the Limits of Lithium Cobalt Oxide: Challenges and Innovations for High-Voltage Lithium-Ion Batteries.**

**Book Title:** **Advancement in Oxide Utilization for Li Rechargeable Batteries,**

**Authors:** Vishwa Pratap Singh, Deji.R, **Satyendra Kumar Satyarthi**, Gulshan Kumar, Akhilesh Kumar Singh, Ramesh K Sharma,

**Publisher:** Royal Society of Chemistry (RSC), London, United Kingdom

**Status:** Under Revision.



### List of Conference/Seminar/Workshop

1. **Satyendra Kumar Satyarthi**, Akhilesh Kumar Singh, “ $\text{Li}_{(1-x)}\text{Dy}_{x/3}\text{NbO}_3$  Ceramics: Environmentally Friendly Materials with Electrical and Optical Properties for High Temperature Energy Storage Applications”, International Conference on Hydrogen Energy and Advanced Materials, (**ICHEAM-2024**). Department of Physics, Institute of Science, Banaras Hindu University, Varanasi, India
2. **Satyendra Kumar Satyarthi**, Akhilesh Kumar Singh, Dielectric and Optical Performance of Environment friendly  $\text{Li}_{(1-x)}\text{Sm}_{x/3}\text{NbO}_3$  Ceramic Materials, International Conference on Energy and Advanced Materials (**ICEAM-2023**), JIIT, Noida, India
3. **Satyendra Kumar Satyarthi**, Akhilesh Kumar Singh, “Enhanced Dielectrics, Ferroelectric behavior of Potassium doped Lithium Niobate along with Optical properties for high Temperature Applications” National Seminar on Ferroelectrics and Dielectrics (**XXII NSFD -2022**), VIT-AP University, A.P., India.
4. **Satyendra Kumar Satyarthi**, Vishwa Pratap Singh, Akhilesh Kumar Singh “Enhancement in the dielectric properties in rare earth cerium doped  $\text{LiNbO}_3$  for high temperature applications” International Conference on Energy Materials and Devices (**ICEMD-2022**), Banaras Hindu University, Varanasi, India.
5. **Satyendra Kumar Satyarthi**, Akhilesh Kumar Singh, “Ytterbium doped Lithium Niobate: A High temperature Environmental Friendly Dielectric Material” International conference on advanced materials and mechanical characterization (**ICAMMC-2021**), SRM University, India.
6. **Satyendra Kumar Satyarthi**, Vishwa Pratap Singh, Krishna Prajapati, Akhilesh Kumar Singh “Potassium doped Lithium Niobate: A Lead Free Environmental friendly dielectric material” International conference on advanced material for better tomorrow (**ICAMBT -2021**), 13 – 17 July, 2021 IIT (BHU), Varanasi, India.