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List of Publications

1. **Vaishali Soni**, Abhay Narayan Singh, Preetam Singh and Asha Gupta, *Photocatalytic dye-degradation activity of nano-crystalline* $Ti_{1-x}M_xO_{2-\delta}$ *(M =Ag, Pd, Fe, Ni and x = 0, 0.01) for water pollution abatement.* **RSC Advances**. 2022, 12, 18794-18805 (https://doi.org/10.1039/D2RA02847F).
2. **Vaishali Soni**, Rakesh Mondal, Abhay Narayan Singh, Preetam Singh, and Asha Gupta, *Dumbbell Defect Containing Chromium-Rich Lithium-Vacant Layered* $Li_yCr_{1-x}Fe_xO_2$ *(*$y \leq 1, 0 \leq x \leq 0.2$*): An Unexplored and Highly Efficient Electrocatalyst for the Oxygen Evolution Reaction.* **ACS Applied Energy Materials**. 2023, 6, 1308−1320 (https://doi.org/10.1021/acsaem.2c03056).
3. **Vaishali Soni**, Shraddha Jaiswal, Preetam Singh, & Asha Gupta, *Aluminium doped Lithium-vacant Layered* $Li_{1-x}Cr_{1-x}Al_xO_2$*: A Potentially Active Electrocatalyst for Oxygen Evolution Reaction.* **ACS Applied Energy Materials.** 2024, 7, 8, 3175–3186 (https://doi.org/10.1021/acsaem.3c03160).
4. **Vaishali Soni**, Shraddha Jaiswal, Krishna Gopal Nigam, Preetam Singh, & Asha Gupta, *Nickel doped Lithium-vacant Layered* $Li_yCr_{1-x}Ni_xO_2$*: A Potentially Active Electrocatalyst for Oxygen Evolution Reaction*. **Journal of Material Chemistry A,** 2024 (https://doi.org/10.1039/d4ta02717e).
5. Shraddha Jaiswal, **Vaishali Soni**, Preetam Singh, & Asha Gupta, *Role of cation deficiency and inductive effect in Ti-doped NiO for developing superior electrocatalysts for Oxygen Evolution Reaction.* **ACS Applied Energy Materials** (Revision submitted), Manuscript ID: ae-2024-01774z.

International/National Conferences Attended

1. The international conference on "**ChemCatCon 2.0: Mechanistic investigation on heterogeneous processes"** IIT Gandhinagar, India, 14-16 May 2022.
2. The International conference on **Beyond Fossil Fuels: The Future of Alternative Energy Technologies (B: FAT-2020)**, IIT (BHU) Varanasi, India, 23-25, July 2022.