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## List of Publications

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### International Journals:

1. Microstructural dependent oxygen reduction reaction in a Ruddlesden–Popper perovskite (SmSr)NiO<sub>4-δ</sub>, **Manisha Chauhan**, Pardeep K Jha, Ajay S Bangwal, Priyanka A Jha, Prabhakar Singh, Physical Chemistry Chemical Physics, 22, 21 (2020) 12294-12300.
2. Influence of the crystalline phase on the electrocatalytic behaviour of Sm<sub>2-x</sub>Sr<sub>x</sub>NiO<sub>4-δ</sub> (x =0.4 to 1.0) Ruddlesden–Popper-based systems: a comparative study of bulk and thin electrocatalysts, **Manisha Chauhan**, Pardeep K Jha, Ajay S Bangwal, Priyanka A Jha, Prabhakar Singh, Physical Chemistry Chemical Physics, 24 (2022) 5330-5342.
3. Electrochemical behaviour of A-site substituted Sm<sub>2-x</sub>Sr<sub>x</sub>NiO<sub>4-δ</sub> for energy storage applications, **Manisha Chauhan**, Ajay S. Bangwal, Prabhakar Singh, international Journal of Hydrogen Energy (Accepted).
4. Compositional effect on oxygen reduction reaction in Pr excess double perovskite Pr<sub>1+x</sub>Ba<sub>1-x</sub>Co<sub>2</sub>O<sub>6-δ</sub> cathode materials, Ajay S. Bangwal, Pardeep K. Jha, **Manisha Chauhan**, Sikha Singh, A.S.K. Sinha, Priyanka A. Jha, and Prabhakar Singh, International Journal of Hydrogen Energy, 05, 43, (2020) 23378-23390.
5. Catalytic behavior of Pr<sub>1-x</sub>Ba<sub>1+x</sub>Co<sub>2</sub>O<sub>6-δ</sub> in alkaline medium, Ajay S. Bangwal, **Manisha Chauhan**, and Prabhakar Singh, International Journal of Hydrogen Energy, 47 (25), 2022 12582-12591.
6. Electrocatalytic activity of nickel oxide thin film: optimization of pH towards oxygen evolution reaction and oxygen reduction reaction, **Manisha Chauhan**, Ajay S. Bangwal, and Prabhakar Singh (Communicated).

## Papers Published as Conference Proceedings:

1. Influence of Sintering temperature on the properties of  $\text{SmSrNiO}_{4-\delta}$ , **Manisha Chauhan**, Priyanka A Jha, Pardeep K Jha, Prabhakar Singh, AIP conf. Proceedings, 2020, 2220, 140044.
2. Structural and electrochemical properties of  $\text{Sm}_{1.5}\text{Sr}_{0.5}\text{NiO}_{4-\delta}$  Ruddlesden popper perovskite material, **Manisha Chauhan**, Priyanka A Jha, Pardeep K Jha, Prabhakar Singh, DEA Solid state Physics symposium, 2021.
3. Influence of co-doping on structural, morphological, and electrical properties of Ruddlesden-Popper-type  $\text{SmSrNiO}_{4-\delta}$  as a cathode material for IT-SOFC, **Manisha Chauhan**, Jay N Mishra, Priyanka A Jha, Pardeep K Jha, Prabhakar Singh, Materials Today: Proceeding, <https://doi.org/10.1016/j.matpr.2022.08.077>.

## National/International Conference Presentations:

1. Presented Paper on “Effect of the crystalline phase on the electrocatalytic performance of  $\text{Sm}_{2-x}\text{Sr}_x\text{NiO}_{4-\delta}$  ( $x = 0.4$  to  $1.0$ ) Ruddlesden Popper based system: A comparison of bulk and thin electrocatalysts” as Distinguished speaker at **4<sup>th</sup> Global summit on Future of Materials Science and Research**, held between 8<sup>th</sup> -9<sup>th</sup> November, 2022, Las Vegas, USA.
2. Attended an online workshop on “**Short-term course on introduction to Multiscale modeling method**” held between 18<sup>th</sup>-21<sup>st</sup> July 2022 organized by IIT, Dharwad, Karnataka.
3. Presented a paper in “**66<sup>th</sup> DAE Solid state physics symposium (DAE-SSPS 2022)**” held during December 18-22, 2022 organized by BERNs, Department of Atomic Energy (DAE), GOI.
4. Presented a poster in “**International Conference on Energy Materials and Devices**” held during January 11-12, 2022 organized by dept. of Physics, MMV, BHU.

5. Attended an online workshop on **“Rietveld Refinement”** held between September 22-24, 2020 organized by UGC-DAE.
6. Participated in **“International Virtual conference MICTAS-2020”** held between 05-06 July 2020 organized by USERC DST Dehradun.
7. Presented a poster in **“International e-Conference on Advanced Functional Materials and Optoelectronic Devices (ICAFMOD-2020)”** held during June 13-15 2020 organized by V.B.S. Paranuchal University, Jaunpur, U.P.
8. Attended national webinar series **“Experimental & Computational Tools for Materials Research-ECTMR 2020”** held during June 01-08 2020 jointly organized Department of Physics, Central University of Rajasthan.
9. Presented a paper in the **“3rd International Conference on Condensed Matter & Applied Physics-ICC 2019”** held between October 14-15 2019 organized by Govt. Engineering College, Bikaner, Rajasthan.
10. Participated in the Gian Course on **“Fuel Cell Power Generation and Battery Storage”** held during September 16-20, 2019 organized by National Institute of Technology, Durgapur.
11. Presented a poster in the **“International Conference on Functional Nanomaterials - ICFNM- 2019** held between February 22-25, 2019 organized by Department of Physics, IIT (BHU), Varanasi.
12. Presented a poster in First Indian Materials Conclave and 30th Annual General Meeting of MRSI-MRSI-2019 held during February 12-15, 2019 organized by Indian Institute of Science, Bangalore.
13. Participated in two workshops on **“LaTeX for Beginners & LaTeX for thesis writing”** held on October 06<sup>th</sup> and 30<sup>th</sup> 2018 jointly organized by IEEE IAS Student Chapter and IEEE student chapter, IIT(BHU).