9. List of Publications

Peer-Reviewed Journal Publication

1. **Asha Panghal**, Yogendra Kumar, P.K. Kulriya, P. M. Shirage, N. L. Singh "Atomic order-disorder engineering in the $La_2Zr_2O_7$ pyrochlore under low energy ion irradiation" Ceramics International, 47,(14), 2021, 20248-20259, https://doi.org/ 10.1016/j.ceramint.2021.04.032 **(I.F.-4.527).**
2. **Asha Panghal**, Yogendra Kumar, P. K. Kulriya, N. L. Singh "Structural assessment and irradiation response of $La_2Zr_2O_7$ pyrochlore: Impact of irradiation temperature and ion fluence" Journal of Alloys and Compounds, 862 (2021)158556, https://doi.org/ 10.1016/j.jallcom.2020.158556 **(I.F.-5.316).**
3. **Asha Panghal**, P. K. Kulriya, Yogendra Kumar, Fouran Singh, N. L. Singh "Investigations of atomic disorder and grain growth kinetics in polycrystalline $La_2Zr_2O_7$" Applied Physics A (2019) 125:428, https://doi.org/10.1007/s00339-019-2720-8 **(I.F.-2.584).**
4. **Asha Panghal**, Yogendra Kumar, N. L. Singh "Investigation of structural modifications of $Gd_2Zr_2O_7$ pyrochlore induced by swift heavy ions for nuclear waste immobilization (communicated in a peer-reviewed journal)
5. **Asha Panghal**, Yogendra Kumar, N. L. Singh "Role of structural ordering on the radiation response of $Gd_2Zr_2O_7$ pyrochlore" (communicated in a peer-reviewed journal)

List of International and National Conferences/Schools/Workshops:

(a) International:

1. Asha Panghal, N. L. Singh, School on Accelerator Science and Technology, 16-27th May **2016**, Inter-University Accelerator Centre, New Delhi, India.

2. **Asha Panghal**, N. L. Singh, School on characterizations of materials, 04-09th September **2017**, Inter-University Accelerator Centre, New Delhi, India.

3. Asha Panghal and N. L. Singh, International Conference on High Energy Radiation and Applications, 10-13th October **2017**, The M. S. University of Baroda, Vadodara, Gujarat, India

4. Asha Panghal, N. L. Singh, Joint ICTP-IAEA Workshop on Fundamentals of Vitrification and Vitreous Materials for Nuclear Waste Immobilization, 06-10th

November **2017,** International Centre for Theoretical Physics**, Trieste, Italy** (**Oral presentation**).

5. **Asha Panghal**, N. L. Singh, Joint ICTP-IAEA International School on Nuclear Waste Actinide Immobilization" 10-14th September **2018**, International Centre for Theoretical Physics, UNESCO**, Italy** (**Oral presentation**).

6. **Asha Panghal** and N. L Singh, 5th International Conference on "Ion beams in materials engineering and characterization**" (IBMEC)** 9-12th October **2018**, IUAC, New Delhi, India **(Best Poster Award_1st prize)**

7. **Asha Panghal** and N. L Singh, Indo-French conference on "Radiation damage in Nuclear Materials" 18-20th February **2019**, held at Amity University Noida and IUAC New Delhi, India.

8. **Asha Panghal**, N. L. Singh, Joint ICTP-IAEA International School on Radioactive Waste Cementation, 16th Oct-25th Nov **2020,** International Centre for Theoretical Physics, **Trieste, Italy.** (Virtual School_Oral presentation).

9. **Asha Panghal,** N. L Singh, International conference (online) on Ion Beams in Materials Engineering and Characterization (**IBMEC-2020**), 8-11th, December **2020**, held at IUAC Delhi, India (Online mode).

(b) National:

1. **Asha Panghal** and N. L. Singh, National Conference on Recent Trends in Materials Science, 24-25th March **2018**, held at The M. S. University of Baroda, Gujarat, India.

2. **Asha Panghal** and N. L. Singh, National conference on Nanoscience and Technologies in Digital India (NANOTCON), 27-28th April **2018,** Shobhit Deemed University, Meerut, India.

3. **Asha Panghal**, Y. Kumar, and N. L. Singh, National Conference on Recent Trends in Material Science and Technology, 7-9th December **2020**, Indian Institute of Space Science and Technology, Kerala, India.