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Publications and Conferences

PUBLICATIONS:

1. **Sanjna Rajput**, Manish Yadav, Taranga Dehury, Akhilesh Kumar Yadav, Pratap Kumar Sahoo and Chandana Rath, Coexistence of tetragonal and cubic phase induced complex magnetic behaviour in CoMn_2O_4 nanoparticles, *Nanotechnology* 34 (2023) 425702 (15pp) (IOP), [DOI 10.1088/1361-6528/ace3cb](https://doi.org/10.1088/1361-6528/ace3cb)
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3. **Sanjna Rajput** and Chandana Rath *, Investigation of local structure by X-ray absorption fine structure and magnetic properties of CoMn_2O_4 nanoparticles, *Bull. Mater. Sci.* (2024) 47:207, <https://doi.org/10.1007/s12034-024-03287-0>
4. **Sanjna Rajput**, Gaurav Chandra Pandey, Chandana Rath, Structure and Local Structure Driven Magnetic Properties of $\text{Co}_x\text{Mn}_{3-x}\text{O}_4$ ($x = 1.00$ to 2.00) Spinel Nanoparticles, *J. Phys. Chem. C* 2024, 128, 15583–15597, <https://doi.org/10.1021/acs.jpcc.4c03508>.
5. **Sanjna Rajput**, Chandana Rath, Structure, Local Structure driven Magnetic Properties of CoMn_2O_4 doped with Cr. (Under submission)
6. Akhilesh Kumar Yadav, Himanshu Tripathi, **Sanjna Rajput**, Priya Singh, Ashutosh Kumar Dubey, Krishan Kumar, Ruchi Chawla, Chandana Rath “Drug kinetics and antimicrobial properties of quaternary bioactive glasses $81\text{S}(81\text{SiO}_2-(16-x)\text{CaO}-2\text{P}_2\text{O}_5-1\text{Na}_2\text{O}-x\text{MgO}$; An in-vitro study”, *Biomaterials Advances* vol. 157 213729. 9 Dec. 2023, <https://doi.org/10.1016/j.bioadv.2023.213729>
7. Akhilesh Kumar Yadav, Satish Kumar, **Sanjna Rajput**, Nilesh Das, Chandan Goswami, Chandana Rath “In vitro Study for Bone Tissue Regeneration Using Composite of Bioglass and Gelatin Nanofiber Scaffolds”, *International Journal of Biological Macromolecules*. (Submitted)

CONFERENCES:

1. **Poster presentation** in Materials Research Society of India (MRSI) conference on title “Structure and optical properties of CoMn_2O_4 spinel nanoparticles” (2021)
2. Certification Program on “data analytics with **Python programming** conducted by IIT Roorkee and iHUB Divyasampark” (31-07-2023 to 25-08-2023)
3. **Poster presentation** in Materials Research Society of India (MRSI) conference on title “Coexistence of tetragonal and cubic phase induced complex magnetic behaviour in CoMn_2O_4 nanoparticles” (2023)
4. **Oral presentation** in International Conference on Composite Materials for Environment Protection & Remediation (ICCMEPR) On title “Investigation of Local Structure by XAFS and Magnetic Properties of CoMn_2O_4 Nanoparticles” (2024)
5. **Poster presentation** in Materials Research Society of India (MRSI) conference on title “Structure and Local Structure Driven Magnetic Properties of $\text{Co}_x\text{Mn}_{3-x}\text{O}_4$ ($x = 1.00$ to 2.00) Spinel Nanoparticles” (2024)