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List of Publications

1. Avnish Singh Pal, Aman Kumar Lal Das, Ankit Singh, Kevin M. Knowles, Md. Imteyaz Ahmad, Joysurya Basu, *Evolution of a self-assembled chessboard nanostructure spinel in a CoFeGaMnZn multicomponent oxide*, Philos. Mag. Feb 2022, pp. 1-15
2. Avnish Singh Pal, Aman Kumar Lal Das, K. Gururaj, M. Sadhasivam, Kevin M. Knowles, Md. Imteyaz Ahmad, K. G. Pradeep, J. Basu, *Nanoarchitectonics of self-assembled chessboard-like structures by recurrent phase separation and coalescence of nano domains in CoFeMn oxide*, Acta Materialia, 242, (2022), 242, 118423.
3. Avnish Singh Pal, Ankit Singh, RK Mandal and Joysurya Basu, *Evolution of Microstructures and Interfaces in Compositionally Graded Mixed Oxide Thin Films for Nanoelectronics and Energy*, Microsc. Microanal. 25, 2, (2019) pp. 2298-2299.
4. Maurya Sandeep Pradeep kumar, Avnish Singh Pal, Ankit Singh, Joysurya Basu, and Md. Imteyaz Ahmad, *Phase separation in wurtzite $CuIn_xGa_{1-x}S_2$ nanoparticles*, J Mater. Sci., 55, (2020) pp. 11841–11855.
5. Ankit singh, Shintaro yasui, Avnish Singh pal, Leonid A. Bendersky, ichiro takeuchi, R. K. Mandal and Joysurya Basu *Structure and interfaces of compositionally graded $Li(Ni, Mn)_xO_y$ cathodes on (111) Nb-doped $SrTiO_3$* , Philos. Mag., (2022), pp.1-33.
6. Aman Kumar Lal Das, Gaurav Dilip rout, Avnish Singh Pal, Joysurya Basu, *Self-assembled chessboard-like microstructure between tetragonal η' and a new monoclinic phase in $NiMn$* , (to be communicated) (2022).
7. Avnish Pal, Aman Kumar Lal Das, Manish Singh, Chanchal Ghosh, Paul Kotula, C. Barry Carter³ and Joysurya Basu, *Microstructural Evolution of Chessboard like Nanodomains in Mn-doped $ZnGaO_4$ Spinel*, Microsc. Microanal. 27, 1, 2021, pp. 2418-2419.

List of Conference Presentations

1. Failure Analysis of high load carrying capacitive Medium Carbon Steels (oral presentation), **NMD ATM Coimbatore, India, 2015**
2. Electron Microscopy Investigation of Growth Mechanism and Interfaces of ZnO Nanorods on Insulating, Semiconducting Surfaces Electron Microscopy Society of India (**EMSI**), **Chennai, India, 2017**
3. Microstructural Evolution of chessboard like nanodomains in Mn- doped CoFe_2O_4 spinel and NdLiTiO_3 based perovskite systems for nanoelectronic device applications. **EMSI, Bhuvneshwar, India, 2018**
4. Evolution of chessboard like nanodomains in Mn-doped CoFe_2O_4 spinel and NdLiTiO_3 based perovskite systems for nanoelectronic applications, **IMC19, Sydney 2019**
5. Microstructural Evolution of chessboard like nanodomains in Mn- doped CoFe_2O_4 spinel a for high density perpendicular memory storage devices, **APMC 2020, Hyderabad 2020**
6. Microstructural Evolution of well-organised nanodomains Like Nanodomains in Mn-Doped CoFeZnGaO_4 for spintronics device applications, **Swiss nano convention 2021**