

# List of Publications arising from the thesis

## A. Publications in peer reviewed Journals

1. Nitya Ramanan, Debdutta Lahiri, Parasmani Rajput, Ramesh Chandra Varma, A. Arun, T.S. Muraleedharan, K.K. Pandey, Nandita Maiti, S.N. Jha and Surinder M. Sharma, ‘Investigating structural aspects to understand the putative/claimed non-toxicity of Hg-based Ayurvedic drug “*Rasasindura*”, using XAFS’, *Journal of Synchrotron Radiation*, **22**, 1233 (2015).
2. Nitya Ramanan, Debdutta Lahiri, Ashwani Kumar, Parasmani Rajput, K. Thankarajan, D. Bhattacharyya and S.N. Jha, ‘First phase commissioning of High Pressure XAFS setup at ED-XAFS beamline, Indus-2 Synchrotron Radiation Source, India’, *Journal of Optics (Optical Society of India)*, **44**, 182 (2015).
3. Nitya Ramanan, Parasmani Rajput, S.N. Jha and Debdutta Lahiri, ‘Assessing the feasibility of Low temperature XAFS experiments at Indus-2, India: first results’, *Nuclear Instruments and Methods in Physics Research A*, **782**, 63 (2015).
4. Nitya Ramanan, Sumalay Roy, Debdutta Lahiri, Surinder M. Sharma and B.N. Dev, ‘Ascertaining the nano-cluster formation within ion-irradiated Pt/Ni/C multi-trilayer, with X-ray Absorption Spectroscopy’, *Journal of Synchrotron Radiation*, **20**, 137 (2013).
5. Debdutta Lahiri, Yongseong Choi, Amit Kumar, Nitya Ramanan, Soma Chattopadhyay, Surinder M. Sharma, Daniel Haskel and S.M. Yusuf, “Understanding temperature and magnetic-field actuated magnetization polarity reversal in the Prussian blue analogue  $\text{Cu}_{0.73}\text{Mn}_{0.77}[\text{Fe}(\text{CN})_6]\cdot z\text{H}_2\text{O}$ , using XMCD”, under review, *Materials Research Express*.

## **B. Publications in Conferences**

1. Nitya Ramanan, Sumalay Roy, Debdutta Lahiri, Surinder M. Sharma and B.N. Dev, 'XSW-XAFS characterization of ion-irradiated Pt/Ni/C Multilayer', *Journal of Physics: Conference Series*, **430**, 012063 (2013).
2. Debdutta Lahiri, Tomohiro Shibata, Soma Chattopadhyay, Nitya Ramanan, Swati Pandya, P D Kulkarni, A Thamizhavel, A K Grover, S Ramakrishnan and Surinder M. Sharma, 'XAFS understanding of "repeated" magnetic compensation in Nd<sub>0.8</sub>Tb<sub>0.2</sub>Al<sub>2</sub>', *Journal of Physics: Conference Series*, **430**, 012106 (2013).\*
3. Nitya Ramanan, Debdutta Lahiri, Nandini Garg, D. Bhattacharyya, S.N. Jha, N K Sahoo and Surinder M Sharma, 'High Pressure experiments at the XAFS beamline, Indus-2', *Journal of Physics: Conference Series*, **377**, 012011 (2012).

## **C. Technical Publications**

1. N. Ramanan, D. Lahiri, D. Bhattacharyya and S. N. Jha, 'Calibration of standard Ni foil XAFS data recorded at the EXAFS Beamline, INDUS-2 SRS', BARC report, *BARC/2012/E/009* (2012).
2. N. Ramanan, D. Lahiri, S.M. Sharma, N.C. Das, D.V. Udupa and A.D. Patil, 'Development of a bendable mirror for studying materials under high pressure using EXAFS beamline at INDUS-2 SRS', BARC report, *BARC/2010/E/12* (2010).

## **D. Under Preparation**

1. "Investigating alloying/de-alloying of Ag/Pt and Ag/Au nanorods under Swift Heavy-ion Irradiation", *manuscript under preparation*.

\* Not included in thesis

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