

Supporting Information

Temperature dependent structural evolution of WSe₂: A synchrotron X-ray diffraction study

Sinu Mathew^{1,2}, Aben R. Abraham², Sandhya Chintalapati³, Soumya Sarkar¹, Bobby Joseph^{4*}
and T. Venkatesan^{1,5*}

1 NUSNNI-NanoCore, National University of Singapore, 117411, Singapore

2 Department of Physics, S.B College, Mahatma Gandhi University, Kerala 686101, India

3 Tata Institute for Fundamental Research, Centre for Interdisciplinary Sciences, Hyderabad, 500107, India

4 Elettra Sincrotrone, Strada Statale 14 – km 163,5 in Area Science Park, 34149, Basovizza, Trieste, Italy

5 Department of Materials Science and Engineering, National University of Singapore, 117575 Singapore

S1. Temperature dependence of W-Se bond distance and Hall Effect

The W-Se bond distance extracted from the XRD refinement and the Hall Coefficient [1] is given in Fig 1.

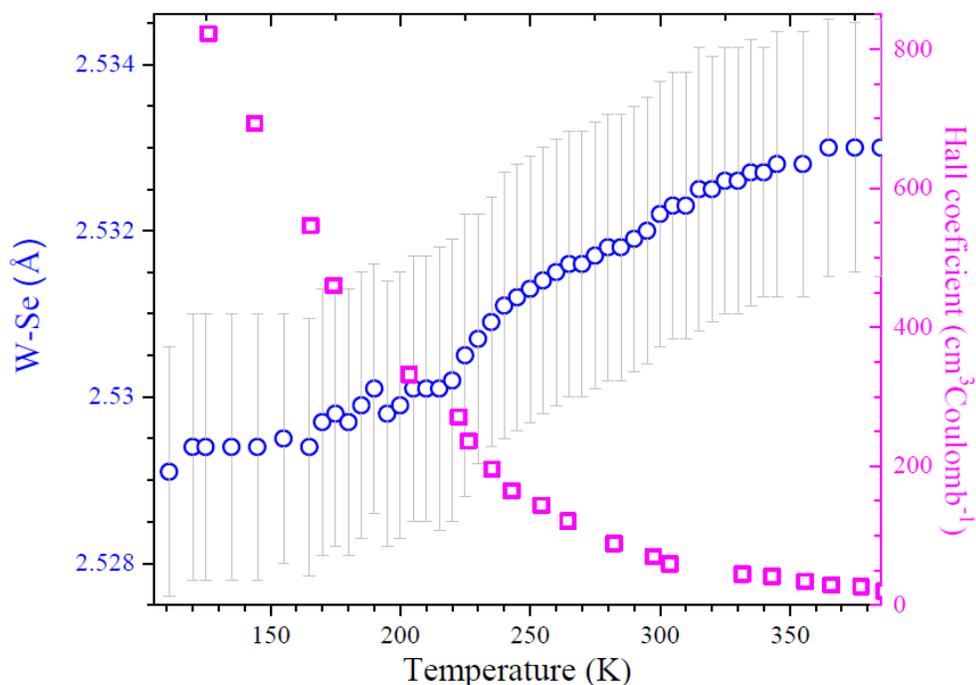


Figure 1. Temperature dependence of W-Se bond distance. The variation of Hall Coefficient with temperature extracted from Ref. 1 is shown at the right-side panel

Reference

1. EL-Mahalawy S. H. and B. L. Evans B. Temperature Dependence of the Electrical Conductivity and Hall Coefficient in 2H-MoS₂, MoSe₂, WSe₂, and MoTe₂, *phys. stat. sol. (b)* **1977**, 79, 713, doi.org/10.1002/pssb.2220790238