

Sajid Ali

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Education

- 2016–Present **Northwestern University, Evanston, IL,**
Ph.D., Applied Physics,
Computational x-ray optics, New Techniques X-ray Microscopy.
- 2011–2016 **IIT Madras, Chennai, India,**
Masters of Tech. in Microelectronics and VLSI Design Electrical Engg.,
Master's Thesis : Impurity induced magnetism in Graphene.
- 2011–2016 **IIT Madras, Chennai, India,**
Bachelors of Technology, Electrical Engg.,
Minor: Physics.

Research Experience

- 2016–Present **Zone Plate Testing,**
X-Ray Microscopy Group, Northwestern University, PI: Prof Chris Jacobsen.
○ Tested high aspect ratio zone plates for efficiency and tilt tolerance at APS and NSLS.
○ Developing parallelized computer codes for high resolution x-ray optics simulation to model tilt misalignment effects.
- 2015–2016 **Magnetism in Graphene,**
Computational Condensed Matter Group, IIT Madras, PI: Prof Ranjit Nanda.
○ Investigated the magnetic properties of intercalated bilayer graphene using DFT.
○ Performed stability analysis for those which exhibited a non-trivial magnetic moment.
- Summer 2015 **A preliminary DFT Study on the stability of cathode materials,**
Center for Automotive Energy Materials, ARCI IITM Research Park, PI: Dr Sahana MB.
○ Studied the relative stability of three structural phases of a novel cathode material for Li-ion batteries.
○ Created complex heterostructures and studied their electronic structure using DFT.

Publications

- 2018 **Zone Plate Performance as a Function of Tilt Analyzed via Multislice Simulations** Syed Sajid Ali, Kenan Li, Michael Wojcik and Chris Jacobsen *Vol 24, Suppl. S2 (Proc. of the 14th Intl. Conf. on X-ray Microsc. 2018) pp. 298-299*
- 2016 **Magnetism in intercalated graphene** Sajid Ali, BRK Nanda *AIP Conference Proceedings 1731, 130040*