## Bhattacharyya, Semonti



PhD Institution and Year: IISc, Bangalore, 2016

Date of Joining IISc : May 2016 (as a Postdoctoral Research Associate)

Area(s) of Research : Low-temperature nanoelectronics (Experimental Condensed Matter)

Name of the Post-doctoral Fellowship: NA

Laboratory where currently working : Low Temperature Nanoelectronics group, Prof. Arindam Ghosh's Lab, Dept. of Physics, IISc

**Department :** Physics

Email address and Telephone number : semonti@physics.iisc.ernet.in 08022932726, 08022932059

**Topic(s) of Research :** (electrical transport and 1/f noise in 3D topological insulators, Highresolution Atomic force microscopy in nano-exfoliated HOPG)

## **Research Publications in IISc :**

I) "Bulk-Induced 1/f Noise at the Surface of Three-Dimensional Topological Insulators", Semonti Bhattacharyya, Mitali Banerjee, Hariharan Nhalil, Saurav Islam, Chandan Dasgupta, Suja Elizabeth, and Arindam Ghosh, ACS Nano, 2015, 9 (12), pp 12529–12536.

II) "Resistance noise in epitaxial thin films of ferromagnetic topological insulators", Semonti Bhattacharyya, Abhinav Kandala, Anthony Richardella, Saurav Islam, Nitin Samarth and Arindam Ghosh, Appl. Phys. Lett. 108, 082101 (2016).

III) "Quantized edge modes in atomic-scale point contacts in graphene", Amogh Kinikar,T.
Phanindra Sai, Semonti Bhattacharyya, Adhip Agarwala, Tathagata Biswas, Sanjoy K. Sarker,
H. R. Krishnamurthy, Manish Jain, Vijay B. Shenoy, & Arindam Ghosh, just accepted in Nature Nanotechnology.

Other accomplishments and recognition while in IISc : -

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