Faculty Profile

Name: DR. SANDIP MAJUMDAR

Designation: ASSISTANT PROFESSOR

Branch: Physics

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Educational Qualification(s):

Qualification(s)	University
M.SC	JADAVPUR UNIVERSITY,KOLKATA
M.TECH	IIT KHARAGPUR
PH.D	IIT KHARAGPUR

Experience in years:

Academic: 3 YEARS 2 MONTHS

1. Post Doc- Chang Gung University, Taiwan (May 2009-July 2010)

2. Research Assistant Professor: Peking University, P.R.China (Jan 2014-Jan 2016)

Industrial: 3 YEARS 7 MONTHS

1. Vishay Siliconix Inc. (High Voltage MOSFET Research and Development Division) (July 2010-Jan 2014)

Other Information:

1. Publication details. **International Journal 12, International conference paper 7.**

REFEREED INTERNATIONAL JOURNAL

1. S. Majumdar, S. Bhaumik, K. Rana, S. K. Ray and A. K. Das, Temperaturedependent structure and magnetism of Mn doped Ge nanowires. Physica Status Solidi A, (2014)Volume 211, Issue 4, pages 877–883, April 2014.

2. Amit Prakash, Siddheswar Maikap, Sheikh Ziaur Rahaman, Sandip Majumdar, Santanu Manna and Samit K Ray, (2013), Resistive switching memory characteristics of Ge/GeOx nanowires and evidence of oxygen ion migration, Nanoscale Research Letters,http://www.nanoscalereslett.com/content/8/1/220

3. S. Majumdar, A. K. Das and S. K. Ray, (2009), Magnetic semiconducting diode of p-Ge1-xMnx/n-Ge layers on silicon substrate, Appl. Phys. Lett., Vol. 94, No. 12, pp. 122505(1)- 122505(3).

4. S. Majumdar, S. Mandal, A. K. Das and S. K. Ray, (2009), Synthesis and temperature dependent photoluminescence properties of Mn doped Ge nanowires, J. Appl. Phys., Vol. 105, No. 2, pp. 024302(1)-024302(5).

5. S. Majumdar, R. K. Singha, K. Das, M. Chakraborty, A. K. Das and S. K. Ray, (2008), Temperature-dependent texture, stress and resistivity in melt spun Cu0.95Co0.05 ribbon, Physica B, Vol. 403, No. 12, pp. 2059-2064.

6. S. Majumdar, R. K. Singha, J. Yoon, M. H. Jung, M. Chakraborty, A. K. Das and S. K. Ray, (2009), Microstructure and magnetic properties of melt-spun Cu0.95Co0.05 granular alloy, Physica B, Vol. 404, No. 12-13, pp. 1858-1861.

7. S. Majumdar, A. K. Das and S. K. Ray, Structural and magnetic field dependent transport properties of p-MnxGe1-x/n-Ge heterojunction, (2009), Int. J. Mod. Phys. B, Vol. 23, No. 17, pp. 3579-3585.

8. R. K. Singha, S. Das, S. Majumdar, K. Das, A. Dhar, and S. K. Ray, (2008), Evolution of strain and composition of Ge islands on Si (001) grown by molecular beam epitaxy during post-growth annealing, J. Appl. Phys., Vol. 103, No. 11, pp. 114301(1)- 114301(8).

9. R. K. Singha, S. Das, K. Das, S. Majumdar, A. Dhar, and S. K. Ray, (2008), Shape and size distribution of molecular beam epitaxy grown self-assembled Ge islands on Si (001) substrates, J. Nanosci. Nanotechnol., Vol 8, No. 8, pp. 4101(1)-4105(5).

10. A. Roy Chaudhuri, R. Ranjith, S. B. Krupanidhi, R. V. K. Mangalam, A. Sundaresan, S. Majumdar, and S. K. Ray, (2007), Realization of biferroic properties in La0.6Sr0.4MnO3/0.7Pb(Mg1/3Nb2/3)O3–0.3(PbTiO3) epitaxial superlattices, J. Appl. Phys., Vol. 101, No. 11, pp. 114104(1)-114104(9).

11. S Mandal, H Mullick, S Majumdar, A Dhar and S K Ray, (2008), Effect of Al concentration in grain and grain boundary region of Al-doped ZnO films: a dielectric approach, J. Phys. D: Appl. Phys., Vol. 41, No. 2, pp. 025307(1)-025307(6).

12. S. Adhikary, N. Halder, S. Chakrabarti, S. Majumdar, S.K. Ray, M. Herrera, M. Bonds, and N.D. Browning, (2010): Investigation of strain in selfassembled multilayer InAs/GaAs quantum dot heterostructures, J. Cryst. Growth, Vol. 312, No. 5, pp. 724- 729.

INTERNATIONAL CONFERENCE PAPERS:

[1] Bias Stress Induced threshold voltage instability in solution processed organic thin film transistors, S. Majumdar, Y. Sunl, L. Zhang, Z. Ahmed, Dipu Kabir, and M. Chan, IEEE, ICSICT2014, Guilin, China, 978-1-4799-3282-5 (2015)

[2] Structural and Magnetic Field Dependent Transport Properties of MnxGe(1-x) Dilute Magnetic Semiconductor Thin Films Grown by Laser Ablation Technique, Sandip Majumdar, Amal Kumar Das, Samit Kumar Ray, IUMRS-ICEM 2008, Hilton Sydney, Australia. Page 96, Symposium R

[3] Ge nanowires for nanoscale nonvolatile memory applications, S. Maikap , S. Majumdar, W. Banerjee, S. Mondal, S. Manna, and S. K. Ray, International conference on solid state devices and materials. Tokyo, Japan, 2010, pp-91-92

[4] Microstructue and Electrical Properties of Cu-Co Magnetic Granular Ribbon: S. Majumdar, R. K. Singha, V. S. Reddy, K. Das, A. Dhar, M. Chakraborty, A. K. Das and S. K. Ray, ICRTNT (2006), Jadavpur University. Page 159

[5] Field Dependent Transport Property of Magnetic Semiconducting p-Ge1-xMnx/nGe Diode: S. Majumdar, A. K. Das and S. K. Ray, Homi Bhaba Centenary DAEBRNS International Conference on Spintronics and Magnetoelectronics Materials and Devices. Page 45

[6] Temperature dependent optical and magnetic properties of Mn doped Ge nanowires, S. Majumdar, A. K. Das and S. K. Ray,Magnetic Nanomaterials and their applications (MNTA 2009), S. N Bose center for basic Sciences, Kolkata,Page 28.

[7] Atomic Clusters and Compound Precipitates in Mn doped Ge Nanowires, Majumdar, S., Das, A. K., and Ray, S. K. (2009): 54thDAE Solid State Physics Symposium, Board of Research in Nuclear Sciences Department of Atomic Energy, Government of India, (Volume. 54, pp. 287-288).

2. Details of Seminar/Workshop/Conference.

1. IEEE, ICSICT2014, Guilin, China (July 2015)
2.IUMRS-ICEM 2008, Hilton Sydney, Australia
3.International conference on solid state devices and materials. Tokyo, Japan, 2010
4.Magnetic Nanomaterials and their applications (MNTA 2009), S. N Bose center for basic Sciences, Kolkata
5.54thDAE Solid State Physics Symposium, Board of Research in Nuclear Sciences Department of Atomic Energy, Government of India (2009)

(c). Professional membership of reputed bodies if any.

1. IEEE MEMBER
2. REVIEWER "IEEE transactions on device and materials reliability"