

## List of Publications of (2008-2009)

### Journals

#### **Dr. Pinaki Chakraborty**

1. P. Chakraborty, S.S. Mahato, T. K. Maiti, A. Biswas and C. K. Maiti, "Charge Trapping in Memory Devices Using High-k Dielectrics", *International Journal of Computers, Information Technology and Engineering*, vol. 2, no. 2, pp. 71-76, 2008
2. T. K. Maiti, S. S. Mahato, P. Chakraborty, C. K. Maiti, and S. K. Sarkar, "CMOS Performance Enhancement in Hybrid Orientation Technologies", *Journal of Computational Electronics*, vol. 7, no. 3, pp. 181-186, 2008.

#### **A. K. Atta**

1. Sanki, A.; Bhattacharya, R.; **Atta, A. K.**; Suresh, C. G.; Pathak, T. Diastereoselective addition of planar N-heterocycles to vinyl sulfone-modified carbohydrates: a new route to isonucleosides. *Tetrahedron* **2008**, *64*, 10406-10416.

#### **Dr. Susanta Maity**

1. S. Maity and B.S. Dandapat, Effects of air-flow and evaporation on the development of thin film over a rotating annular disk, *International Journal of Non-Linear Mechanics*, 44(2009), 877-882

#### **Dr. Nabakumar Pramanik**

1. S. K. Biswas, A. Pathak, **N. Pramanik**, D. Dhak and P. Pramanik, "Codoped Cr and W rutile nanosized powders obtained by pyrolysis of triethanolamine complexes", *Ceramic International*, vol.34 (2008) pp.1875-1883.
2. **N. Pramanik** and P. Pramanik, "Nano hydroxyapatite-polymer composites for biomedical applications" *World Journal of Engineering*, vol.5, (2008) pp.771-774.
3. **N. Pramanik**, S. Mohapatra, P. Bhargava and P. Pramanik, "Chemical synthesis and characterization of hydroxyapatite (HAp)-poly (ethylene co vinyl alcohol) (EVA) nanocomposite using a phosphonic acid coupling agent for orthopedic applications", *Materials Science and Engineering C*, vol.29 (2009) pp.228-236.

4. **N. Pramanik**, D. Mishra, I. Banerjee, T. K. Maiti, P. Bhargava and P. Pramanik, "Chemical synthesis, characterization and biocompatibility studies of hydroxyapatite-chitosan phosphate nanocomposites for biomedical applications", *International Journal of Biomaterials*, vol.2009 (2009) pp.1-8.

## **Dr. Pinaki Chakraborty**

1. **P. Chakraborty**, S. S. Mahato, T. K. Maiti, S. Saha, and C. K. Maiti, "Tungsten Nanocrystal (W-NC) Flash Memory Cell," in International Conference on Nano and Microelectronics (**ICONAME-08**), pp.239-241, 2008.
2. S. S. Mahato, T. K. Maiti, **P. Chakraborty**, S. K. Sarkar, and C. K. Maiti, "Performance Enhancement in Scaled Strained-Si/SOI MOSFETs with High-k Gate Dielectrics," in International Conference on Nano and Microelectronics (**ICONAME-08**), pp. 86-88, 2008.
3. **P. Chakraborty**, S.S. Mahato, T.K.Maiti, M.K.Bera, C.Mahata, S. K.Samanta, and C.K.Maiti, "Performance Improvement of Flash Memory using AlN as Charge-Trapping Layer," in **E-MRS Fall Meeting**, 2008.
4. S.S.Mahato, T. K. Maiti, **P.Chakraborty**, S. K. Sarkar and C. K. Maiti, "Channel Engineering in MOSFETs," in **E-MRS Fall Meeting**, 2008.
5. S. S. Mahato, **P. Chakraborty**, T. K. Maiti, M. K. Bera, C. Mahata, M. Sengupta, A. Chakraborty, S. K. Sarkar and C. K. Maiti, "DIBL in Short-Channel Strained-Si n-MOSFET," in Proc. Of 15th International Symposium on the Physical and Failure Analysis of Integrated Circuits (**IPFA 2008**), pp. 196-199, 2008.
6. T. K. Maiti, M. K. Bera, S. S. Mahato, **P. Chakraborty**, C. Mahata, M. Sengupta, A. Chakraborty, and C. K. Maiti, "Hot Carrier Degradation in Nanowire (NW) FinFETs ," in Proc. Of 15th International Symposium on the Physical and Failure Analysis of Integrated Circuits (**IPFA 2008**), pp.325-328, 2008.
7. T. K. Maiti, S. S. Mahato, M. K. Bera, M. Sengupta, **P. Chakraborty**, C. Mahata, A. Chakraborty, and C. K. Maiti, "Stress-Induced Degradation in Strain-Engineered nMOSFETs ," in Proc. Of 15th International Symposium on the Physical and Failure Analysis of Integrated Circuits (**IPFA 2008**), pp. 193-195, 2008.
8. M. K. Bera, G. K. Dalapati, C. Mahata, **P.Chakraborty**, T. Das, P. S. Das, A. Sridhara, A. S. Wong, D. Z. Chi and C. K. Maiti, "Reliability Assessment of High-k Gate Dielectrics on Si-passivated p-GaAs under Dynamic and AC Stress," 214th **ECS Meeting** - Honolulu, HI E3 - High k Dielectric Constant Materials and Gate Stacks, 2008.

9. M. K. Bera, C. Mahata, S. S. Mahato, T. K. Maiti, **P. Chakraborty** and C. K. Maiti, "Hot Carrier Reliability of Strained-Si n-MOSFET," International Workshop on Dielectric Thin Films for Future ULSI Devices: Science and Technology (**IWDTF 2008**) pp. 113 – 114, 2008.

## **Dr. Nabakumar Pramanik**

1. **N. Pramanik** and P. Pramanik, ISMC-2008, *International Conference on Materials Chemistry, Bhaba Atomic Research Centre (BARC), Trombay, Mumbai, India, December, 2008.*