

## List of Publication:

### International Journals

1. Effect of texturing process involving saw-damage etching on crystalline silicon solar cells, Hyunho Kim, Sungeun Park, Byungjun Kang, Seongtak Kim, Sung Ju Tark, Donghwan Kim, **S.S. Dahiwale**, **Applied Surface Science** **284** (2013) 133-137.
2. Influence of SiNx:H film properties according to gas mixture ratios for Crystalline Silicon Solar Cells, Kyung Dong Lee, **S. S. Dahiwale**, Young Do Kim, Sungeun Park, SungJu Tark, Donghwan Kim, **Current Applied Physics** **13** (2013) 241-245.
3. Influence of gas mixture ratios on properties of SiNx:H films for Crystalline Silicon Solar Cells, Kyung Dong Lee, **S. S. Dahiwale**, Young Do Kim, Sungeun Park, SungJu Tark, Donghwan Kim, **Energy Procedia** **27** (2012) 419-425.
4. Irradiation effects of 6 MeV electron on electrical properties of Al/Al<sub>2</sub>O<sub>3</sub>/n-Si MOS capacitors, P. Laha, I. Banerjee, A. Bajaj, P. Chakraborty, P.K. Barhaia, **S.S. Dahiwale**, A.K. Das, V.N. Bhoraskar, D. Kim, S.K. Mahapatra, , **Radiation Physics and Chemistry** **81** (2012) 1600-1605.
5. A study on optimization of SiNx:H films for crystalline silicon solar cells, Kyung Dong Lee, Young Do Kim, **Shailendra Dahiwale**, Hyunpil Boo, Sungeun Park, Sung Ju Tark and Donghwan Kim, **Journal of Korean Vacuum Society** **21**(1), 2012, 29-35
6. 6 MeV electron irradiation effects on electrical properties of Al/TiO<sub>2</sub>/n-Si MOS capacitors, P. Laha, **S. S. Dahiwale**, I. Banerjee, S.K. Pabi, D. Kim, P.K. Barhai, V.N. Bhoraskar, S.K. Mahapatra, **Nuclear Instruments and Methods B** **269** (2011) 2740-2744.
7. Effect of leakage current & dielectric constant on single & double layer oxides in MOS structure", P. Laha, A. B. Panda, **S. S. Dahiwale**, K. Date, K. R. Patil, P. K. Barhai, A. K. Das, I. Banerjee, S. K. Mahapatra, **Thin Solid Films**, **519** (2010) 1530-1535.
8. Swift heavy ion induced single event upsets in high density UV-EPRoM's **S. S. Dahiwale**, N.S.Shinde, D. Kanjilal, V. N. Bhoraskar, S. D. Dhole **Nuclear Instruments and Methods B** **266** (2008) 1729-1733.
9. Depth distribution of carrier lifetime in 65MeV energy oxygen ion irradiated silicon. N.S.Shinde, **S.S.Dahiwale**, D. Kanjilal, V.N.Bhoraskar, S.D.Dhole **Nuclear Instruments and Methods –B** **244** (2006) 161-165.

10. Damage Induced by high energy multiply charged oxygen ions in oxide coated silicon. S.D.Dhole, **S.S.Dahiwale**, V.R.Kulkarni, K.A.Bogle, N.S.Shinde, V.N.Bhoraskar, **Nuclear Instruments and Methods –B 244 (2006) 354-358.**
11. Surface profile of minority carrier lifetime in 65 and 100 MeV fluorine irradiated n- Si(111) **S. S. Dahiwale**, N. S. Shinde, V. N. Bhoraskar and S. D. Dhole **Nuclear Instruments and Methods (2010). [communicated]**
12. Investigation of interdiffusion effect of silicon based Al<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub> heterostructure on bulk potential and interface trap density, Pinaki Laha, **S. S. Dahiwale**, Biswajit Saha, Purushottam Chakraborty, Donghwan Kim, P K Barhai, A K Das, I Banerjee and S K Mahapatra, **Journal of Physics D [communicated]**

#### **National/International conference journals/proceedings**

13. Effect of N<sub>2</sub>O on annealed and un-annealed Al<sub>2</sub>O<sub>3</sub> films prepared by Plasma Assisted Atomic Layer Deposition, **S. S. Dahiwale**, Kyung Dong Lee, Young Do Kim, Sung Ju Tark, Sungeun Park, and Donghwan Kim, **Technical Digest of 21<sup>st</sup> International Photovoltaic Science and Engineering Conference**, Hilton, Fukoka Sea Hawk 28<sup>th</sup> Nov. – 2<sup>nd</sup> Dec. 2011.
14. Fixed Charge Effect of SiN<sub>x</sub> Film on Efficiency of Crystalline Silicon Solar Cells, K. D. Lee, Y. D. Kim, **S. S. Dahiwale**, S. J. Tark, J.-H. Lee, S. Park, S. Kim, S. Bae and D. Kim, **Technical Digest of 21<sup>st</sup> International Photovoltaic Science and Engineering Conference**, Hilton, Fukoka Sea Hawk 28<sup>th</sup> Nov. – 2<sup>nd</sup> Dec. 2011.
15. PECVD SiN<sub>x</sub> for crystalline silicon solar cells, Kyung Dong Lee, Young Do Kim, **S. S. Dahiwale**, Sung Ju Tark, Kong-Han Lee, Sungeun Park, Donghwan Kim, **14<sup>th</sup> Joint Symposium on Electronic Materials**, Seoul, S. Korea, August 18-21, 2011.
16. 6 MeV electron beam induced diffusion of iodine in isotactic polypropylene, N. L. Mathakari, B. J. Patil, **S. S. Dahiwale**, V. N. Bhoraskar, and S. D. Dhole, **Proc. SPIE 8144, 81440J, 2011.**
17. Effect of high energy electron bombardment on iodine and lithium penetration into PEEK, HDPE and PI, J. Vacik, V. Lavrentiev, **S. S. Dahiwale**, V. N. bhoraskar, V. Hnatowicz, K. Narumi, **10th European conference on Accelerators in Applied Research and Technology**, Athens, Greece; 2010.
18. Single Event Effects on Highly Packed Memory Devices by Heavy Ion Irradiation **S.S.Dahiwale**, V. N. Bhoraskar, S. D. Dhole, **Proceedings of D.A.E., Solid State Physics Symposium**, vol. 51 (2006) 347-348.
19. Proposed Pulsed Neutron Source for Radiotherapy and Radiography. B. J. Patil, **S. S. Dahiwale**, S. T. Chavan, S. N. Pethe, V. F. Khan, R. Krishnan, V. N. Bhoraskar and S. D. Dhole, **Journal of Medical physics** Vol. 32 (2007) [Suppl], s38.
20. Effect of 15 keV Energy Electrons on the Lifetime of Minority Carriers in n-Si and SiO<sub>2</sub> Substrate. G.J.Tambave, **S.S.Dahiwale**, K.A.Bogle, S.K.Mahapatra,

V.N.Bhoraskar and S.D.Dhole, **Proceedings of D.A.E., Solid State Physics Symposium**, vol. 51 (2006) 761-762.

21. Comparison of minority carrier lifetime in Mev energy electrons, gamma rays and thermal neutrons irradiated crystalline silicon. G.S.George, **S.S.Dahiwale**, J.E.Yewale, V.N.Bhoraskar and S.D.Dhole **Proceedings of D.A.E., Solid State Physics Symposium**, vol. 49 (2004) 673-674.