

Presentations at the Semi-Annual Meetings of the Silicon Wafer Engineering and Defect Science (SiWEDS¹)

1. F. Sahtout Karoui, A. Karoui, G. A. Rozgonyi, **Dislocation Density and Relaxation Mechanisms in SiGe Heterostructures**, SiWEDS Review Meeting, , Hawaii, Oct.1-2, 2004.
2. F. Sahtout Karoui, A. Karoui, G. A. Rozgonyi, **Atomistic and Continuum Modeling of the Elastic/Plastic Deformation during Growth of Strained Si/Si_{1-x}Ge_x/Si**, SiWEDS Meeting, SLAC, Stanford University, CA, Apr. 16-17, 2004.
3. F. Sahtout Karoui, A. Karoui, G. A. Rozgonyi, **First-Principles Calculations of Nucleation Precursors in Nitrogen-doped Silicon**, SiWEDS Meeting, Orlando, FL, Oct. 17, 2003.
4. F. Sahtout Karoui, A. Karoui, G. A. Rozgonyi, **Atomistic and Continuum Modeling of Defect Formation and Relaxation Mechanisms in Ultra-thin SIMOX and SiGe/SOI Heterostructures**, SiWEDS Meeting, Orlando, FL, Oct. 17, 2003.
5. A. Karoui, F. Sahtout Karoui, G. A. Rozgonyi, **Modeling and Experiments of Nucleation and Growth of Oxygen Precipitates and Voids in N doped CZ Si**, SiWEDS Meeting Apr. 24-25, 2003, Stanford Univ.
6. N. Stoddard, A. Kvit, A. Karoui, G. Duscher, F. Stevie and G. Rozgonyi, **The Use of the TEM as a Nanoscale Laboratory for Point Defect Creation and Agglomeration in Silicon**, SiWEDS Meeting Apr. 24-25, 2003, Stanford Univ.
7. A. Karoui, A. Kvit, G. Duscher, and G. A. Rozgonyi, **Precipitates and Stacking Faults in Nitrogen-Doped CZ Silicon Annealed Wafer** , SiWEDS Meeting, Salt Lake City, Oct. 25, 2002.
8. F. Sahtout Karoui, A. Karoui, G. A. Rozgonyi, N. Inoue, **First Principles Calculations of Infrared Spectra of the Dominant Defect Complexes in N-CZ Silicon**, SiWEDS Meeting, Salt Lake City, Oct. 25, 2002.
9. F. Sahtout Karoui, A. Karoui, G. A. Rozgonyi, N. Inoue, **Ab-Initio Vibrational Analysis of Nitrogen Defects in CZ Silicon**, North Carolina State University, May 9-10, 2002.
10. A. Karoui, F. Sahtout Karoui, G. A. Rozgonyi, M. Hourai, and K. Sueoka, **First Principles Calculations of the atomic Structure, Energetics and Thermal Stability of Nitrogen-Vacancy Related Defects in Nitrogen Doped CZ Silicon**, North Carolina State University, May 9-10, 2002.
11. A. Karoui, G. A. Rozgonyi, A. Kvit, F. Sahtout Karoui, D. Yang, **Nano-Scale Analysis of Defect Evolution and Gettering in CZ Silicon Nitrogen and Oxygen Coupling (co-precipitation)**, Web Conference for SiWEDS Semi-Annual Review Meeting, Nov. 26-30, 2001.
12. A. Karoui, F. Sahtout Karoui, G. A. Rozgonyi, N. Inoue, H. Harada, **Ab-initio Vibrational Analysis of Nitrogen Defects in Silicon**, Web Conference for SiWEDS Semi-Annual Review Meeting, Nov. 26-30, 2001
13. A. Karoui, F. Sahtout Karoui, and G. A. Rozgonyi, **Ab-initio Calculations for Chemical Complexes in N-Cz Silicon Wafers**, Lafayette, Apr. 19, 2001.
14. G. A. Rozgonyi, A. Karoui, and A. Kvit, **Nano-Scale Analysis of Defect Evolution and Gettering from Vacancies to Nanovoids to Cavities and COPs in CZ Silicon**, Lafayette Apr. 19, 2001.
15. A. Karoui, F. Sahtout Karoui, and G. A. Rozgonyi, T. Sasaki, D. Yang, **Overview of Oxygen/Vacancy-Nitrogen Nucleation and Precipitate/Void Growth in N-CZ Silicon Wafers**, Phoenix, Oct. 27, 2000.

¹ Silicon Wafer Engineering and Defect Science, Consortium of seven university and 15 silicon and microelectronic industry members
<http://www.mse.ncsu.edu/siweds/>

16. F. Sahtout Karoui, A. Karoui, B. L. Jiang and G. A. Rozgonyi, **Computer Simulation of Oxygen Precipitation in CZ Silicon Wafers**, Portland, May. 25, 2000.
17. F. Sahtout Karoui, A. Karoui, B. L. Jiang, and G. A. Rozgonyi, **Homogenous versus Heterogenous Nucleation of Oxygen in Hi-Lo-Hi and Lo-Hi annealing processes of CZ silicon wafers**, SiWEDS meeting, Portland, May 25, 2000.
18. Jean F. Daviet, A. Karoui, and G. A. Rozgonyi, **Control of Rapid Thermal Processing Induced Defects/Impurities In 200 mm Si Wafers**, SiWEDS Spring Meeting '99, Sedona Apr. 26-27, 1999.
19. Faouzia Sahtout Karoui, Abdennaceur Karoui, and George A. Rozgonyi, **Computer Simulation of Oxygen Precipitation in CZ Silicon Wafers**, Mass. Inst. of Tech - Nov. '98.