

## **Dr. Avraham Publications:**

1. A. Karsenty and **A. Chelly**, "Y-Function Analysis of the Low Temperature Behavior of Ultrathin Film FD SOI MOSFETs," *Active and Passive Electronic Components*, vol. 2014, Article ID 697369, 10 pages, 2014.
2. A. Karsenty and **A. Chelly**, "Application, Modeling and Limitations of Y-function based Methods for Massive Series Resistance in Nanoscale SOI MOSFETs", [Solid State Electronics](#), Volume 92, February 2014, Pages 12–19.
3. A. Karsenty and **A. Chelly**, "Comparative study of NSB and UTB SOI MOSFETs Characteristics by Extraction of Series Resistance", [Solid State Electronics](#), Volume 91, January 2014, pages 28-35.
4. M. Shviro, A. Paszternák, **A. Chelly** and D. Zitoun, "Zigzag-shaped nickel nanowires via organometallic template-free route", [Journal of Nanoparticle Research](#), Volume 15, Issue 8, August 2013, Pages 1-10.
5. S. Levy, I. Shlimak, **A. Chelly** and, Z. Zalevsky "C-V characteristics of Si-MOS structures with Ge nanocrystals", 21st Int. Symp. "Nanostructures: Physics and Technology" St. Petersburg, Russia, June 24-28, 2013.
6. A. Karsenty and **A. Chelly** "Modeling of the channel thickness influence on electrical characteristics and series resistance in gate-recessed nanoscale SOI MOSFETs" [Active and Passive Electronic Components, Volume 2013, 2013.](#)
7. A. Karsenty and **A. Chelly**, "Influence of Series Massive Resistance on Capacitance and Conductance Characteristics in Gate-recessed Nanoscale SOI MOSFETs", [Active and Passive Electronic Components](#), Volume 2013, 2013.
8. A. Karsenty and **A. Chelly**, "A Comparative Study of Electrical Transport Phenomena in Ultrathin vs. Nanoscale SOI MOSFETs Devices", [International Journal of Electrical Science and Engineering](#) Vol:7 No:1, 1243-1247 (2013).
9. D. Abraham, **A. Chelly**, D. Elbaz, S. Schiff, M. Nabozny, and Z. Zalevsky, "Modeling of Current-Voltage Characteristics of the Photoactivated Device Based on SOI Technology" [Active and Passive Electronic Components Volume 2012 \(2012\).](#)
10. D. Abraham, **A. Chelly**, J. Shappir and Z. Zalevsky, "Hybrid Optical and Electrical Reconfigurable Logic Gates Based On SOI Technology" [Photonics and Nanostructures, 9 \(2011\) pp. 35-41.](#)
11. S. Levy, I. Shlimak, **A. Chelly**, Z. Zalevsky and T. Lu, "Influence of Ge nanocrystals and radiation defects on C–V characteristics in Si-MOS structures", *Physica B*, 404 (2009) pp. 5189–5191.
12. D. Abraham, Z. Zalevsky, **A. Chelly**, J. Shappir and Michael Rosenbluh, "Silicon on insulator photo-activated modulator", [Microelectronics J. , 39 \(2009\) pp. 1429-1432.](#)
13. D. Abraham, Z. Zalevsky, **A. Chelly** and J. Shappir , "Fabrication of vertically positioned silicon on insulator photo-activated modulator", [Photonics and Nanostructures, 7 \(2009\) pp. 190-197.](#)
14. **R. Chelly**, Y.Cohen A. Sa'ar and J. Shappir "Pyramid-Shaped Silicon Photodetector with subwavelength Aperture" *IEEE Transactions on Electron Devices* 49 (6); 986-990 (2002).

15. T. Angot, **R. Chelly** "Stable Ge-H phase at 620 K on Si<sub>1-x</sub>Gex / Si(001) surface: A high-resolution electron energy loss spectroscopy study". Surface Science 402; 52-56 (1998).
16. **R. Chelly**, T. Angot, P. Louis, D. Bolmont, J.J. Koulmann "In-situ monitoring of growth rate parameters in Hot-wire assisted GS-MBE using a Quartz Crystal Microbalance" Applied Surface Science 115, 299-306 (1997).
17. **R. Chelly**, T. Angot, D. Bolmont, J.J. Koulmann "Growth of epitaxial Si<sub>1-x</sub>Gex layers on Si(100) surface by catalytical decomposition of disilane and germane: Photoemission studies" Applied Physics Letters 67, 1733-1735 (1995).
18. L. Stauffer, H. Ezzehar, D. Bolmont, **R. Chelly**, J.J. Koulmann "Chemisorption of atomic hydrogen on the Si(111) 7x7 reconstructed surface at low coverage" Surface Science 342, 206-240 (1995).