

## PUBLIKATIONEN

### ZEITSCHRIFTEN-ARTIKEL

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1. **Geometrical optimization and contact configuration in radial pn junction nanorod and microrod silicon solar cells**, F. Voigt, T. Stelzner, S. Christiansen, Progress in Photovoltaics: Research and Applications, <http://dx.doi.org/10.1002/pip.2231> (published online, June 2012).
2. **Influence of the Contacting Scheme in Simulations of Radial Silicon Nanorod Solar Cells**, F. Voigt, T. Stelzner, and S. H. Christiansen, Mater. Sci. Eng. B 177, 1558 (2012).
3. **Photoluminescence of samples produced by Electroless Wet Chemical Etching: Between silicon nanowires and porous structures**, F. Voigt, V. Sivakov, V. Gerliz, G. H. Bauer, B. Hoffmann, G. Z. Radnoczi, B. Pecz, and S. Christiansen, Phys. Status Solidi A 208, 893 (2011).
4. **Roughness of Silicon Nanowire Sidewalls: the Key to Understand Room Temperature Photoluminescence**, V. A. Sivakov, F. Voigt, A. Berger, G. H. Bauer, and S. H. Christiansen, Phys. Rev. B 82, 125446 (2010).
5. **Layer growth and connectivity calculations based on a stick-ball model: Application to silicon nanocrystals**, F. Voigt, G. H. Bauer, F. Huisken, Journal of Applied Physics 106, 034308 (2009).
6. **The Flexural-Torsional Resonance Mode of a Chip Cantilever System – Applications to Nanomachining**, F. Voigt, F. Krohs, R. Gerbach, Journal of Vacuum Science and Technology B 27, 958 (2009).
7. **Transport properties and defects in silicon nanoparticles and effect of embedding in amorphous silicon layers**, M.-E. Gueunier-Farret, F. Huisken, J.-P. Kleider, F. Voigt, R. Brüggemann, G. H. Bauer, , J. Non-Cryst. Solids 352, 1101 (2006).
8. **Porous thin films grown from size-selected silicon nanocrystals**, F. Voigt, R. Brüggemann, T. Unold, F. Huisken, G. H. Bauer, Materials Science and Engineering C 25, 584 (2005).
9. **Schweben in elektromagnetischen Feldern: Abgehoben**, F. Voigt, K. Hinsch, Phys. Unserer Zeit 34, 232 (2003).
10. **Electronic Properties of Microcrystalline SiGe- Thin Films by Hall Experiments and Photo- and Dark Transport**, G. H. Bauer, F. Voigt, R. Carius, M. Krause, R. Brüggemann, T. Unold, J. Non-Cryst. Solids 299-302, 153 (2002).

1. F. Voigt, and S. Christiansen, *Radial Junction Si Nanowire Solar Cells: The Influence of Optical Generation Profiles on Cell Efficiency*, Poster at conference 'Next Generation Solar Energy: From Fundamentals to Applications', Erlangen, December 2011.
2. F. Voigt, T. Stelzner, and S. H. Christiansen, *Influence of the Contacting Scheme in Simulations of Radial Silicon Nanorod Solar Cells*, Talk and Poster at E-MRS Spring Meeting, Nice, France, May 2011.
3. F. Voigt, T. Stelzner, and S. H. Christiansen, *Simulation of symmetrically doped silicon nanowire solar cells*, Poster at MRS Spring Meeting 2011, San Francisco, April 2011. (Mater. Res. Soc. Symp. Proc., vol. 1322, 2011)
4. F. Voigt, V. Gerliz, G. H. Bauer, R. Har-Lavan, D. Cahen, V. Sivakov, and S. Christiansen, *Influence of Surface Treatment and Passivation on Photoluminescence of Wet Chemically Etched Silicon*, Talk at Quantsol 2011 Winter workshop, Bad Hofgastein, Austria, March 2011. E-proceedings: [www.quantsol.org/pub/pub11\\_24.pdf](http://www.quantsol.org/pub/pub11_24.pdf)
5. F. Voigt, G. H. Bauer, V. Sivakov, A. Berger, S. Christiansen, *Photoluminescence Properties of Silicon Nanowires Produced by Wet Chemical Etching Using Varying Etching Conditions*, Poster at E-MRS Spring Meeting 2010, Strasbourg, France, June 2010.
6. F. Voigt, V. Gerliz, V. Sivakov, G. H. Bauer, and S. Christiansen, *Photoluminescence of Wet Chemically Etched Silicon Nanowires*, Talk at Quantsol 2010 Winter workshop, Brigels (Breil), Switzerland, March 2010. E-proceedings: [www.quantsol.org/pub/pub10\\_27.pdf](http://www.quantsol.org/pub/pub10_27.pdf)
7. E. Kamau, F. Voigt, *Modeling of Vibrating Atomic Force Microscope's Cantilever within Different Frames of Reference*, European Comsol Conference, Hannover, November 2008.
8. F. Voigt, F. Krohs, R. Gerbach, *The Flexural Torsional Vibration-Mode - A Resonance of a Chip Cantilever System*, International Conference on Nanoscience and Technology (ICN+T), Denver, July 2008.
9. F. Voigt, R. Brüggemann, T. Unold, F. Huisken, G. H. Bauer, *Porous thin films grown from size-selected silicon nanocrystals*, Poster G/PIII.10 at E-MRS Spring Meeting, Strasbourg, France, May 2004.
10. F. Voigt, R. Brüggemann, F. Huisken und G. H. Bauer, *Porous Thin Films Grown by Size-Selected Si-Nanoparticles*, Verhandl. DPG (VI) 39, 2/2004.
11. F. Voigt, R. Brüggemann, T. Unold, J.-P. Kleider, A. Colder, F. Huisken und G. H. Bauer, *Analysen des Ladungstransports in Silizium-Nanokristallit-Dünnschichten*, Verhandl. DPG (VI) 38, 5/2003.
12. F. Voigt, R. Brüggemann, T. Unold, J.-P. Kleider, G. Ledoux, F. Huisken und G. H. Bauer, *Ladungstransport in dünnen Schichten aus Silizium-Nanokristallen*, Verhandl. DPG (VI) 37, 1/2002.
13. F. Voigt, T. Unold, R. Brüggemann, R. Carius, G. H. Bauer, *Analyse des Ladungstransports in  $\mu$ -SiGe mit Hall- und Photoleitungsmessungen*, Verhandl. DPG (VI) 36, HL24.82, Hamburg, 2001.

14. R. Carius, M. Krause, F. Finger, F. Voigt, H. Stiebig, *Structural and Electronic Properties of Microcrystalline Silicon-Germanium Alloys*, 11th International School on Condensed Matter Physics, Sep 2000, Varna, Bulgaria (2001) 18.
15. F. Voigt, R. Carius, T. Unold, M. Krause, G. H. Bauer, *Ladungstransport in mikrokristallinen Silizium-Germanium-Schichten* ( $\mu$ -SiGe:H), Verhandl. DPG (VI) 36, HL15.2, Regensburg, 2000.

BUCHBEITRÄGE, POPULÄRWISSENSCHAFTLICHES

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\* **Wet - Chemically Etched Silicon Nanowire Architectures: Formation and Properties**, V. Sivakov, F. Voigt, B. Hoffmann, V. Gerliz, and S. Christiansen, in book: *Nanowires – Fundamental Research*, ed. A. Hashim, chap. 3, pp. 45-80, ISBN 978-953-307-327-9, (Intech, 2011).

\* **Abgehoben: Schweben in elektromagnetischen Feldern**, F. Voigt, K. Hinsch, *Physik in unserer Zeit* 34, 232 (2003), letzte Fassung vor Veröffentlichung: [www.staff.uni-oldenburg.de/felix.voigt/download/voigt\\_03\\_pre.pdf](http://www.staff.uni-oldenburg.de/felix.voigt/download/voigt_03_pre.pdf), Originalfassung ,open access' von [onlinelibrary.wiley.com](http://onlinelibrary.wiley.com) zu bekommen.

DISSERTATION

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**Optoelectronic properties of size-selected silicon nanocrystals**, F. Voigt, Carl von Ossietzky Universität Oldenburg, July 2005. <http://oops.uni-oldenburg.de/volltexte/2006/134>

DIPLOMARBEIT

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**Hall-Effekt und Rekombination in mikrokristallinen Silizium-Germanium-Dünnschichten**, F. Voigt, Carl-von-Ossietzky-Universität Oldenburg, July 2000.