

PROCEEDINGS OF SPIE

Nanotechnology IV

**Achim Wixforth
Axel Lorke
Friedrich C. Simmel**
Editors

**4–6 May 2009
Dresden, Germany**

Sponsored by
SPIE Europe
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Volume 7364

Proceedings of SPIE, 0277-786X, v. 7364

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Author(s), "Title of Paper," in *Nanotechnology IV*, edited by Achim Wixforth, Axel Lorke, Friedrich C. Simmel, Proceedings of SPIE Vol. 7364 (SPIE, Bellingham, WA, 2009) Article CID Number.

ISSN 0277-786X

ISBN 9780819476388

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA

Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445

SPIE.org

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Printed in the United States of America.

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Contents

vii	Conference Committee
ix	Introduction

SESSION 1 CHARACTERISATION

- 7364 02 **Electronic and excitonic properties of self-assembled semiconductor quantum rings (Invited Paper) [7364-01]**
V. M. Fomin, Univ. Duisburg-Essen (Germany), Univ. Antwerpen (Belgium), Technische Univ. Eindhoven (Netherlands), and State Univ. of Moldova (Moldova); V. N. Gladilin, Univ. Antwerpen (Belgium) and State Univ. of Moldova (Moldova); J. T. Devreese, Univ. Antwerpen (Belgium) and Technische Univ. Eindhoven (Netherlands); J. H. Blokland, P. C. M. Christianen, J. C. Maan, Radboud Univ. Nijmegen (Netherlands); A. G. Taboada, D. Granados, J. M. García, Instituto de Microelectrónica de Madrid (Spain); N. A. J. M. Kleemans, H. C. M. van Genuchten, M. Bozkurt, P. M. Koenraad, Technische Univ. Eindhoven (Netherlands)
- 7364 03 **Characterization of nano-thin films and membranes by use of atomic force acoustic microscopy methods [7364-03]**
M. Kopycinska-Müller, A. Striegler, Technische Univ. Dresden (Germany) and Fraunhofer-Institut für Zerstörungsfreie Prüfverfahren (Germany); B. Köhler, N. Meyendorf, Fraunhofer-Institut für Zerstörungsfreie Prüfverfahren (Germany); K.-J. Wolter, Technische Univ. Dresden (Germany)

SESSION 2 FABRICATION I

- 7364 05 **Local charge storage and decay mechanism in silica [7364-05]**
H. Graaf, C. Maedler, C. von Borczyskowski, Chemnitz Univ. of Technology (Germany)
- 7364 06 **Spin-dependent transport in hard superparamagnetic C:Ni nanocomposites [7364-06]**
S. Zhou, G. Abrasonis, A. Mücklich, K. Potzger, J. Fassbender, M. Helm, H. Schmidt, Forschungszentrum Dresden-Rossendorf (Germany)

SESSION 3 SELF-ASSEMBLY AND NANOTEMPLATES

- 7364 09 **Nanostructure formation driven by local protonation of polymer thin films [7364-09]**
C. Maedler, H. Graaf, Chemnitz Univ. of Technology (Germany); S. Chada, M. Yan, A. La Rosa, Portland State Univ. (United States)
- 7364 0A **Creation of functionalized nanostructures on alkyl terminated silicon by selective binding of dye molecules [7364-10]**
T. Baumgärtel, H. Graaf, C. von Borczyskowski, Chemnitz Univ. of Technology (Germany)

SESSION 4 NOVEL DEVICES

- 7364 0B **Programmable lab-on-a-chip system for single cell analysis (Invited Paper)** [7364-11]
S. Thalhammer, Helmholtz Zentrum München, GmbH (Germany)
- 7364 0C **Attainability of negative differential conductance in tunnel Schottky structures with 2D channels: theory and experiment** [7364-12]
M. N. Feiginov, Technische Univ. Darmstadt (Germany); I. N. Kotelnikov, Institute of Radioengineering and Electronics (Russian Federation)
- 7364 0D **Bio-mimicking rotary nanomotors** [7364-13]
A. Smirnov, The Institute of Physical and Chemical Research (RIKEN) (Japan) and The Univ. of Michigan (United States); L. Mourkh, Queens College, CUNY (United States); S. Savel'ev, The Institute of Physical and Chemical Research (RIKEN) (Japan) and Loughborough Univ. (United Kingdom); F. Nori, The Institute of Physical and Chemical Research (RIKEN) (Japan) and Univ. of Michigan (United States)

SESSION 5 HYBRID NANOSYSTEMS

- 7364 0F **Surface reactions of (sub)monolayers of small organic species on oxidized silicon** [7364-15]
N. Salingue, D. Lingenfelter, P. Prunici, P. Hess, Univ. of Heidelberg (Germany)
- 7364 0G **Luminescence and photovoltaic effect of multilayer structures based on CdSe and CdSe/ZnS nanoparticles embedded into organic semiconductors** [7364-16]
A. A. Chistyakov, S. V. Dayneko, Moscow Engineering Physics Institute (Russian Federation); V. A. Oleinikov, Shemyakin and Ovchinnikov Institute of Bioorganic Chemistry (Russian Federation); A. R. Tameev, M. G. Tedoradze, Institute of Physical Chemistry and Electrochemistry (Russian Federation); K. V. Zakharchenko, Moscow Engineering Physics Institute (Russian Federation); V. I. Zolotarevskiy, Institute of Physical Chemistry and Electrochemistry (Russian Federation)

SESSION 6 FABRICATION II

- 7364 0I **Patterning of Si substrates for Ge/Si(001) islands grown by low-energy plasma enhanced CVD** [7364-18]
M. Bollani, CNISM-CNR (Italy), L-Ness (Italy), and Univ. Milano Bicocca (Italy); D. Chrastina, L-NESS (Italy) and Politecnico di Milano (Italy); A. Fedorov, CNISM-CNR (Italy), L-NESS (Italy), and Politecnico di Milano (Italy); G. Isella, R. Sordan, L-NESS (Italy) and Politecnico di Milano (Italy)
- 7364 0K **Mesoscale honeycomb films for templating inorganic nanomaterials and microspheres** [7364-20]
K. Kon, O. Karthaus, Chitose Institute of Science and Technology (Japan)
- 7364 0L **Heterojunction solar cell fabricated by spin-coating of a CNT/PEDOT:PSS heteroemitter on top of a crystalline silicon absorber** [7364-21]
H.-C. Neitzert, Salerno Univ. (Italy); S. Schwertheim, K. Meusinger, M. Leinhos, W. R. Fahrner, Hagen Univ. (Germany)

SESSION 7 NANOPARTICLES/NANOPATTERNS

- 7364 0N **Nanoparticle contamination control for EUVL-technology: especially for photomasks in carriers and scanners** [7364-23]
H. Fissan, C. Asbach, T. A. J. Kuhlbusch, Institute of Energy and Environmental Technology e.V. (Germany); J. Wang, D. Y. H. Pui, Univ. of Minnesota (United States); S.-J. Yook, Hanyang Univ. (Korea, Republic of); J. H. Kim, The Univ. of Seoul (Korea, Republic of)
- 7364 0O **Scanning probe measurements of CuI doped single-walled carbon nanotubes** [7364-24]
A. A. Zhukov, V. K. Gartman, Institute of Solid State Physics (Russian Federation); A. A. Eliseev, Lomonosov Moscow State Univ. (Russian Federation)
- 7364 0P **Vortex dynamics in high- T_c superconducting films with arrays of antidots** [7364-25]
V. M. Fomin, Univ. Duisburg-Essen (Germany) and Forschungszentrum Jülich GmbH (Germany); R. Wördenweber, Forschungszentrum Jülich GmbH (Germany)

SESSION 8 NANOSCALE TRANSPORT

- 7364 0Q **Experimental realization of a Fabry-Perot-type interferometer by co-propagating edge states in the integer and fractional quantum Hall effect regimes (Invited Paper)** [7364-26]
E. V. Deviatov, Institute of Solid State Physics (Russian Federation); B. Marquardt, A. Lorke, Univ. Duisburg-Essen (Germany); G. Biasiol, Lab. Nazionale TASC, INFN-CNR (Italy); L. Sorba, Lab. Nazionale TASC, INFN-CNR (Italy) and Scuola Normale Superiore di Pisa (Italy)

Author Index

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Session Chairs

- 1 Characterisation
Achim Wixforth, Universität Augsburg (Germany)
- 2 Fabrication I
Achim Wixforth, Universität Augsburg (Germany)
- 3 Self-assembly and Nanotemplates
Axel Lorke, Universität Duisburg-Essen (Germany)
- 4 Novel Devices
Axel Lorke, Universität Duisburg-Essen (Germany)
- 5 Hybrid Nanosystems
Vladimir M. Fomin, Universiteit Antwerpen (Belgium)
- 6 Fabrication II
Alexey E. Zhukov, Ioffe Physico-Technical Institute (Russian Federation)
- 7 Nanoparticles/Nanopatterns
Eduard V. Deviatov, Institute of Solid State Physics (Russian Federation)
- 8 Nanoscale Transport
Heinz J. Fissan, Institut für Energie- und Umwelttechnik e.V. (Germany)

Introduction

A conference entitled 'Microtechnologies for the next Millennium' must include a focus on nanotechnology, a field which has certainly matured beyond its infancy. Novel fabrication techniques and hybridization of different materials reveal a wealth of new applications and experimental findings that could not have been envisioned a few years ago.

The SPIE Europe Nanotechnology conference 2009 brought together research scientists, engineers, and visionaries from this exciting field. In view of the fact that nanotechnology was not represented by a single headline, six different sessions were set up which gave special emphasis to technologies and techniques that are serving to bridge the fields of electronics, mechanics, photonics, and biology (soft matter, generally).

The following selection of papers nicely reflects the state of nanotechnology and nanoscience in general. I personally wish to thank all the attendees and authors for their great mix of theories, mature scientific results, and visionary ideas which made the conference a true 'must attend' event for players in the field.

Achim Wixforth

