

Research Area B 'Nano-Electronics'

Project B1 'Fabrication and Characterization of Nanostructures'

B1.6 'Preparation and Characterization of Metallic Nanostructures' (T. Schimmel)

- [B1.6:1] * F.-Q. Xie, R. Maul, A. Augenstein, Ch. Obermair, E.B. Starikov, G. Schön, Th. Schimmel, and W. Wenzel, *Independently Switchable Atomic Quantum Transistors by Reversible Contact Reconstruction*, Nano Lett. **8**, 4493 (2008)
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- [B1.6:5] ‡ S. Zhong, D. Wang, Th. Koch, M. Wang, S. Walheim, and Th. Schimmel, *Growth and Branching Mechanisms of Electrochemically Self-Organized Mesoscale Metallic Wires*, Crystal Growth & Design **10**, 1455 (2010)
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- [B1.6:9] * F.-Q. Xie, R. Maul, Ch. Obermair, W. Wenzel, G. Schön, and Th. Schimmel, *Multilevel Atomic-Scale Transistors Based on Metallic Quantum Point Contacts*, Adv. Mater. **22**, 2033 (2010)
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- [B1.6:11] C. Obermair, H. Kuhn, and Th. Schimmel, *Lifetime analysis of individual-atom contacts and crossover to geometric-shell structures in unstrained silver nanowires*, Beilstein J. Nanotechnol. **2**, 740 (2011)

B1.7 'Quantum Coherent Transport in Nanostructures' (G. Schön)

- [B2.4:1] ‡ M. Pletyukhov, V. Gritsev, and N. Pauget, *Tunneling conductance of a mesoscopic ring with spin-orbit coupling and Tomonaga-Luttinger interaction*, Phys. Rev. B **74**, 045301 (2006)
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- [B2.4:4] ‡ J.C. Cuevas and A. Levy Yeyati, *Subharmonic gap structure in short ballistic graphene junctions*, Phys. Rev. B **74**, 180501 (2006)
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B1.9 ‘Controlling Electron Transport in Carbon Nanotubes and Graphene with an Optical Micro-Resonator Cavity’ (R. Krupke)

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Project B2 'Electron Transport in Nanostructures'

B2.2 'Single-Electron Effects in Nanostructures' (G. Schön, A. Shnirman)

- [B2.2:1] J. Aghassi, A. Thielmann, M.H. Hettler, and G. Schön, *Strongly enhanced shot noise in chains of quantum dots*, Appl. Phys. Lett. **89**, 052101 (2006)
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B2.6 ,Theory of Superconducting and Ferromagnetic Heterostructures' (G. Schön, M. Eschrig)

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