

List of publications

Original Journal Articles:

- A1 A. Wacker and E. Schöll: *Oscillatory instability in the heterostructure hot-electron diode*, Applied Physics Letters **59**, 1702–1704 (1991) DOI: 10.1063/1.106223
- A2 A. Wacker and E. Schöll: *Spatio-temporal dynamics of vertical charge transport in a semiconductor heterostructure*, Semiconductor Science and Technology **7**, 1456–1463 (1992) DOI: 10.1088/0268-1242/7/12/006
- A3 A. Wacker and E. Schöll: *Spiking in an Activator-Inhibitor Model for Elements with S-Shaped Negative Differential Conductivity*, Zeitschrift für Physik **B 93**, 431–436 (1994) DOI: 10.1007/BF01314246
- A4 A. Wacker: *Dynamical behavior in a quantum-dot structure*, Physical Review B **49**, 16785–16488 (1994) DOI: 10.1103/PhysRevB.49.16785
- A5 F. Prenzel, A. Wacker, and E. Schöll: *Simple model for multistability and domain formation in semiconductor superlattices*, Physical Review B **50**, 1705–1712 (1994); erratum **52**, 11518 (1995) DOI: 10.1103/PhysRevB.50.1705
- A6 S. Bose, A. Wacker, and E. Schöll: *Bifurcation scenarios of spatio-temporal spiking in semiconductor devices*, Physics Letters **A 195**, 144–150 (1994) DOI: 10.1016/0375-9601(94)90087-6
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- A8 S.H. Kwok, H.T. Grahn, M. Ramsteiner, K. Ploog, F. Prenzel, A. Wacker, E. Schöll, S. Murugkar, and R. Merlin: *Non-resonant carrier transport through high-field domains in semiconductor superlattices*, Physical Review B **51**, 9943–9951 (1995) DOI: 10.1103/PhysRevB.51.9943
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- A10 A. Wacker and E. Schöll: *Criteria for stability in bistable electrical devices with S- or Z-shaped current-voltage characteristics*, Journal of Applied Physics **78**, 7352–7357 (1995) DOI: 10.1063/1.360384
- A11 A. Wacker, S. Bose, and E. Schöll: *Transient spatio-temporal chaos in a reaction-diffusion model*, Europhysics Letters **31**, 257–262 (1995) DOI: 10.1209/0295-5075/31/5-6/002
- A12 G. Schwarz, A. Wacker, F. Prenzel, E. Schöll, J. Kastrup, H.T. Grahn, and K. Ploog: *The influence of imperfections and weak disorder on domain formation superlattices*, Semiconductor Science and Technology **11**, 475–482 (1996) DOI: 10.1088/0268-1242/11/4/003
- A13 F.-J. Niedernostheide, H.-J. Schulze, S. Bose, A. Wacker, and E. Schöll: *Spiking in a semiconductor device: Experiments and comparison with a model*, Physical Review E **54**, 1253–1260 (1996). DOI: 10.1103/PhysRevE.54.1253
- A14 R. Stasch, R. Hey, M. Asche, A. Wacker, and E. Schöll: *Temperature persistent bistability and threshold switching in a single barrier heterostructure hot-electron diode*, Journal of Applied Physics **80**, 3376–3380 (1996). DOI: 10.1063/1.363251
- A15 A. Wacker, M. Moscoso, M. Kindelan, and L.L. Bonilla: *Current-voltage characteristic and stability in resonant-tunneling n-doped semiconductor superlattices*, Physical Review B **55**, 2466–2475 (1997). DOI: 10.1103/PhysRevB.55.2466
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