

Superlattices

- [1] M. Heinrich, T. Dahms, V. Flunkert, S. W. Teitsworth, and E. Schöll: *Symmetry breaking transitions in networks of nonlinear circuit elements*, New J. Phys. **12**, 113030 (2010).
- [2] M. T. Greenaway, A. G. Balanov, E. Schöll, and T. M. Fromhold: *Controlling and enhancing THz collective electron dynamics in superlattices by chaos-assisted miniband transport*, Phys. Rev. B **80**, 205318 (2009).
- [3] H. Xu, A. Amann, E. Schöll, and S. W. Teitsworth: *Dynamics of electronic transport in a semiconductor superlattice with a shunting side layer*, Phys. Rev. B **79**, 245318 (2009).
- [4] J. Hizanidis and E. Schöll: *Control of coherence resonance in semiconductor superlattices*, Phys. Rev. E **78**, 066205 (2008).
- [5] E. Schöll: *Delayed feedback control of chaotic spatio-temporal patterns in semiconductor nanostructures*, in *Handbook of Chaos Control*, edited by E. Schöll and H. G. Schuster (Wiley-VCH, Weinheim, 2008), chap. 24, pp. 533–558, second completely revised and enlarged edition.
- [6] J. Hizanidis and E. Schöll: *Control of noise-induced spatiotemporal patterns in superlattices*, phys. stat. sol. (c) **5**, 207 (2008).
- [7] J. Hizanidis, R. Aust, and E. Schöll: *Delay-induced multistability near a global bifurcation*, Int. J. Bifur. Chaos **18**, 1759 (2008).
- [8] J. Hizanidis, A. G. Balanov, A. Amann, and E. Schöll: *Noise-induced front motion: signature of a global bifurcation*, Phys. Rev. Lett. **96**, 244104 (2006).
- [9] J. Hizanidis, A. G. Balanov, A. Amann, and E. Schöll: *Noise-induced oscillations and their control in semiconductor superlattices*, Int. J. Bifur. Chaos **16**, 1701 (2006).
- [10] A. Amann and E. Schöll: *Coupled lateral and vertical electron dynamics in semiconductor superlattices*, Phys. Rev. B **72**, 165319 (2005).
- [11] A. Amann and E. Schöll: *Bifurcations in a system of interacting fronts*, J. Stat. Phys. **119**, 1069 (2005).
- [12] J. Schlesner, A. Amann, N. B. Janson, W. Just, and E. Schöll: *Self-stabilization of chaotic domain oscillations in superlattices by time-delayed feedback control*, Semicond. Sci. Technol. **19**, S34 (2004).
- [13] J. Schlesner, A. Amann, N. B. Janson, W. Just, and E. Schöll: *Self-stabilization of high frequency oscillations in semiconductor superlattices by time-delay autosynchronization*, Phys. Rev. E **68**, 066208 (2003).
- [14] A. Amann, K. Peters, U. Parlitz, A. Wacker, and E. Schöll: *Hybrid model for chaotic front dynamics: From semiconductors to water tanks*, Phys. Rev. Lett. **91**, 066601 (2003).
- [15] A. Amann, J. Schlesner, A. Wacker, and E. Schöll: *Chaotic front dynamics in semiconductor superlattices*, Phys. Rev. B **65**, 193313 (2002).

- [16] A. Amann, A. Wacker, and E. Schöll: *Tripole current oscillations in superlattices*, Physica B **314**, 404 (2002).
- [17] A. Amann, A. Wacker, L. L. Bonilla, and E. Schöll: *Dynamic scenarios of multi-stable switching in semiconductor superlattices*, Phys. Rev. E **63**, 066207 (2001).
- [18] A. Carpio, L. L. Bonilla, A. Wacker, and E. Schöll: *Wavefronts may move upstream in semiconductor superlattices*, Phys. Rev. E **61**, 4866 (2000).
- [19] R. Scheuerer, E. Schomburg, K. F. Renk, A. Wacker, and E. Schöll: *Feasibility of a semiconductor superlattice oscillator based on quenched domains for the generation of submillimeter waves*, Appl. Phys. Lett. **81**, 1515 (2002).
- [20] A. K. Jappsen, A. Amann, A. Wacker, E. Schöll, and E. Schomburg: *High frequency impedance of driven superlattices*, J. Appl. Phys. **92**, 3137 (2002).
- [21] E. Schomburg, K. Hofbeck, R. Scheuerer, M. Haeussler, K. F. Renk, A. K. Jappsen, A. Amann, A. Wacker, E. Schöll, D. G. Pavel'ev, and Y. Koschurinov: *Control of the dipole domain propagation in a GaAs/AlAs superlattice with a high-frequency field*, Phys. Rev. B **65**, 155320 (2002).
- [22] C. Pacher, G. Strasser, E. Gornik, F. Elsholz, A. Wacker, and E. Schöll: *Optics with ballistic electrons: Anti-reflection coating for GaAs/AlGaAs superlattices*, Physica E **12**, 285 (2002).
- [23] C. Pacher, C. Rauch, G. Strasser, E. Gornik, F. Elsholz, A. Wacker, G. Kießlich, and E. Schöll: *Anti-reflection coating for miniband transport and Fabry-Perot resonances in GaAs/AlGaAs superlattices*, Appl. Phys. Lett. **79**, 1486 (2001).
- [24] F. Elsholz, A. Wacker, E. Schöll, M. Kast, G. Strasser, and E. Gornik: *Magnetotransport through semiconductor superlattices*, Phys. Rev. B **63**, 033312 (2001).
- [25] H. Steuer, A. Wacker, E. Schöll, M. Ellmauer, E. Schomburg, and K. F. Renk: *Thermal breakdown, bistability, and complex high-frequency current oscillations due to carrier heating in superlattices*, Appl. Phys. Lett. **76**, 2059 (2000).
- [26] H. Steuer, A. Wacker, and E. Schöll: *Complex behavior due to electron heating in superlattices exhibiting high-frequency current oscillations*, Physica B **272**, 202 (1999).
- [27] E. Schöll, G. Schwarz, and A. Wacker: *Nonlinear and oscillatory electronic transport in superlattices as a probe of structural imperfections*, Physica B **249–251**, 961 (1998).
- [28] M. Patra, G. Schwarz, and E. Schöll: *Bifurcation analysis of stationary and oscillating field domains in semiconductor superlattices with doping fluctuations*, Phys. Rev. B **57**, 1824 (1998).
- [29] G. Schwarz, M. Patra, F. Pregel, and E. Schöll: *Multistable current-voltage characteristics as fingerprints of growth-related imperfections in semiconductor superlattices*, Superlattices and Microstructures **23**, 1353 (1998).
- [30] F. Pregel, M. Patra, G. Schwarz, and E. Schöll: *Nonlinear dynamics of field domains in weakly disordered superlattices*, in *Proc. 23rd Int. Conf. Phys. Semicond., Berlin 1996*, edited by M. Scheffler and R. Zimmermann (World Scientific, Singapore, 1996), vol. 3, pp. 1667–1670.

- [31] G. Schwarz, F. Prengel, E. Schöll, J. Kastrup, H. T. Grahn, and R. Hey: *Electric field domains in intentionally perturbed semiconductor superlattices*, Appl. Phys. Lett. **69**, 626 (1996).
- [32] G. Schwarz and E. Schöll: *Field domains in semiconductor superlattices*, phys. status solidi (b) **194**, 351 (1996).
- [33] E. Schöll, G. Schwarz, M. Patra, F. Prengel, and A. Wacker: *Oscillatory instabilities and field domain formation in imperfect superlattices*, in *Proc. 9th Int. Conf. on Hot Carriers in Semiconductors, Chicago 1995*, edited by K. Hess, J. P. Leburton, and U. Ravaioli (Plenum Press, New York, 1996), pp. 177–181.
- [34] F. Prengel, A. Wacker, G. Schwarz, E. Schöll, J. Kastrup, and H. T. Grahn: *Dynamics of domain formation in semiconductor superlattices*, in *Proc. 9th Symposium on Ultrafast Phenomena in Semiconductors* (Lithuanian Journal of Physics **35**, Vilnius, 1995), pp. 404–407.
- [35] J. Kastrup, F. Prengel, H. T. Grahn, K. Ploog, and E. Schöll: *Formation times of electric field domains in doped GaAs-AlAs superlattices*, Phys. Rev. B **53**, 1502 (1996).
- [36] G. Schwarz, A. Wacker, F. Prengel, E. Schöll, J. Kastrup, H. T. Grahn, and K. Ploog: *The influence of imperfections and weak disorder on domain formation in superlattices*, Semicond. Sci. Technol. **11**, 475 (1996).
- [37] A. Wacker, G. Schwarz, F. Prengel, E. Schöll, J. Kastrup, and H. T. Grahn: *Probing growth-related disorder by high-field transport in semiconductor superlattices*, Phys. Rev. B **52**, 13788 (1995).
- [38] S. H. Kwok, H. T. Grahn, M. Ramsteiner, K. Ploog, F. Prengel, A. Wacker, E. Schöll, S. Murugkar, and R. Merlin: *Non-resonant carrier transport through high-field domains in semiconductor superlattices*, Phys. Rev. B **51**, 9943 (1995).
- [39] A. Wacker, F. Prengel, and E. Schöll: *Theory of multistability and domain formation in semiconductor superlattices*, in *Proc. 22nd Int. Conf. Phys. Semicond., Vancouver 1994*, edited by D. J. Lockwood (World Scientific, Singapore, 1995), vol. 2, p. 1075.
- [40] J. Kastrup, H. T. Grahn, K. Ploog, F. Prengel, A. Wacker, and E. Schöll: *Multistability of the current-voltage characteristics in doped GaAs-AlAs superlattices*, Appl. Phys. Lett. **65**, 1808 (1994).
- [41] F. Prengel, A. Wacker, and E. Schöll: *Simple model for multistability and domain formation in semiconductor superlattices*, Phys. Rev. B **50**, 1705 (1994), *ibid* **52**, 11518 (1995).