

Review Articles

- [1] E. Schöll, P. Hövel, V. Flunkert, and M. A. Dahlem: *Time-delayed feedback control: from simple models to lasers and neural systems*, in *Complex time-delay systems: theory and applications*, edited by F. M. Atay (Springer, Berlin, 2010), pp. 85–150.
- [2] E. Schöll: *Pattern formation and time-delayed feedback control at the nano-scale*, in *Nonlinear Dynamics of Nanosystems*, edited by G. Radons, B. Rumpf, and H. G. Schuster (Wiley-VCH, Weinheim, 2010), pp. 325–367.
- [3] E. Schöll and H. G. Schuster (Editors): *Handbook of Chaos Control* (Wiley-VCH, Weinheim, 2008), second completely revised and enlarged edition.
- [4] N. B. Janson, A. G. Balanov, and E. Schöll: *Control of noise-induced dynamics*, in *Handbook of Chaos Control*, edited by E. Schöll and H. G. Schuster (Wiley-VCH, Weinheim, 2008), chap. 11, pp. 223–274, second completely revised and enlarged edition.
- [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] B. Fiedler, V. Flunkert, M. Georgi, P. Hövel, and E. Schöll: *Beyond the odd number limitation of time-delayed feedback control*, in *Handbook of Chaos Control*, edited by E. Schöll and H. G. Schuster (Wiley-VCH, Weinheim, 2008), pp. 73–84, second completely revised and enlarged edition.
- [7] B. Fiedler, V. Flunkert, M. Georgi, P. Hövel, and E. Schöll: *Delay stabilization of rotating waves without odd number limitation*, in *Reviews of nonlinear dynamics and complexity*, edited by H. G. Schuster (Wiley-VCH, Weinheim, 2008), vol. 1, pp. 53–68.
- [8] V. A. Shchukin, E. Schöll, and P. Kratzer: *Thermodynamics and kinetics of quantum dot growth*, in *Semiconductor Nanostructures*, edited by D. Bimberg (Springer, Berlin, 2008), pp. 1–39.
- [9] G. Kießlich, A. Wacker, and E. Schöll: *Theory of nonlinear transport for ensembles of quantum dots*, in *Semiconductor Nanostructures*, edited by D. Bimberg (Springer, Berlin, 2008), pp. 211–220.
- [10] E. Schöll, J. Hizanidis, P. Hövel, and G. Stegmann: *Pattern formation in semiconductors under the influence of time-delayed feedback control and noise*, in *Analysis and control of complex nonlinear processes in physics, chemistry and biology*, edited by L. Schimansky-Geier, B. Fiedler, J. Kurths, and E. Schöll (World Scientific, Singapore, 2007), pp. 135–183.
- [11] L. Schimansky-Geier, B. Fiedler, J. Kurths, and E. Schöll (Editors): *Analysis and control of complex nonlinear processes in physics, chemistry and biology* (World Scientific, Singapore, 2007).
- [12] E. Schöll: *Was ist Nanotechnologie?*, in *Jahrbuch 2004 der Berliner Wissenschaftlichen Gesellschaft*, edited by B. Sösemann (Berliner Wissenschaftsverlag, Berlin, 2005), pp. 263–266, ISSN 0171-3302.

- [13] E. Schöll: *Pattern formation in semiconductors: control of spatio-temporal dynamics*, Ann. Phys. (Leipzig) **13**, 403 (2004), Special Topic Issue, ed. by R. Friedrich, T. Kuhn and S. Linz.
- [14] E. Schöll: *Nonlinear dynamics and pattern formation in semiconductor systems*, in *Collective Dynamics of Nonlinear and Disordered Systems*, edited by G. Radons, W. Just, and W. Häußler (Springer, Berlin, 2005), pp. 39–59.
- [15] E. Schöll: *Avalanche breakdown; diodes; Drude model; semiconductor oscillators*, in *Encyclopedia of Nonlinear Science*, edited by A. Scott (Routledge, London, 2005), pp. 30–832, 30-32,210-211,235-236,830-832.
- [16] W. Just, H. Benner, and E. Schöll: *Control of chaos by time-delayed feedback: a survey of theoretical and experimental aspects*, in *Advances in Solid State Physics*, edited by B. Kramer (Springer, Berlin, 2003), vol. 43, pp. 589–603.
- [17] E. Schöll: *Field domains and current filaments*, in *Survey of semiconductor physics Vol. II*, edited by K. W. Böer (Plenum, New York, 2002), pp. 737–804.
- [18] E. Schöll: *Nonlinear spatio-temporal dynamics and chaos in semiconductors* (Cambridge University Press, Cambridge, 2001), Nonlinear Science Series, Vol. 10.
- [19] E. Schöll: *Nonlinear spatiotemporal patterns in globally coupled reaction-diffusion systems*, in *Stochastic Processes in Physics, Chemistry and Biology*, edited by J. A. Freund and T. Pöschel (Springer, Berlin, 2000), p. 437.
- [20] E. Schöll: *Nonlinear spatio-temporal dynamics in semiconductors*, Braz. J. Phys. **29**, 627 (1999).
- [21] E. Schöll: *Modelling of devices for optoelectronic applications: The quantum confined Stark effect and self-electrooptic effect devices*, Turk. J. Phys. **23**, 635 (1999).
- [22] E. Schöll, F. J. Niedernostheide, J. Parisi, W. Prettl, and H. G. Purwins: *Formation of spatio-temporal structures in semiconductors*, in *Evolution of spontaneous structures in dissipative continuous systems*, edited by F. H. Busse and S. C. Müller (Springer, Berlin, 1998), pp. 446–494.
- [23] E. Schöll: *Impact phenomena and nonlinear spatiotemporal dynamics of hot electrons in semiconductors*, in *Hot electrons in semiconductors: physics and devices*, edited by N. Balkan (Oxford University Press, Oxford, 1998), chap. 9, pp. 209–231, vormalis SCH97c.
- [24] E. Schöll (Editor): *Theory of Transport Properties of Semiconductor Nanostructures*, vol. 4 of *Electronic Materials Series* (Chapman and Hall, London, 1998).
- [25] E. Schöll: *Modeling nonlinear and chaotic dynamics in semiconductor device structures*, VLSI Design **6**, 321 (1998), proc. 4th Int. Workshop on Computational Electronics (Tempe, Az.), ed. D. K. Ferry and C. Gardner and C. Ringhofer.
- [26] E. Schöll: *Spatio-temporal pattern formation in semiconductors*, in *Selforganization in Activator-Inhibitor-Systems*, edited by H. Engel, F. J. Niedernostheide, H. G. Purwins, and E. Schöll (Wissenschaft & Technik Verlag, Berlin, 1996), pp. 10–15.

- [27] E. Schöll and A. Wacker: *Oscillatory transport instabilities and complex spatio-temporal dynamics in semiconductors*, in *Nonlinear Dynamics and Pattern Formation in Semiconductors and Devices*, edited by F. J. Niedernostheide (Springer, Berlin, 1995), pp. 21–45.
- [28] E. Schöll: *Theory of oscillatory instabilities in parallel and perpendicular transport in heterostructures*, in *Negative Differential Resistance and Instabilities in two-dimensional Semiconductors*, edited by N. Balkan, B. K. Ridley, and A. J. Vickers (Plenum Press, New York, 1993), p. 37.
- [29] E. Schöll: *Nonlinear dynamics, phase transitions and chaos in semiconductors*, in *Handbook on Semiconductors*, edited by P. T. Landsberg (North Holland, Amsterdam, 1992), vol. 1.
- [30] E. Schöll: *Current instabilities in semiconductors: Mechanisms and self-organized structures*, in *Nonlinear Dynamics in Solid State Physics*, edited by H. Thomas (Springer, Berlin, 1992).
- [31] M. P. Shaw, V. V. Mitin, E. Schöll, and H. L. Grubin: *The Physics of Instabilities in Solid State Electron Devices* (Plenum Press, New York, 1992).
- [32] E. Schöll: *Theoretical approaches to nonlinear and chaotic dynamics of generation-recombination processes in semiconductors*, *Appl. Phys. A* **48**, 95 (1989).
- [33] E. Schöll: *Nonequilibrium Phase Transitions in Semiconductors* (Springer, Berlin, 1987).