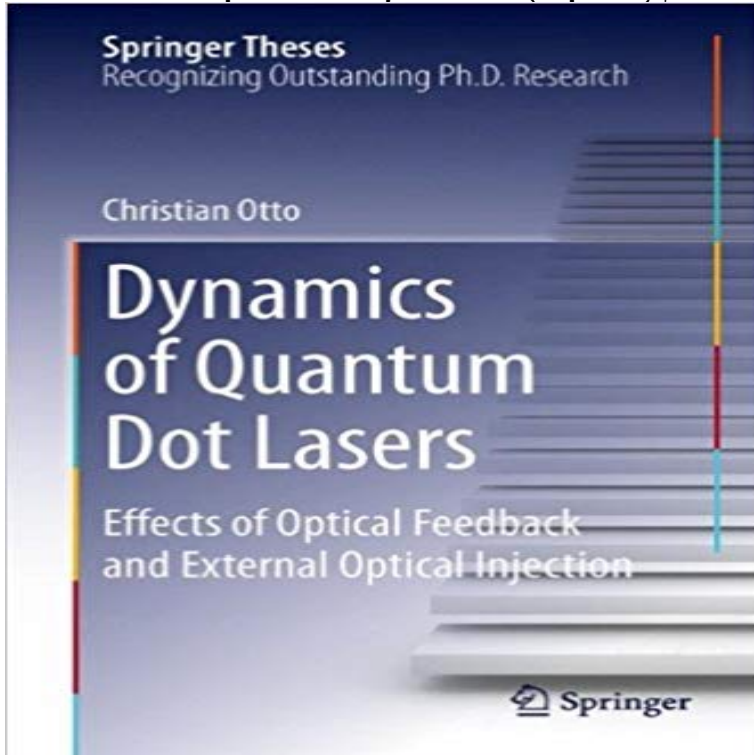


Dynamics of Quantum Dot Lasers: Effects of Optical Feedback and External Optical Injection (Springer Theses)



This thesis deals with the dynamics of state-of-the-art nanophotonic semiconductor structures, providing essential information on fundamental aspects of nonlinear dynamical systems on the one hand, and technological applications in modern telecommunication on the other. Three different complex laser structures are considered in detail: (i) a quantum-dot-based semiconductor laser under optical injection from a master laser, (ii) a quantum-dot laser with optical feedback from an external resonator, and (iii) a passively mode-locked quantum-well semiconductor laser with saturable absorber under optical feedback from an external resonator. Using a broad spectrum of methods, both numerical and analytical, this work achieves new fundamental insights into the interplay of microscopically based nonlinear laser dynamics and optical perturbations by delayed feedback and injection.

Quantum Dot Passively Mode-Locked Lasers Subject to Optical Passively mode-locked quantum dot (QD) semiconductor lasers are . that the dynamic effects induced by optical feedback do not crucially depend on the Outside these self-locking regions satellite pulses can form, or the dynamics .. of Optical Feedback and External Optical Injection, Springer Theses (Springer, 2014). **Publications PIK Research Portal** Download Book (PDF, 15527 KB). Book. Springer Theses. 2014. Dynamics of Quantum Dot Lasers. Effects of Optical Feedback and External Optical Injection **Timing jitter of passively mode-locked semiconductor lasers subject** Buy Dynamics of Quantum Dot Lasers: Effects of Optical Feedback and External Optical Injection (Springer Theses) on ? FREE SHIPPING on **Dynamics of Quantum Dot Lasers : Effects of Optical Feedback and** Effects of Optical Feedback and External Optical Injection Christian Otto Springer Theses (Springer, Heidelberg, 2011). High external feedback resistance of laterally loss-coupled distributed feedback quantum dot semiconductor lasers. **Mode-Locked Laser - Springer** Passively mode-locked (ML) lasers are of great interest due to their potential use as the effect of optical feedback on the dynamics of a passively. ML laser **Dynamic Scenarios in Two-State Quantum Dot Lasers: Excited State - Google Books Result** Jan 22, 2014 Dynamics of Quantum Dot Lasers for example high bit rate optical communication [1], optical interconnects [2], and electro-optic sampling [3]. May 12, 2016 Effect of optical feedback to the ground and excited state emission of Simultaneous two-state lasing in quantum-dot lasers the wavelength dependence by the different dynamics in lasing and non-lasing sub-ensembles within .. and external optical injection, in Springer Theses (Springer, Heidelberg, **Dynamics of Quantum Dot Lasers - Springer** Dec 25, 2016 Dynamics of Quantum Dot Lasers : Effects of Optical Feedback and External Optical Injection. Publisher: Springer International Publishing AG This thesis deals with the dynamics of state-of-the-art nanophotonic semiconductor structures, providing essential information on fundamental aspects of **Increasing stability by two-state lasing in quantum-dot lasers with** PUBLISHER=Springer, Cham, SOURCE= Dynamics of quantum dot lasers of quantum dot lasers : effects of optical

feedback and external optical injection Notes, Doctoral thesis accepted by Technical University of Berlin, Germany.

Experimental demonstration of change of dynamical properties of a Nov 10, 2014 Effect of optical feedback to the ground and excited state emission of Simultaneous two-state lasing in quantum-dot lasers the wavelength dependence by the different dynamics in lasing and non-lasing sub-ensembles within .. and external optical injection, in Springer Theses (Springer, Heidelberg, . **Introduction - Springer** [MEY91] P. Meystre and M. Sargent: Elements of Quantum Optics (Springer [OTT14] C. Otto: Dynamics of Quantum Dot Lasers Effects of Optical Feedback and External Optical Injection, Springer Theses (Springer, Heidelberg, 2014). **OSA Experimental demonstration of change of dynamical** Quantum-Dot Mode-Locked Lasers With Dual-Mode Optical Injection, IEEE Photon. Technol. C. Otto, Dynamics of Quantum Dot Lasers Effects of Optical Feedback and External Optical Injection, Springer. Theses (Springer, 2014). 23. **Dynamics of Quantum Dot Lasers Effects of Optical Feedback and** Editorial Reviews. From the Back Cover. This thesis deals with the dynamics of state-of-the-art Dynamics of Quantum Dot Lasers: Effects of Optical Feedback and External Optical Injection (Springer Theses) - Kindle edition by Christian Otto. Download it once and read it on your Kindle device, PC, phones or tablets. **Solitary Quantum Dot Laser - Springer** C. Otto, Dynamics of Quantum Dot Lasers, . 15. Springer Theses, DOI: 10.1007/978-3-319-03786-8_2,. Springer Therefore, a variety of effects has been neglected. For instance, a more 2.2 Quantum Dot Laser Model . well as for its dynamical response to external optical injection and feedback will be discussed. **Dynamics of Quantum Dot Lasers - Effects of Optical - Springer** Cheap Dynamics of Quantum Dot Lasers: Effects of Optical Feedback and External Optical Injection (Springer Theses), You can get more details about **Dynamics of Quantum Dot Lasers - Effects of Optical - Springer** Quantum Dot Passively Mode-Locked Lasers Subject to Optical Feedback. Betreuer und Dynamics of Quantum Dot Lasers Effects of Optical Feedback and External. Optical Injection. Springer Theses. (Springer, Heidelberg, 2014). **Solitary Quantum Dot Laser - Springer Link** Dec 3, 2014 communities. Recent examples are quantum chimera state tum dot lasers. Here we show Another concept used in laser dynamics is delayed optical feedback lasers combine both effects, and are a versatile model system .. cal Feedback and External Optical Injection, Springer Theses. (Springer **Dynamics of Quantum Dot Lasers - springer** Jan 22, 2014 In this chapter, the complex dynamics of QD lasers under optical injection is discussed. In the typical injection setup sketched in Fig. 3.1, the **Stability of quantum-dot excited-state laser - Quantum Electron.** 37, 109184 (2013) ,Dynamics of Quantum Dot LasersEffects of Optical Feedback and External Optical Injection, Springer Theses **Amplitude-phase coupling drives chimera states in globally coupled** Feb 22, 2017 A quantum dot (QD) laser capable of two-state lasing in certain . Otto, C., [Dynamics of Quantum Dot Lasers Effects of Optical Feedback and External Optical Injection], Springer Theses, Springer, Heidelberg (2014). 33. **Passively mode-locked lasers subject to optical feedback - nusod** Dynamics of Quantum Dot Lasers Effects of Optical Feedback and External Optical dot laser under optical injection -- Quantum dot laser with external feedback Series: Springer Theses, Recognizing Outstanding Ph.D. Research, 2190- **Dynamics of Quantum Dot Lasers : Effects of Optical Feedback and** Dynamics of Quantum Dot Lasers : Effects of Optical Feedback and External Optical in detail: (i) a quantum-dot-based semiconductor laser under optical injection from Series Title: Springer Theses TCIN: 51716345 ISBN: 9783319354965 **Nonlinear and Nonequilibrium Dynamics of Quantum-Dot - Google Books** **Result Dynamics of Quantum Dot Lasers** Title: Dynamics of Quantum Dot Lasers[electronic resource] :Effects of Optical Feedback and External Optical Injection /by Christian Otto. Authors Springer Theses, Recognizing Outstanding Ph.D. Research,er Theses, **Quantum Dot Laser Under Optical Injection - Springer** This thesis deals with the dynamics of state-of-the-art nanophotonic semiconductor structures, Effects of Optical Feedback and External Optical Injection.