

Publication list

Journal papers and book chapters

1. [C. Jirauschek, A. Matyas, P. Lugli, and M.-C. Amann, "Monte Carlo study of terahertz difference frequency generation in quantum cascade lasers," *Opt. Express* **21**, 6180–6185 \(2013\).](#)
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3. [M. Bareiß, D. Kälblein, C. Jirauschek, A. Exner, I. Pavlichenko, B. Lotsch, U. Zschieschang, H. Klauk, G. Scarpa, B. Fabel, W. Porod, and P. Lugli, "Ultra-thin titanium oxide," *Appl. Phys. Lett.* **101**\(8\), 083113 \(2012\).](#)
4. [A. Matyas, R. Chashmahcharagh, I. Kovacs, P. Lugli, K. Vijayraghavan, M. A. Belkin, and C. Jirauschek, "Improved terahertz quantum cascade laser with variable height barriers," *J. Appl. Phys.* **111**, 103106 \(2012\).](#)
5. [M. Bareiß, F. Ante, D. Kälblein, G. Jegert, C. Jirauschek, G. Scarpa, B. Fabel, E. M. Nelson, G. Timp, U. Zschieschang, H. Klauk, W. Porod, and P. Lugli, "High-yield transfer printing of metal–insulator–metal nanodiodes," *ACS Nano* **6**\(3\), 2853–2859 \(2012\).](#)
6. [S. Todor, B. Biedermann, R. Huber, and C. Jirauschek, "Balance of Physical Effects Causing Stationary Operation of Fourier Domain Mode-Locked Lasers," *J. Opt. Soc. Am. B* **29**, 656–664 \(2012\).](#)
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8. [A. Mátyás, P. Lugli, and C. Jirauschek, "Photon-induced carrier transport in high efficiency midinfrared quantum cascade lasers," *J. Appl. Phys.* **110**, 013108 \(2011\).](#)
9. [C. Jirauschek and F. Ö. Ilday, "Semianalytic theory of self-similar optical propagation and mode locking using a shape-adaptive model pulse," *Phys. Rev. A* **83**, 063809 \(2011\).](#)
10. [S. Todor, B. Biedermann, W. Wieser, R. Huber, and C. Jirauschek, "Instantaneous lineshape analysis of Fourier domain mode-locked lasers," *Opt. Express* **19**, 8802–8807 \(2011\).](#)
11. [A. Mátyás, C. Jirauschek, F. Peretti, P. Lugli, and G. Csaba, "Linear circuit models for on-chip quantum electrodynamics," *IEEE Trans. Microwave Theory Tech.* **59**, 65–71 \(2011\).](#)
12. [C. Jirauschek, "Monte Carlo study of intrinsic linewidths in terahertz quantum cascade lasers," *Opt. Express* **18**, 25922–25927 \(2010\).](#)
13. [V.-M. Gkortsas, C. Wang, L. Kuznetsova, L. Diehl, A. Gordon, C. Jirauschek, M. A. Belkin, A. Belyanin, F. Capasso, and F. X. Kärtner, "Dynamics of actively mode-locked quantum cascade lasers," *Opt. Express* **18**, 13616–13630 \(2010\).](#)
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15. [C. Jirauschek, "Monte Carlo study of carrier-light coupling in terahertz quantum cascade lasers," *Appl. Phys. Lett.* **96**, 011103 \(2010\).](#)
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18. A. Mátyás, T. Kubis, P. Lugli, and C. Jirauschek, "Carrier transport in THz quantum cascade lasers: Are Green's functions necessary?," *Journal of Physics: Conference Series* **193**, 012026 (2009).
19. [C. Jirauschek, A. Mátyás, and P. Lugli, "Importance of Coulomb interactions in bound-to-continuum THz quantum cascade lasers," *Journal of Physics: Conference Series* **193**, 012062 \(2009\).](#)
20. [A. Mátyás, T. Kubis, P. Lugli, and C. Jirauschek, "Comparison between semiclassical and full quantum transport analysis of THz quantum cascade lasers," *Physica E* **42**, 2628–2631 \(2010\).](#)
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