# Benjamin Lingnau

List of Publications by Year
in descending order



| 27 | 494 | 567281 15 | 677142 22 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 27 | 27 | 27 | 359 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Quantum coherence induces pulse shape modification in a semiconductor optical amplifier at room temperature. Nature Communications, 2013, 4, 2953. | 12.8 | 56 |
| 2 | Failure of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î±</mml:mi></mml:math>factor in describing dynamical instabilities and chaos in quantum-dot lasers. Physical Review E, 2012, 86, 065201. | 2.1 | 55 |
| 3 | Mode-switching induced super-thermal bunching in quantum-dot microlasers. New Journal of Physics, 2016, 18, 063011. | 2.9 | 45 |
| 4 | Amplitude-phase coupling and chirp in quantum-dot lasers: influence of charge carrier scattering dynamics. Optics Express, 2014, 22, 4867. | 3.4 | 40 |
| 5 | Nonlinear and Nonequilibrium Dynamics of Quantum-Dot Optoelectronic Devices. Springer Theses, 2015, , . | 0.1 | 26 |
| 6 | Ultra-Short Pulse Generation in a Three Section Tapered Passively Mode-Locked Quantum-Dot Semiconductor Laser. Scientific Reports, 2019, 9, 1783. | 3.3 | 26 |
| 7 | Feedback-induced steady-state light bunching above the lasing threshold. Physical Review A, 2014, 89, . | 2.5 | 25 |
| 8 | Mutual coupling and synchronization of optically coupled quantum-dot micropillar lasers at ultra-low light levels. Nature Communications, 2019, 10, 1539. | 12.8 | 25 |
| 9 | Ultrafast gain recovery and large nonlinear optical response in submonolayer quantum dots. Physical Review B, 2016, 94, . | 3.2 | 24 |
| 10 | Strong amplitude-phase coupling in submonolayer quantum dots. Applied Physics Letters, 2016, 109, 201102. | 3.3 | 18 |
| 11 | Injection Locking of Quantum-Dot Microlasers Operating in the Few-Photon Regime. Physical Review Applied, 2016, 6, . | 3.8 | 18 |
| 12 | Tailoring the mode-switching dynamics in quantum-dot micropillar lasers via time-delayed optical feedback. Optics Express, 2018, 26, 22457. | 3.4 | 17 |
| 13 | Four-Wave Mixing in Quantum-Dot Semiconductor Optical Amplifiers: A Detailed Analysis of the Nonlinear Effects. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-12. | 2.9 | 16 |
| 14 | On-chip optoelectronic feedback in a micropillar laser-detector assembly. Optica, 2017, 4, 303. | 9.3 | 16 |
| 15 | Universal generation of devil's staircases near Hopf bifurcations via modulated forcing of nonlinear systems. Physical Review E, 2020, 102, 030201. | 2.1 | 16 |
| 16 | Stability of Optically Injected Twoâ€State Quantumâ€Dot Lasers. Annalen Der Physik, 2017, 529, 1600279. | 2.4 | 15 |
| 17 | Stochastic polarization switching induced by optical injection in bimodal quantum-dot micropillar lasers. Optics Express, 2019, 27, 28816. | 3.4 | 11 |
| 18 | Modulation response of nanolasers: what rate equation approaches miss. Optical and Quantum Electronics, 2016, 48, 1. | 3.3 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Dynamic phase response and amplitude-phase coupling of self-assembled semiconductor quantum dots. Applied Physics Letters, 2017, 110, 241102. | 3.3 | 8 |
| 20 | Rabi-oscillation-enhanced frequency conversion in quantum-dot semiconductor optical amplifiers. Optical and Quantum Electronics, 2018, 50, 1. | 3.3 | 8 |
| 21 | Class-C semiconductor lasers with time-delayed optical feedback. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180124. | 3.4 | 7 |
| 22 | Multimode dynamics and modeling of free-running and optically injected Fabry-PÃ©rot quantum-dot lasers. Physical Review A, 2019, 100, . | 2.5 | 4 |
| 23 | Dynamic signatures of mode competition in optically injected high-Î² lasers. New Journal of Physics, 2020, 22, 073052. | 2.9 | 2 |
| 24 | Laser Dynamics and Delayed Feedback. , 2020, , 1-18. | | 2 |
| 25 | Mapping the Stability and Dynamics of Optically Injected Dual State Quantum Dot Lasers. Photonics, 2022, 9, 101. | 2.0 | 2 |
| 26 | Quantum-Dot Semiconductor Optical Amplifiers. , 2017, , 715-746. | | 1 |
| 27 | Laser Dynamics and Delayed Feedback. , 2020, , 31-47. | | 1 |