Holger Grahn

List of Publications by Year
in descending order

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		361045	395343
51	1,127	20	33
papers	citations	h-index	g-index

51	51	51	753
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Correlation between frequency and location on the wafer for terahertz quantum-cascade lasers. Semiconductor Science and Technology, 2021, 36, 035012.	1.0	2
2	In-situ control of molecular beam epitaxial growth by spectral reflectivity analysis. Journal of Crystal Growth, 2021, 557, 125993.	0.7	4
3	A 3.5-THz, Ã—6-Harmonic, Single-Ended Schottky Diode Mixer for Frequency Stabilization of Quantum-Cascade Lasers. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 684-694.	2.0	14
4	Effective group dispersion of terahertz quantum-cascade lasers. Journal Physics D: Applied Physics, 2021, 54, 025110.	1.3	0
5	High-Performance GaAs/AlAs Terahertz Quantum-Cascade Lasers For Spectroscopic Applications. IEEE Transactions on Terahertz Science and Technology, 2020, 10, 133-140.	2.0	21
6	Terahertz Sensing with Quantum-Cascade Lasers. , 2020, , .		0
7	Electronic and magnetic properties of Î±â˜FeGe2 films embedded in vertical spin valve devices. Physical Review Materials, 2020, 4, .	0.9	1
8	A Compact 4.75-THz Source Based on a Quantum-Cascade Laser With a Back-Facet Mirror. IEEE Transactions on Terahertz Science and Technology, 2019, 9, 606-612.	2.0	10
9	Towards a 4.75-THz local oscillator based on a terahertz quantum-cascade laser with a back-facet mirror. , 2019, , .		1
10	Stabilizing a terahertz quantum-cascade laser using near-infrared optical excitation. , 2019, , .		0
11	Terahertz quantum-cascade lasers for high-resolution spectroscopy of sharp absorption lines. Journal of Applied Physics, 2019, 125, .	1.1	11
12	Wideband, high-resolution terahertz spectroscopy by light-induced frequency tuning of quantum-cascade lasers. Optics Express, 2019, 27, 5420.	1.7	14
13	Frequency and power stabilization of a terahertz quantum-cascade laser using near-infrared optical excitation. Optics Express, 2019, 27, 36846.	1.7	7
14	Determination of the interface parameter in terahertz quantum-cascade laser structures based on transmission electron microscopy. Applied Physics Letters, 2018, 113, 172101.	1.5	14
15	Intrinsic frequency tuning of terahertz quantum-cascade lasers. Journal of Applied Physics, 2018, 123, .	1.1	7
16	Doppler-free spectroscopy with a terahertz quantum-cascade laser. Optics Express, 2018, 26, 6692.	1.7	21
17	Heterodyne Spectroscopy of Frequency Instabilities in Terahertz Quantum-Cascade Lasers Induced by Optical Feedback. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-6.	1.9	13
18	Continuous tuning of two-section, single-mode terahertz quantum-cascade lasers by fiber-coupled, near-infrared illumination. AIP Advances, 2017, 7, .	0.6	6

#	Article	IF	Citations
19	Terahertz quantum-cascade lasers as high-power and wideband, gapless sources for spectroscopy. Optics Express, 2017, 25, 16282.	1.7	13
20	Real-time gas sensing based on optical feedback in a terahertz quantum-cascade laser. Optics Express, 2017, 25, 30203.	1.7	15
21	Multiple lobes in the far-field distribution of terahertz quantum-cascade lasers due to self-interference. AIP Advances, 2016, 6, .	0.6	4
22	Terahertz GaAs/AlAs quantum-cascade lasers. Applied Physics Letters, 2016, 108, .	1.5	40
23	Fast continuous tuning of terahertz quantum-cascade lasers by rear-facet illumination. Applied Physics Letters, 2016, 108, .	1.5	30
24	Real-time terahertz imaging through self-mixing in a quantum-cascade laser. Applied Physics Letters, 2016, 109, .	1.5	44
25	Phenomenological scattering-rate model for the simulation of the current density and emission power in mid-infrared quantum cascade lasers. Journal of Applied Physics, 2016, 119, .	1.1	4
26	Frequency tuning of a terahertz quantum-cascade laser by rear-facet illumination via a diode laser. , 2016, , .		2
27	Individual electron and hole localization in submonolayer InN quantum sheets embedded in GaN. Applied Physics Letters, 2016, 109, 042104.	1.5	6
28	Efficient numerical procedure for the determination of the wave function-independent terms in longitudinal optical phonon scattering rates formulated in the Fourier domain. Journal of Computational Electronics, 2016, 15, 1505-1510.	1.3	0
29	Fourier-transform-based model for carrier transport in semiconductor heterostructures: Longitudinal optical phonon scattering. Journal of Applied Physics, 2016, 119, 214302.	1.1	5
30	Terahertz gas spectroscopy through self-mixing in a quantum-cascade laser. Applied Physics Letters, 2016, 109, .	1.5	24
31	High-spectral-resolution terahertz imaging with a quantum-cascade laser. Optics Express, 2016, 24, 13839.	1.7	24
32	Frequency dependence of the maximum operating temperature for quantum-cascade lasers up to 5.4 THz. Applied Physics Letters, 2015, 107, .	1.5	44
33	Fourier transform-based scattering-rate method for self-consistent simulations of carrier transport in semiconductor heterostructures. Journal of Applied Physics, 2015, 117, .	1.1	10
34	Spatially resolved study of polarized micro-photoluminescence spectroscopy on single GaAs nanowires with mixed zincblende and wurtzite phases. Journal of Applied Physics, 2015, 117, 054308.	1.1	10
35	4.7-THz Local Oscillator for the GREAT Heterodyne Spectrometer on SOFIA. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 539-545.	2.0	89
36	Experimental evidence for coherence resonance in a noise-driven GaAs/AlAs superlattice. Europhysics Letters, 2014, 105, 47005.	0.7	15

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37	Evidence for frequency comb emission from a Fabry-PÃ©rot terahertz quantum-cascade laser. Optics Express, 2014, 22, 30410.	1.7	48
38	High-temperature, continuous-wave operation of terahertz quantum-cascade lasers with metal-metal waveguides and third-order distributed feedback. Optics Express, 2014, 22, 3334.	1.7	81
39	Efficient simulation of the impact of interface grading on the transport and optical properties of semiconductor heterostructures. Applied Physics Letters, 2014, 104, .	1.5	17
40	Fast 2-D and 3-D Terahertz Imaging With a Quantum-Cascade Laser and a Scanning Mirror. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 617-624.	2.0	53
41	Frequency modulation spectroscopy with a THz quantum-cascade laser. Optics Express, 2013, 21, 32199.	1.7	42
42	Quantum-cascade lasers as local oscillators for heterodyne spectrometers in the spectral range around 4.745 THz. Semiconductor Science and Technology, 2013, 28, 035011.	1.0	41
43	Lateral distributed-feedback gratings for single-mode, high-power terahertz quantum-cascade lasers. Optics Express, 2012, 20, 11207.	1.7	21
44	Multi-channel terahertz grating spectrometer with quantum-cascade laser and microbolometer array. Applied Physics Letters, 2011, 99, .	1.5	21
45	Nonlinear transport in quantum-cascade lasers: The role of electric-field domain formation for the laser characteristics. Journal of Applied Physics, 2011, 109, .	1.1	28
46	Low-threshold terahertz quantum-cascade lasers based on GaAs/Al0.25Ga0.75As heterostructures. Applied Physics Letters, 2010, 97, 071113.	1.5	31
47	A compact, continuous-wave terahertz source based on a quantum-cascade laser and a miniature cryocooler. Optics Express, 2010, 18, 10177.	1.7	85
48	Compact model for the efficient simulation of the optical gain and transport properties in THz quantum-cascade lasers. Semiconductor Science and Technology, 2010, 25, 045025.	1.0	26
49	Analysis of the slope efficiency for terahertz quantum-cascade lasers. Journal of Applied Physics, 2010, 108, .	1.1	15
50	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Co</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu light-emitting diodes: Competition between spin injecti. Physical Review B, 2008, 78, .	1.1	84
51	Suppression of longitudinal modes in two-sectioned, coupled-cavity GaAsâ^•(Al,Ga)As terahertz quantum-cascade lasers. Applied Physics Letters, 2007, 91, 161102.	1.5	9