

Holger Grahn

List of Publications by Year in descending order

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51
papers

1,127
citations

361296
20
h-index

395590
33
g-index

51
all docs

51
docs citations

51
times ranked

753
citing authors

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

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

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37	Evidence for frequency comb emission from a Fabry-Pérot terahertz quantum-cascade laser. <i>Optics Express</i> , 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. <i>Optics Express</i> , 2014, 22, 3334.	1.7	81
39	Efficient simulation of the impact of interface grading on the transport and optical properties of semiconductor heterostructures. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	17
40	Fast 2-D and 3-D Terahertz Imaging With a Quantum-Cascade Laser and a Scanning Mirror. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2013, 3, 617-624.	2.0	53
41	Frequency modulation spectroscopy with a THz quantum-cascade laser. <i>Optics Express</i> , 2013, 21, 32199.	1.7	42
42	Quantum-cascade lasers as local oscillators for heterodyne spectrometers in the spectral range around 4.745 THz. <i>Semiconductor Science and Technology</i> , 2013, 28, 035011.	1.0	41
43	Lateral distributed-feedback gratings for single-mode, high-power terahertz quantum-cascade lasers. <i>Optics Express</i> , 2012, 20, 11207.	1.7	21
44	Multi-channel terahertz grating spectrometer with quantum-cascade laser and microbolometer array. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	21
45	Nonlinear transport in quantum-cascade lasers: The role of electric-field domain formation for the laser characteristics. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	28
46	Low-threshold terahertz quantum-cascade lasers based on GaAs/Al0.25Ga0.75As heterostructures. <i>Applied Physics Letters</i> , 2010, 97, 071113.	1.5	31
47	A compact, continuous-wave terahertz source based on a quantum-cascade laser and a miniature cryocooler. <i>Optics Express</i> , 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. <i>Semiconductor Science and Technology</i> , 2010, 25, 045025.	1.0	26
49	Analysis of the slope efficiency for terahertz quantum-cascade lasers. <i>Journal of Applied Physics</i> , 2010, 108, .	1.1	15
50	<math display="block">\frac{Co}{2} \times 10^3 \text{ mW} = 84 \text{ mW} light-emitting diodes: Competition between spin injecti. <i>Physical Review B</i> , 2008, 78, .		
51	Suppression of longitudinal modes in two-sectioned, coupled-cavity GaAs $\text{As}_{\text{As}}\text{As}_{\text{Ga}}$ terahertz quantum-cascade lasers. <i>Applied Physics Letters</i> , 2007, 91, 161102.	1.5	9