Jerome Faist

List of Publications by Year
in descending order

879 papers	35,002 citations	3731 89 h-index	5394 164 g-index
889 all docs	889 docs citations	889 times ranked	12041 citing authors

#	Article	IF	Citations
1	Quantum Cascade Laser. Science, 1994, 264, 553-556.	12.6	4,380
2	Lasing in direct-bandgap GeSn alloy grown on Si. Nature Photonics, 2015, 9, 88-92.	31.4	1,016
3	Continuous Wave Operation of a Mid-Infrared Semiconductor Laser at Room Temperature. Science, 2002, 295, 301-305.	12.6	722
4	Mid-infrared frequency comb based on a quantum cascade laser. Nature, 2012, 492, 229-233.	27.8	645
5	Ultrastrong Coupling of the Cyclotron Transition of a 2D Electron Gas to a THz Metamaterial. Science, 2012, 335, 1323-1326.	12.6	452
6	GaAs/AlxGa1â^'xAs quantum cascade lasers. Applied Physics Letters, 1998, 73, 3486-3488.	3.3	414
7	High power midâ€infrared (Î»â^¼5 Î¼m) quantum cascade lasers operating above room temperature. Applied Physics Letters, 1996, 68, 3680-3682.	3.3	401
8	Dual-comb spectroscopy based on quantum-cascade-laser frequency combs. Nature Communications, 2014, 5, 5192.	12.8	390
9	Analysis of enhanced light emission from highly strained germanium microbridges. Nature Photonics, 2013, 7, 466-472.	31.4	367
10	Controlling the sign of quantum interference by tunnelling from quantum wells. Nature, 1997, 390, 589-591.	27.8	352
11	Distributed feedback quantum cascade lasers. Applied Physics Letters, 1997, 70, 2670-2672.	3.3	335
12	Short wavelength (Î»â^¼3.4â€‰Î¼m) quantum cascade laser based on strained compensated InGaAs/AlInAs. Applied Physics Letters, 1998, 72, 680-682.	3.3	300
13	Quantum cascade lasers operating from 1.2to1.6THz. Applied Physics Letters, 2007, 91, .	3.3	288
14	Observation of an electronic bound state above a potential well. Nature, 1992, 358, 565-567.	27.8	284
15	Intersubband Electroluminescence from Silicon-Based Quantum Cascade Structures. Science, 2000, 290, 2277-2280.	12.6	272
16	Nonparabolicity and a sum rule associated with bound-to-bound and bound-to-continuum intersubband transitions in quantum wells. Physical Review B, 1994, 50, 8663-8674.	3.2	271
17	Sensitive absorption spectroscopy with a room-temperature distributed-feedback quantum-cascade laser. Optics Letters, 1998, 23, 219.	3.3	264
18	Resonant tunneling in quantum cascade lasers. IEEE Journal of Quantum Electronics, 1998, 34, 1722-1729.	1.9	244

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19	Octave-spanning semiconductor laser. Nature Photonics, 2015, 9, 42-47.	31.4	240
20	Gain without inversion in semiconductor nanostructures. Nature Materials, 2006, 5, 175-178.	27.5	237
21	Quantum-cascade lasers based on a bound-to-continuum transition. Applied Physics Letters, 2001, 78, 147-149.	3.3	234
22	THz and subâ€THz quantum cascade lasers. Laser and Photonics Reviews, 2009, 3, 45-66.	8.7	234
23	Far-infrared (Î»â‰ƒ87â€‰Î¼m) bound-to-continuum quantum-cascade lasers operating up to 90 K. Applied Physics Letters, 2003, 82, 3165-3167.	3.3	219
24	Bound-to-continuum and two-phonon resonance, quantum-cascade lasers for high duty cycle, high-temperature operation. IEEE Journal of Quantum Electronics, 2002, 38, 533-546.	1.9	215
25	Widely tunable mode-hop free external cavity quantum cascade laser for high resolution spectroscopic applications. Applied Physics B: Lasers and Optics, 2005, 81, 769-777.	2.2	214
26	External cavity quantum cascade laser tunable from 7.6 to 11.4â€‚Î¼m. Applied Physics Letters, 2009, 95, .	3.3	207
27	Low-divergence single-mode terahertz quantum cascade laser. Nature Photonics, 2009, 3, 586-590.	31.4	205
28	Low-threshold terahertz quantum-cascade lasers. Applied Physics Letters, 2002, 81, 1381-1383.	3.3	203
29	ac Stark Splitting and Quantum Interference with Intersubband Transitions in Quantum Wells. Physical Review Letters, 2005, 94, 157403.	7.8	202
30	Widely tunable mode-hop free external cavity quantum cascade lasers for high resolution spectroscopy and chemical sensing. Applied Physics B: Lasers and Optics, 2008, 92, 305-311.	2.2	202
31	Room temperature terahertz quantum cascade laser source based on intracavity difference-frequency generation. Applied Physics Letters, 2008, 92, .	3.3	199
32	Highly tunable hybrid metamaterials employing split-ring resonators strongly coupled to graphene surface plasmons. Nature Communications, 2015, 6, 8969.	12.8	197
33	Room-temperature nine-Âµm-wavelength photodetectors and GHz-frequency heterodyne receivers. Nature, 2018, 556, 85-88.	27.8	197
34	Terahertz range quantum well infrared photodetector. Applied Physics Letters, 2004, 84, 475-477.	3.3	195
35	Vertical transition quantum cascade laser with Bragg confined excited state. Applied Physics Letters, 1995, 66, 538-540.	3.3	191
36	Widely tunable single-mode quantum cascade laser source for mid-infrared spectroscopy. Applied Physics Letters, 2007, 91, .	3.3	190

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37	External cavity quantum cascade laser. Semiconductor Science and Technology, 2010, 25, 083001.	2.0	189
38	Multimode regimes in quantum cascade lasers: From coherent instabilities to spatial hole burning. Physical Review A, 2008, 77, .	2.5	184
39	Thermoelectrically cooled THz quantum cascade laser operating up to 210â€‰K. Applied Physics Letters, 2019, 115, .	3.3	178
40	Quantum Cascade Detectors. IEEE Journal of Quantum Electronics, 2009, 45, 1039-1052.	1.9	175
41	Quantum Cascade Laser Frequency Combs. Nanophotonics, 2016, 5, 272-291.	6.0	171
42	Continuous wave operation of a vertical transition quantum cascade laser above T=80 K. Applied Physics Letters, 1995, 67, 3057-3059.	3.3	165
43	Ultrastrong Coupling Regime and Plasmon Polaritons in Parabolic Semiconductor Quantum Wells. Physical Review Letters, 2012, 108, 106402.	7.8	165
44	Low-Bias Active Control of Terahertz Waves by Coupling Large-Area CVD Graphene to a Terahertz Metamaterial. Nano Letters, 2013, 13, 3193-3198.	9.1	163
45	High-Power Infrared (8-Micrometer Wavelength) Superlattice Lasers. Science, 1997, 276, 773-776.	12.6	161
46	Long-wavelength (? ? 8â€“115??Âµm) semiconductor lasers with waveguides based on surface plasmons. Optics Letters, 1998, 23, 1366.	3.3	159
47	Polarization-entangled photons produced with high-symmetry site-controlled quantum dots. Nature Photonics, 2010, 4, 302-306.	31.4	156
48	High-temperature operation of distributed feedback quantum-cascade lasers at 5.3 Î¼m. Applied Physics Letters, 2001, 78, 396-398.	3.3	154
49	Bound-to-continuum terahertz quantum cascade laser with a single-quantum-well phonon extraction/injection stage. New Journal of Physics, 2009, 11, 125022.	2.9	153
50	Broadband tuning of external cavity bound-to-continuum quantum-cascade lasers. Applied Physics Letters, 2004, 84, 1659-1661.	3.3	150
51	Far-infrared (Î»=88â€‰Î¼m) electroluminescence in a quantum cascade structure. Applied Physics Letters, 1998, 73, 3724-3726.	3.3	148
52	Imaging with a Terahertz quantum cascade laser. Optics Express, 2004, 12, 1879.	3.4	145
53	Ultrastrong coupling in the near field of complementary split-ring resonators. Physical Review B, 2014, 90, .	3.2	140
54	Quantum cascade laser with plasmonâ€enhanced waveguide operating at 8.4 Î¼m wavelength. Applied Physics Letters, 1995, 66, 3242-3244.	3.3	139

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55	External cavity quantum-cascade laser tunable from 8.2to10.4Î¼m using a gain element with a heterogeneous cascade. Applied Physics Letters, 2006, 88, 201113.	3.3	133
56	Biomedical terahertz imaging with a quantum cascade laser. Applied Physics Letters, 2006, 88, 153903.	3.3	133
57	Real-time imaging using a 28 THz quantum cascade laser and uncooled infrared microbolometer camera. Optics Letters, 2008, 33, 440.	3.3	128
58	Continuous-wave and high-power pulsed operation of index-coupled distributed feedback quantum cascade laser at Î»â‰ˆ8.5â€‰Î¼m. Applied Physics Letters, 1998, 72, 1430-1432.	3.3	126
59	Microcavity Laser Oscillating in a Circuit-Based Resonator. Science, 2010, 327, 1495-1497.	12.6	126
60	Top-down fabricated silicon nanowires under tensile elastic strain up to 4.5%. Nature Communications, 2012, 3, 1096.	12.8	126
61	Low-loss Al-free waveguides for unipolar semiconductor lasers. Applied Physics Letters, 1999, 75, 3911-3913.	3.3	125
62	Linewidth and tuning characteristics of terahertz quantum cascade lasers. Optics Letters, 2004, 29, 575.	3.3	125
63	Quantum Cascade Lasers without Intersubband Population Inversion. Physical Review Letters, 1996, 76, 411-414.	7.8	123
64	Terahertz emission from lateralâ€¨photo-Dember currents. Optics Express, 2010, 18, 4939.	3.4	123
65	Single-Shot Sub-microsecond Mid-infrared Spectroscopy on Protein Reactions with Quantum Cascade Laser Frequency Combs. Analytical Chemistry, 2018, 90, 10494-10500.	6.5	123
66	Sub-ppbv nitric oxide concentration measurements using cw thermoelectrically cooled quantum cascade laser-based integrated cavity output spectroscopy. Applied Physics B: Lasers and Optics, 2006, 82, 149-154.	2.2	122
67	Wallplug efficiency of quantum cascade lasers: Critical parameters and fundamental limits. Applied Physics Letters, 2007, 90, 253512.	3.3	120
68	Engineering quantum materials with chiral optical cavities. Nature Materials, 2021, 20, 438-442.	27.5	120
69	Terahertz photonic crystal quantum cascade lasers. Optics Express, 2007, 15, 16818.	3.4	119
70	Vertically emitting microdisk lasers. Nature Photonics, 2009, 3, 46-49.	31.4	119
71	Intersubband gain in a Bloch oscillator and quantum cascade laser. Physical Review B, 2003, 67, .	3.2	118
72	A density matrix model of transport and radiation in quantum cascade lasers. New Journal of Physics, 2010, 12, 033045.	2.9	118

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73	High-power continuous-wave quantum cascade lasers. IEEE Journal of Quantum Electronics, 1998, 34, 336-343.	1.9	117
74	Coherent instabilities in a semiconductor laser with fast gain recovery. Physical Review A, 2007, 75, .	2.5	117
75	Coherent frequency combs produced by self frequency modulation in quantum cascade lasers. Applied Physics Letters, 2014, 104, .	3.3	116
76	Measurement of the intersubband scattering rate in semiconductor quantum wells by excited state differential absorption spectroscopy. Applied Physics Letters, 1993, 63, 1354-1356.	3.3	115
77	Magneto-transport controlled by Landau polariton states. Nature Physics, 2019, 15, 186-190.	16.7	115
78	Room-temperature, continuous-wave, single-mode quantum-cascade lasers at Î»â‰ƒ5.4Î¼m. Applied Physics Letters, 2005, 86, 041109.	3.3	114
79	Quantum-cascade-laser structures as photodetectors. Applied Physics Letters, 2002, 81, 2683-2685.	3.3	112
80	Low frequency terahertz quantum cascade laser operating from 1.6to1.8THz. Applied Physics Letters, 2006, 89, 231121.	3.3	112
81	Continuous wave operation of a 9.3 Î¼m quantum cascade laser on a Peltier cooler. Applied Physics Letters, 2001, 78, 1964-1966.	3.3	111
82	Evidence of linear chirp in mid-infrared quantum cascade lasers. Optica, 2018, 5, 948.	9.3	110
83	GeSn Lasers Covering a Wide Wavelength Range Thanks to Uniaxial Tensile Strain. ACS Photonics, 2019, 6, 2462-2469.	6.6	105
84	Photoacoustic spectroscopy with quantum cascade distributed-feedback lasers. Optics Letters, 2001, 26, 887.	3.3	102
85	Quasi-periodic distributed feedback laser. Nature Photonics, 2010, 4, 165-169.	31.4	99
86	Phonon limited intersubband lifetimes and linewidths in a twoâ€dimensional electron gas. Applied Physics Letters, 1994, 64, 872-874.	3.3	98
87	Phase locking of a 15 Terahertz quantum cascade laser and use as a local oscillator in a heterodyne HEB receiver. Optics Express, 2009, 17, 1159.	3.4	98
88	Quantum cascade laser: Temperature dependence of the performance characteristics and highT0operation. Applied Physics Letters, 1994, 65, 2901-2903.	3.3	94
89	Long wavelength infrared (Î»â‰ƒ11 Î¼m) quantum cascade lasers. Applied Physics Letters, 1996, 69, 2810-2812.	3.3	94
90	Electrically controlled terahertz magneto-optical phenomena in continuous and patterned graphene. Nature Communications, 2017, 8, 14626.	12.8	93

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91	Continuous wave operation of midinfrared (7.4â€“8.6 Î¼m) quantum cascade lasers up to 110 K temperature. Applied Physics Letters, 1996, 68, 1745-1747.	3.3	91
92	Intersubband linewidths in quantum cascade laser designs. Applied Physics Letters, 2008, 93, .	3.3	89
93	Lasing in strained germanium microbridges. Nature Communications, 2019, 10, 2724.	12.8	89
94	Farâ€infrared generation by doubly resonant difference frequency mixing in a coupled quantum well twoâ€dimensional electron gas system. Applied Physics Letters, 1994, 65, 445-447.	3.3	88
95	Electroluminescence from strain-compensated Si0.2Ge0.8/Si quantum-cascade structures based on a bound-to-continuum transition. Applied Physics Letters, 2002, 81, 4700-4702.	3.3	87
96	Design, fabrication and optical characterization of quantum cascade lasers at terahertz frequencies using photonic crystal reflectors. Optics Express, 2005, 13, 8960.	3.4	87
97	Quantum cascade disk lasers. Applied Physics Letters, 1996, 69, 2456-2458.	3.3	86
98	Free-space optical data link using Peltier-cooled quantum cascade laser. Electronics Letters, 2001, 37, 778.	1.0	86
99	Complex-coupled quantum cascade distributed-feedback laser. IEEE Photonics Technology Letters, 1997, 9, 1090-1092.	2.5	85
100	Gain Recovery Dynamics and Photon-Driven Transport in Quantum Cascade Lasers. Physical Review Letters, 2008, 100, 167401.	7.8	85
101	Infrared (4â€“11 Î¼m) quantum cascade lasers. Solid State Communications, 1997, 102, 231-236.	1.9	84
102	Direct-Gap Gain and Optical Absorption in Germanium Correlated to the Density of Photoexcited Carriers, Doping, and Strain. Physical Review Letters, 2012, 109, 057402.	7.8	84
103	Terahertz bound-to-continuum quantum-cascade lasers based on optical-phonon scattering extraction. Applied Physics Letters, 2005, 86, 181101.	3.3	83
104	Interface-roughness-induced broadening of intersubband electroluminescence in p-SiGe and n-GaInAsâˆ•AlInAs quantum-cascade structures. Applied Physics Letters, 2005, 86, 062113.	3.3	83
105	Surface Plasmon Resonance sensor showing enhanced sensitivity for CO_2 detection in the mid-infrared range. Optics Express, 2009, 17, 293.	3.4	82
106	Electric field correlation measurements on the electromagnetic vacuum state. Nature, 2019, 568, 202-206.	27.8	82
107	Mid-infrared (8.5 Î¼m) semiconductor lasers operating at room temperature. IEEE Photonics Technology Letters, 1997, 9, 294-296.	2.5	81
108	Surface-emitting 10.1 Î¼m quantum-cascade distributed feedback lasers. Applied Physics Letters, 1999, 75, 3769-3771.	3.3	80

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109	High power quantum cascade lasers operating at Î»â‰ƒ87 and 130Î¼m. Applied Physics Letters, 2004, 85, 3986-3988.	3.3	80
110	Terahertz Emission from Quantum Cascade Lasers in the Quantum Hall Regime: Evidence for Many Body Resonances and Localization Effects. Physical Review Letters, 2004, 93, 237403.	7.8	80
111	Horn antennas for terahertz quantum cascade lasers. Electronics Letters, 2007, 43, 573.	1.0	78
112	Recordâ€Low Inhomogeneous Broadening of Siteâ€Controlled Quantum Dots for Nanophotonics. Small, 2010, 6, 1268-1272.	10.0	77
113	On-chip, self-detected terahertz dual-comb source. Applied Physics Letters, 2016, 108, .	3.3	77
114	Compact and ultra-efficient broadband plasmonic terahertz field detector. Nature Communications, 2019, 10, 5550.	12.8	77
115	Direct measurement of the linewidth enhancement factor by optical heterodyning of an amplitude-modulated quantum cascade laser. Applied Physics Letters, 2006, 89, 091121.	3.3	76
116	Dispersion engineering of quantum cascade laser frequency combs. Optica, 2016, 3, 252.	9.3	76
117	Retrieval of phase relation and emission profile of quantum cascade laser frequency combs. Nature Photonics, 2019, 13, 562-568.	31.4	76
118	Quantum wells with localized states at energies above the barrier height: A Fabryâ€“Perot electron filter. Applied Physics Letters, 1992, 61, 898-900.	3.3	75
119	Low divergence Terahertz photonic-wire laser. Optics Express, 2010, 18, 6390.	3.4	75
120	Strong Coupling in the Far-Infrared between Graphene Plasmons and the Surface Optical Phonons of Silicon Dioxide. ACS Photonics, 2014, 1, 1151-1155.	6.6	75
121	Continuous-wave operation of a broadly tunable thermoelectrically cooled external cavity quantum-cascade laser. Optics Letters, 2005, 30, 2584.	3.3	73
122	Electrically switchable, two-color quantum cascade laser emitting at 1.39 and 2.3THz. Applied Physics Letters, 2006, 88, 141102.	3.3	72
123	InP-based quantum cascade detectors in the mid-infrared. Applied Physics Letters, 2006, 88, 241118.	3.3	72
124	Bloch gain in quantum cascade lasers. Nature Physics, 2007, 3, 329-333.	16.7	72
125	Quantum Electrodynamic Control of Matter: Cavity-Enhanced Ferroelectric Phase Transition. Physical Review X, 2020, 10, .	8.9	72
126	Narrowing of the intersubband electroluminescent spectrum in coupledâ€quantumâ€well heterostructures. Applied Physics Letters, 1994, 65, 94-96.	3.3	71

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127	Mid-infrared trace-gas sensing with a quasi- continuous-wave Peltier-cooled distributed feedback quantum cascade laser. Applied Physics B: Lasers and Optics, 2004, 79, 907-913.	2.2	71
128	Broadband THz lasing from a photon-phonon quantum cascade structure. Optics Express, 2010, 18, 8043.	3.4	70
129	1.9% bi-axial tensile strain in thick germanium suspended membranes fabricated in optical germanium-on-insulator substrates for laser applications. Applied Physics Letters, 2015, 107, .	3.3	70
130	Dynamics of ultra-broadband terahertz quantum cascade lasers for comb operation. Optics Express, 2015, 23, 33270.	3.4	70
131	Midâ€infrared fieldâ€tunable intersubband electroluminescence at room temperature by photonâ€assisted tunneling in coupledâ€quantum wells. Applied Physics Letters, 1994, 64, 1144-1146.	3.3	69
132	Four-wave mixing in a quantum cascade laser amplifier. Applied Physics Letters, 2013, 102, .	3.3	68
133	Dual comb operation of Î» â^¼ 8.2 Î¼m quantum cascade laser frequency comb with 1 W optical power. Applied Physics Letters, 2017, 111, .	3.3	68
134	Tunable Fano interference in intersubband absorption. Optics Letters, 1996, 21, 985.	3.3	66
135	Fabrication and Characterization of Molecular Beam Epitaxy Grown Thin-Film GaAs Waveguides for Mid-Infrared Evanescent Field Chemical Sensing. Analytical Chemistry, 2006, 78, 4224-4227.	6.5	66
136	High-power inter-miniband lasing in intrinsic superlattices. Applied Physics Letters, 1998, 72, 2388-2390.	3.3	64
137	Comparison of cw and pulsed operation with a TE-cooled quantum cascade infrared laser for detection of nitric oxide at 1900Âcm-1. Applied Physics B: Lasers and Optics, 2006, 85, 235-241.	2.2	64
138	Measurement of semiconductor laser gain and dispersion curves utilizing Fourier transforms of the emission spectra. IEEE Photonics Technology Letters, 1999, 11, 1372-1374.	2.5	63
139	Broadband Distributed-Feedback Quantum Cascade Laser Array Operating From 8.0 to 9.8 mum. IEEE Photonics Technology Letters, 2009, 21, 914-916.	2.5	63
140	Small optical volume terahertz emitting microdisk quantum cascade lasers. Applied Physics Letters, 2007, 90, 141114.	3.3	62
141	Excess carrier lifetimes in Ge layers on Si. Applied Physics Letters, 2014, 104, .	3.3	62
142	Short pulse generation and mode control of broadband terahertz quantum cascade lasers. Optica, 2016, 3, 1087.	9.3	62
143	Grapheneâ€“Metamaterial Photodetectors for Integrated Infrared Sensing. ACS Photonics, 2016, 3, 936-941.	6.6	62
144	Electrically driven nanopillars for THz quantum cascade lasers. Optics Express, 2013, 21, 10917.	3.4	61

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145	Demonstration of high-performance 10.16 Î¼m quantum cascade distributed feedback lasers fabricated without epitaxial regrowth. Applied Physics Letters, 1999, 75, 665-667.	3.3	60
146	Heterodyne mixing of two far-infrared quantum cascade lasers by use of a point-contact Schottky diode. Optics Letters, 2004, 29, 1632.	3.3	60
147	High-Performance Bound-to-Continuum Quantum-Cascade Lasers for Broad-Gain Applications. IEEE Journal of Quantum Electronics, 2008, 44, 36-40.	1.9	60
148	Ultra-broadband heterogeneous quantum cascade laser emitting from 2.2 to 3.2 THz. Applied Physics Letters, 2011, 99, .	3.3	60
149	Mid-infrared frequency comb from a ring quantum cascade laser. Optica, 2020, 7, 162.	9.3	60
150	Mid-Infrared Quantum Cascade Lasers for Flow Injection Analysis. Analytical Chemistry, 2000, 72, 1645-1648.	6.5	59
151	Frequency noise of free-running 46â€‰Î¼m distributed feedback quantum cascade lasers near room temperature. Optics Letters, 2011, 36, 3109.	3.3	59
152	Long-wavelength (9.5-11.5 Î¼m) microdisk quantum-cascade lasers. IEEE Journal of Quantum Electronics, 1997, 33, 1567-1573.	1.9	58
153	Long-wavelength (Î»â‰ˆ16 Î¼m), room-temperature, single-frequency quantum-cascade lasers based on a bound-to-continuum transition. Applied Physics Letters, 2001, 79, 4271-4273.	3.3	58
154	Heterogeneous High-Performance Quantum-Cascade Laser Sources for Broad-Band Tuning. IEEE Journal of Quantum Electronics, 2008, 44, 1083-1088.	1.9	58
155	Possible observation of impurity effects on conductance quantization. Physical Review B, 1990, 42, 3217-3219.	3.2	57
156	Quantum cascade laser combs: effects of modulation and dispersion. Optics Express, 2015, 23, 1651.	3.4	57
157	Few-Electron Ultrastrong Light-Matter Coupling at 300 GHz with Nanogap Hybrid LC Microcavities. Nano Letters, 2017, 17, 7410-7415.	9.1	57
158	Breakdown of topological protection by cavity vacuum fields in the integer quantum Hall effect. Science, 2022, 375, 1030-1034.	12.6	57
159	InGaAsâ€“AlInAsâ•InP terahertz quantum cascade laser. Applied Physics Letters, 2005, 87, 141107.	3.3	56
160	23GHz operation of a room temperature photovoltaic quantum cascade detector at 5.35Î¼m. Applied Physics Letters, 2006, 89, 061119.	3.3	56
161	Characterization of a near-room-temperature, continuous-wave quantum cascade laser for long-term, unattended monitoring of nitric oxide in the atmosphere. Optics Letters, 2006, 31, 2012.	3.3	56
162	Distributed-Feedback Quantum-Cascade Lasers at 9 mum Operating in Continuous Wave Up to 423 K. IEEE Photonics Technology Letters, 2009, 21, 814-816.	2.5	56

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163	Quantum dot admittance probed at microwave frequencies with an on-chip resonator. Physical Review B, 2012, 86, .	3.2	56
164	Continuous-wave operation of far-infrared quantum cascade lasers. Electronics Letters, 2002, 38, 1675.	1.0	55
165	Complex-coupled photonic crystal THz lasers with independent loss and refractive index modulation. Optics Express, 2011, 19, 10707.	3.4	55
166	Characterization of GaAs/(GaAs)n(AlAs)msurfaceâ€emitting laser structures through reflectivity and highâ€resolution electron microscopy measurements. Journal of Applied Physics, 1989, 66, 1023-1032.	2.5	54
167	Room temperature mid-infrared quantum cascade lasers. Electronics Letters, 1996, 32, 560.	1.0	54
168	Continuous-wave distributed-feedback quantum-cascade lasers on a Peltier cooler. Applied Physics Letters, 2003, 83, 1929-1931.	3.3	53
169	Terahertz quantum cascade lasers based on two-dimensional photonic crystal resonators. Optics Express, 2008, 16, 5206.	3.4	53
170	Two-well quantum cascade laser optimization by non-equilibrium Green's function modelling. Applied Physics Letters, 2018, 112, .	3.3	53
171	High-resolution and gapless dual comb spectroscopy with current-tuned quantum cascade lasers. Optics Express, 2020, 28, 6197.	3.4	53
172	Electrically tunable, high performance quantum cascade laser. Applied Physics Letters, 2010, 96, .	3.3	52
173	Direct link of a mid-infrared QCL to a frequency comb by optical injection. Optics Letters, 2012, 37, 1011.	3.3	52
174	Doping in quantum cascade lasers. I. InAlAsâ€“InGaAsâˆ•InP midinfrared devices. Journal of Applied Physics, 2006, 100, 043101.	2.5	51
175	Room temperature, continuous wave operation of distributed feedback quantum cascade lasers with widely spaced operation frequencies. Applied Physics Letters, 2006, 89, 141116.	3.3	51
176	On-chip dual-comb based on quantum cascade laser frequency combs. Applied Physics Letters, 2015, 107, .	3.3	51
177	On-chip mid-infrared and THz frequency combs for spectroscopy. Applied Physics Letters, 2019, 114, .	3.3	51
178	Mid-infrared single-photon counting. Optics Letters, 2006, 31, 1094.	3.3	50
179	Room temperature terahertz polariton emitter. Applied Physics Letters, 2012, 101, .	3.3	50
180	Semiconductor nanowires for highly sensitive, room-temperature detection of terahertz quantum cascade laser emission. Applied Physics Letters, 2012, 100, .	3.3	50

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181	Electrically tunable graphene anti-dot array terahertz plasmonic crystals exhibiting multi-band resonances. Optica, 2015, 2, 135.	9.3	50
182	Heterogeneous terahertz quantum cascade lasers exceeding 1.9 THz spectral bandwidth and featuring dual comb operation. Nanophotonics, 2018, 7, 237-242.	6.0	49
183	Quantum cascade unipolar intersubband light emitting diodes in the 8â€“13 Î¼m wavelength region. Applied Physics Letters, 1995, 66, 4-6.	3.3	48
184	Strong light-matter coupling at terahertz frequencies at room temperature in electronic LC resonators. Applied Physics Letters, 2010, 97, .	3.3	48
185	Germanium under High Tensile Stress: Nonlinear Dependence of Direct Band Gap vs Strain. ACS Photonics, 2016, 3, 1907-1911.	6.6	48
186	Silicon shines on. Nature, 2005, 433, 691-692.	27.8	47
187	Quantum cascade laser: An intersub-band semiconductor laser operating above liquid nitrogen temperature. Electronics Letters, 1994, 30, 865.	1.0	46
188	Mid-infrared external-cavity quantum-cascade laser. Optics Letters, 2002, 27, 1788.	3.3	45
189	Role of elastic scattering mechanisms in GaInAsâ•AlInAs quantum cascade lasers. Applied Physics Letters, 2006, 89, 172120.	3.3	45
190	Mid-infrared spectroscopy for gases and liquids based on quantum cascade technologies. Analyst, The, 2014, 139, 2039-2046.	3.5	45
191	Room temperature operation of n-type Ge/SiGe terahertz quantum cascade lasers predicted by non-equilibrium Green's functions. Applied Physics Letters, 2019, 114, .	3.3	45
192	Dissipative Kerr solitons in semiconductor ring lasers. Nature Photonics, 2022, 16, 142-147.	31.4	45
193	Stand-alone system for high-resolution, real-time terahertz imaging. Optics Express, 2012, 20, 2772.	3.4	44
194	Fully automatized quantum cascade laser design by genetic optimization. Applied Physics Letters, 2012, 101, .	3.3	44
195	High frequency modulation of mid-infrared quantum cascade lasers embedded into microstrip line. Applied Physics Letters, 2013, 102, .	3.3	44
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