

# Carlo Sirtori

## List of Publications by Citations

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186  
papers

13,038  
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55  
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111  
g-index

190  
ext. papers

15,096  
ext. citations

6.4  
avg, IF

5.75  
L-index

#	Paper	IF	Citations
186	Quantum cascade laser. <i>Science</i> , <b>1994</b> , 264, 553-6	33.3	3580
185	GaAs/AlxGa1-xAs quantum cascade lasers. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 3486-3488	3.4	345
184	High power mid-infrared (15 W) quantum cascade lasers operating above room temperature. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 3680-3682	3.4	326
183	Controlling the sign of quantum interference by tunnelling from quantum wells. <i>Nature</i> , <b>1997</b> , 390, 589-591	50.4	319
182	Ultrastrong light-matter coupling regime with polariton dots. <i>Physical Review Letters</i> , <b>2010</b> , 105, 196402	7.4	305
181	Laser-induced quantum coherence in a semiconductor quantum well. <i>Physical Review Letters</i> , <b>2000</b> , 84, 1019-22	7.4	304
180	Distributed feedback quantum cascade lasers. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 2670-2672	3.4	266
179	Observation of an electronic bound state above a potential well. <i>Nature</i> , <b>1992</b> , 358, 565-567	50.4	252
178	Nonparabolicity and a sum rule associated with bound-to-bound and bound-to-continuum intersubband transitions in quantum wells. <i>Physical Review B</i> , <b>1994</b> , 50, 8663-8674	3.3	238
177	. <i>IEEE Journal of Quantum Electronics</i> , <b>1998</b> , 34, 1722-1729	2	199
176	300 K operation of a GaAs-based quantum-cascade laser at 15 W. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 3529-3531	3.4	195
175	Giant, triply resonant, third-order nonlinear susceptibility $\chi^{(3)}$ in coupled quantum wells. <i>Physical Review Letters</i> , <b>1992</b> , 68, 1010-1013	7.4	163
174	Vertical transition quantum cascade laser with Bragg confined excited state. <i>Applied Physics Letters</i> , <b>1995</b> , 66, 538-540	3.4	157
173	Coupled quantum well semiconductors with giant electric field tunable nonlinear optical properties in the infrared. <i>IEEE Journal of Quantum Electronics</i> , <b>1994</b> , 30, 1313-1326	2	142
172	Long-wavelength ( $\lambda$ approximately 8-11.5 microm) semiconductor lasers with waveguides based on surface plasmons. <i>Optics Letters</i> , <b>1998</b> , 23, 1366-8	3	140
171	High-Power Infrared (8-Micrometer Wavelength) Superlattice Lasers. <i>Science</i> , <b>1997</b> , 276, 773-6	33.3	136
170	Strong light-matter coupling in subwavelength metal-dielectric microcavities at terahertz frequencies. <i>Physical Review Letters</i> , <b>2009</b> , 102, 186402	7.4	135

169	Continuous wave operation of a vertical transition quantum cascade laser above T=80 K. <i>Applied Physics Letters</i> , <b>1995</b> , 67, 3057-3059	3-4	133
168	Coherent sampling of active mode-locked terahertz quantum cascade lasers and frequency synthesis. <i>Nature Photonics</i> , <b>2011</b> , 5, 306-313	33-9	132
167	Phase-resolved measurements of stimulated emission in a laser. <i>Nature</i> , <b>2007</b> , 449, 698-701	50-4	126
166	Room-temperature nine- $\mu\text{m}$ -wavelength photodetectors and GHz-frequency heterodyne receivers. <i>Nature</i> , <b>2018</b> , 556, 85-88	50-4	124
165	Quantum cascade laser with plasmon-enhanced waveguide operating at 8.4 $\mu\text{m}$ wavelength. <i>Applied Physics Letters</i> , <b>1995</b> , 66, 3242-3244	3-4	121
164	Low-loss Al-free waveguides for unipolar semiconductor lasers. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 3911-3913	3-3	116
163	Optical properties of metal-dielectric-metal microcavities in the THz frequency range. <i>Optics Express</i> , <b>2010</b> , 18, 13886-907	3-3	114
162	Phase-locking of a 2.7-THz quantum cascade laser to a mode-locked erbium-doped fibre laser. <i>Nature Photonics</i> , <b>2010</b> , 4, 636-640	33-9	110
161	Wave engineering with THz quantum cascade lasers. <i>Nature Photonics</i> , <b>2013</b> , 7, 691-701	33-9	103
160	Quantum cascade lasers without intersubband population inversion. <i>Physical Review Letters</i> , <b>1996</b> , 76, 411-414	7-4	99
159	Laser action by tuning the oscillator strength. <i>Nature</i> , <b>1997</b> , 387, 777-782	50-4	98
158	High-power continuous-wave quantum cascade lasers. <i>IEEE Journal of Quantum Electronics</i> , <b>1998</b> , 34, 336-343	2	97
157	Measurement of the intersubband scattering rate in semiconductor quantum wells by excited state differential absorption spectroscopy. <i>Applied Physics Letters</i> , <b>1993</b> , 63, 1354-1356	3-4	96
156	Observation of large second order susceptibility via intersubband transitions at $\approx 10 \mu\text{m}$ in asymmetric coupled AlInAs/GaInAs quantum wells. <i>Applied Physics Letters</i> , <b>1991</b> , 59, 2302-2304	3-4	95
155	Long wavelength infrared ( $\approx 11 \mu\text{m}$ ) quantum cascade lasers. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 2810-2812	3-4	83
154	Phonon limited intersubband lifetimes and linewidths in a two-dimensional electron gas. <i>Applied Physics Letters</i> , <b>1994</b> , 64, 872-874	3-4	83
153	Injection-locking of terahertz quantum cascade lasers up to 35GHz using RF amplitude modulation. <i>Optics Express</i> , <b>2010</b> , 18, 20799-816	3-3	77
152	Quantum cascade laser: Temperature dependence of the performance characteristics and high TO operation. <i>Applied Physics Letters</i> , <b>1994</b> , 65, 2901-2903	3-4	77

151	Continuous wave operation of midinfrared (7.48.6 $\mu\text{m}$ ) quantum cascade lasers up to 110 K temperature. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 1745-1747	3.4	76
150	Complex-coupled quantum cascade distributed-feedback laser. <i>IEEE Photonics Technology Letters</i> , <b>1997</b> , 9, 1090-1092	2.2	75
149	Charge-induced coherence between intersubband plasmons in a quantum structure. <i>Physical Review Letters</i> , <b>2012</b> , 109, 246808	7.4	74
148	High-temperature performance of GaAs-based bound-to-continuum quantum-cascade lasers. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 4698-4700	3.4	73
147	Quantum cascade disk lasers. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 2456-2458	3.4	72
146	Mid-infrared (8.5 $\mu\text{m}$ ) semiconductor lasers operating at room temperature. <i>IEEE Photonics Technology Letters</i> , <b>1997</b> , 9, 294-296	2.2	70
145	Resonant Stark tuning of second-order susceptibility in coupled quantum wells. <i>Applied Physics Letters</i> , <b>1992</b> , 60, 151-153	3.4	70
144	Quantum wells with localized states at energies above the barrier height: A Fabry-Berot electron filter. <i>Applied Physics Letters</i> , <b>1992</b> , 61, 898-900	3.4	70
143	Room temperature operation of InAs/AlSb quantum cascade lasers. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 167-169	3.4	68
142	Continuous wave operation of a superlattice quantum cascade laser emitting at 2 THz. <i>Optics Express</i> , <b>2006</b> , 14, 171-81	3.3	66
141	Infrared (4.1 $\mu\text{m}$ ) quantum cascade lasers. <i>Solid State Communications</i> , <b>1997</b> , 102, 231-236	1.6	65
140	GaAs-AlGaAs quantum cascade lasers: physics, technology, and prospects. <i>IEEE Journal of Quantum Electronics</i> , <b>2002</b> , 38, 547-558	2	65
139	Narrowing of the intersubband electroluminescent spectrum in coupled-quantum-well heterostructures. <i>Applied Physics Letters</i> , <b>1994</b> , 65, 94-96	3.4	64
138	13GHz direct modulation of terahertz quantum cascade lasers. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 143510	3.4	61
137	Simultaneous measurement of the electronic and lattice temperatures in GaAs/Al <sub>0.45</sub> Ga <sub>0.55</sub> As quantum-cascade lasers: Influence on the optical performance. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 3690-3692	3.4	61
136	Tunable Fano interference in intersubband absorption. <i>Optics Letters</i> , <b>1996</b> , 21, 985-7	3	61
135	GaAs quantum box cascade lasers. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 2941-2943	3.4	58
134	Mechanisms of dynamic range limitations in GaAs/AlGaAs quantum-cascade lasers: Influence of injector doping. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 2111-17	3.4	55

133	Mid-infrared field-tunable intersubband electroluminescence at room temperature by photon-assisted tunneling in coupled-quantum wells. <i>Applied Physics Letters</i> , <b>1994</b> , 64, 1144-1146	3-4	55
132	Electrically injected cavity polaritons. <i>Physical Review Letters</i> , <b>2008</b> , 100, 136806	7-4	54
131	Electrically injected photon-pair source at room temperature. <i>Physical Review Letters</i> , <b>2014</b> , 112, 183901	7-4	53
130	Long-wavelength (9.5-11.5 $\mu\text{m}$ ) microdisk quantum-cascade lasers. <i>IEEE Journal of Quantum Electronics</i> , <b>1997</b> , 33, 1567-1573	2	50
129	Improved temperature performance of Al <sub>0.33</sub> Ga <sub>0.67</sub> As/GaAs quantum-cascade lasers with emission wavelength at $\lambda_1$ $\mu\text{m}$ . <i>Applied Physics Letters</i> , <b>2000</b> , 76, 3340-3342	3-4	50
128	Dynamics of ultra-broadband terahertz quantum cascade lasers for comb operation. <i>Optics Express</i> , <b>2015</b> , 23, 33270-94	3-3	49
127	Measurement of the intrinsic linewidth of terahertz quantum cascade lasers using a near-infrared frequency comb. <i>Optics Express</i> , <b>2012</b> , 20, 25654-61	3-3	48
126	High-performance continuous-wave operation of superlattice terahertz quantum-cascade lasers. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 1518-1520	3-4	48
125	AlAs/GaAs quantum cascade lasers based on large direct conduction band discontinuity. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 463-465	3-4	48
124	Metal-metal terahertz quantum cascade laser with micro-transverse-electromagnetic-horn antenna. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 183508	3-4	47
123	Terahertz quantum cascade lasers with large wall-plug efficiency. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 191115	3-4	47
122	Terahertz amplifier based on gain switching in a quantum cascade laser. <i>Nature Photonics</i> , <b>2009</b> , 3, 715-719	3-3	46
121	Patch antenna terahertz photodetectors. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 161102	3-4	45
120	Quantum cascade intersubband polariton light emitters. <i>Semiconductor Science and Technology</i> , <b>2005</b> , 20, 985-990	1-8	44
119	Phase-locking of a 2.5 THz quantum cascade laser to a frequency comb using a GaAs photomixer. <i>Optics Letters</i> , <b>2011</b> , 36, 3969-71	3	41
118	Semiconductor surface plasmon sources. <i>Physical Review Letters</i> , <b>2010</b> , 104, 226806	7-4	41
117	Short Terahertz Pulse Generation from a Dispersion Compensated Modelocked Semiconductor Laser. <i>Laser and Photonics Reviews</i> , <b>2017</b> , 11, 1700013	8-3	40
116	Terahertz transfer onto a telecom optical carrier. <i>Nature Photonics</i> , <b>2007</b> , 1, 411-415	33-9	40

115	Role of elastic scattering mechanisms in GaInAs/AlInAs quantum cascade lasers. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 172120	3-4	39
114	Quantum cascade unipolar intersubband light emitting diodes in the 8–13 $\mu\text{m}$ wavelength region. <i>Applied Physics Letters</i> , <b>1995</b> , 66, 4-6	3-4	39
113	InAs/AlSb quantum-cascade light-emitting devices in the 3–8 $\mu\text{m}$ wavelength region. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 1029-1031	3-4	38
112	Superradiant Emission from a Collective Excitation in a Semiconductor. <i>Physical Review Letters</i> , <b>2015</b> , 115, 187402	7-4	37
111	Nonlinear phase matching in THz semiconductor waveguides. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, 964-970	1.8	36
110	Intracavity sum-frequency generation in GaAs quantum cascade lasers. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 2019-2021	3-4	36
109	High-power long-wavelength ( $\lambda \sim 11.5 \mu\text{m}$ ) quantum cascade lasers operating above room temperature. <i>IEEE Photonics Technology Letters</i> , <b>1998</b> , 10, 1100-1102	2.2	36
108	Influence of the material parameters on quantum cascade devices. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 1311-1314	3-4	35
107	High frequency modulation of mid-infrared quantum cascade lasers embedded into microstrip line. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 181114	3-4	34
106	Mesoscopic phenomena in semiconductor nanostructures by quantum design. <i>Journal of Mathematical Physics</i> , <b>1996</b> , 37, 4775-4792	1.2	34
105	Improved CW operation of GaAs-based QC lasers: $T_{\text{max}} = 150 \text{ K}$ . <i>IEEE Journal of Quantum Electronics</i> , <b>2004</b> , 40, 665-672	2	33
104	Transition from strong to ultrastrong coupling regime in mid-infrared metal-dielectric-metal cavities. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 231114	3-4	32
103	Quantum cascade laser: An intersub-band semiconductor laser operating above liquid nitrogen temperature. <i>Electronics Letters</i> , <b>1994</b> , 30, 865	1.1	32
102	Injection locking of mid-infrared quantum cascade laser at 14 GHz, by direct microwave modulation. <i>Laser and Photonics Reviews</i> , <b>2014</b> , 8, 443-449	8.3	31
101	Extremely sub-wavelength THz metal-dielectric wire microcavities. <i>Optics Express</i> , <b>2012</b> , 20, 29121-30	3-3	31
100	Intersubband emission in double-well structures with quantum interference in absorption. <i>Applied Physics Letters</i> , <b>1997</b> , 71, 3477-3479	3-4	31
99	Design strategies for GaAs-based unipolar lasers: Optimum injector-active region coupling via resonant tunneling. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 282-284	3-4	31
98	Ultra-subwavelength resonators for high temperature high performance quantum detectors. <i>New Journal of Physics</i> , <b>2016</b> , 18, 113016	2.9	30

97	Surface plasmon quantum cascade lasers as terahertz local oscillators. <i>Optics Letters</i> , <b>2008</b> , 33, 312-4	3	30
96	Dual-wavelength emission from optically cascaded intersubband transitions. <i>Optics Letters</i> , <b>1998</b> , 23, 463-5	3	30
95	Thermal resistance and temperature characteristics of GaAs/Al <sub>0.33</sub> Ga <sub>0.67</sub> As quantum-cascade lasers. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 1177-1179	3.4	28
94	Investigation of spectral gain narrowing in quantum cascade lasers using terahertz time domain spectroscopy. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 101115	3.4	27
93	Low threshold high-power room-temperature continuous-wave operation diode laser emitting at 2.26 $\mu\text{m}$ . <i>IEEE Photonics Technology Letters</i> , <b>2004</b> , 16, 1253-1255	2.2	27
92	Coupled-cavity terahertz quantum cascade lasers for single mode operation. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 241102	3.4	26
91	Tunable interminiband infrared emission in superlattice electron transport. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 1796-1798	3.4	25
90	Subband electronic temperatures and electron-lattice energy relaxation in terahertz quantum cascade lasers with different conduction band offsets. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 131114	3.4	25
89	Pulsed and continuous-wave operation of long wavelength infrared ( $\lambda = 9.3 \mu\text{m}$ ) quantum cascade lasers. <i>IEEE Journal of Quantum Electronics</i> , <b>1997</b> , 33, 89-93	2	24
88	Photovoltaic probe of cavity polaritons in a quantum cascade structure. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 201101	3.4	24
87	A semiconductor laser device for the generation of surface-plasmons upon electrical injection. <i>Optics Express</i> , <b>2009</b> , 17, 9391-400	3.3	22
86	Narrowing of the intersubband absorption spectrum by localization of continuum resonances in a strong electric field. <i>Applied Physics Letters</i> , <b>1993</b> , 62, 1931-1933	3.4	22
85	Sub-diffraction-limit semiconductor resonators operating on the fundamental magnetic resonance. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 131113	3.4	21
84	Observation of electromagnetically induced transparency and measurements of subband dynamics in a semiconductor quantum well. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2000</b> , 7, 166-173	3.4	21
83	Gain measurements on GaAs-based quantum cascade lasers using a two-section cavity technique. <i>IEEE Journal of Quantum Electronics</i> , <b>2000</b> , 36, 736-741	2	21
82	Midinfrared Ultrastrong Light-Matter Coupling for THz Thermal Emission. <i>ACS Photonics</i> , <b>2017</b> , 4, 2550-2555	3.5	20
81	5-ps-long terahertz pulses from an active-mode-locked quantum cascade laser. <i>Optica</i> , <b>2017</b> , 4, 168	8.6	20
80	High-power room temperature emission quantum cascade lasers at $\lambda = 9 \mu\text{m}$ . <i>IEEE Journal of Quantum Electronics</i> , <b>2005</b> , 41, 1430-1438	2	20



79	Large electrically induced transmission changes of GaAs/AlGaAs quantum-cascade structures. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 3254-3256	3.4	20
78	Ultrastrong Light-Matter Coupling in Deeply Subwavelength THz LC Resonators. <i>ACS Photonics</i> , <b>2019</b> , 6, 1207-1215	6.3	19
77	Gain Measurements of THz Quantum Cascade Lasers using THz Time-Domain Spectroscopy. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2008</b> , 14, 436-442	3.8	19
76	Resonant multiphoton electron emission from a quantum well. <i>Applied Physics Letters</i> , <b>1992</b> , 60, 2678-2680	3.4	19
75	Long-wavelength infrared photovoltaic heterodyne receivers using patch-antenna quantum cascade detectors. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 161101	3.4	18
74	Room-Temperature, Wide-Band, Quantum Well Infrared Photodetector for Microwave Optical Links at 4.9 $\mu\text{m}$ Wavelength. <i>ACS Photonics</i> , <b>2018</b> , 5, 3689-3694	6.3	18
73	All-optical wavelength shifting in a semiconductor laser using resonant nonlinearities. <i>Nature Photonics</i> , <b>2012</b> , 6, 519-524	33.9	18
72	High peak power (1.1 W) (Al)GaAs quantum cascade laser emitting at 9.7 [ $\mu\text{m}$ ]. <i>Electronics Letters</i> , <b>1999</b> , 35, 1848	1.1	18
71	Continuous wave operation of quantum cascade lasers based on vertical transitions at 4.6 $\mu\text{m}$ . <i>Superlattices and Microstructures</i> , <b>1996</b> , 19, 337-345	2.8	18
70	Longitudinal spatial hole burning in terahertz quantum cascade lasers. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 161108	3.4	17
69	High reflectivity metallic mirror coatings for mid-infrared (10 $\mu\text{m}$ ) unipolar semiconductor lasers. <i>Semiconductor Science and Technology</i> , <b>2002</b> , 17, 1312-1316	1.8	17
68	Low threshold THz QC lasers with thin core regions. <i>Electronics Letters</i> , <b>2007</b> , 43, 285	1.1	16
67	Gain enhancement in a terahertz quantum cascade laser with parylene antireflection coatings. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 101102	3.4	15
66	High-power tunable quantum fountain unipolar lasers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2000</b> , 7, 12-19	3	15
65	Dynamics of a broad-band quantum cascade laser: from chaos to coherent dynamics and mode-locking. <i>Optics Express</i> , <b>2018</b> , 26, 2829-2847	3.3	14
64	Effect of transverse mode structure on the far field pattern of metal-metal terahertz quantum cascade lasers. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 124513	2.5	14
63	Measurements of optical losses in mid-infrared semiconductor lasers using Fabry-Pérot transmission oscillations. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 7584-7587	2.5	14
62	Quantum cascade laser: A new optical source in the mid-infrared. <i>Infrared Physics and Technology</i> , <b>1995</b> , 36, 99-103	2.7	14



61	Injection of midinfrared surface plasmon polaritons with an integrated device. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 211110	3.4	13
60	Demonstration of ( $\lambda_{sp}/\lambda_{ap}/11.5$ - $\mu\text{m}$ ) GaAs-based quantum cascade laser operating on a Peltier cooled element. <i>IEEE Photonics Technology Letters</i> , <b>2001</b> , 13, 556-558	2.2	13
59	Spectroscopy of GaAs/AlGaAs quantum-cascade lasers using hydrostatic pressure. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 221105	3.4	12
58	Thermoelastic stress in GaAs/AlGaAs quantum cascade lasers. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 4639-4641	3.4	12
57	Temperature transients and thermal properties of GaAs/AlGaAs quantum-cascade lasers. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 4020-4022	3.4	12
56	Lateral current spreading in unipolar semiconductor lasers. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 1688-1691	3.5	12
55	Intersubband lifetime in quantum wells with transition energies above and below the optical phonon energy. <i>Solid-State Electronics</i> , <b>1994</b> , 37, 1273-1276	1.7	12
54	Three-dimensional THz lumped-circuit resonators. <i>Optics Express</i> , <b>2015</b> , 23, 16838-45	3.3	11
53	Electrical modulation of the complex refractive index in mid-infrared quantum cascade lasers. <i>Optics Express</i> , <b>2012</b> , 20, 1172-83	3.3	11
52	Thermal behavior of GaAs/AlGaAs quantum-cascade lasers: effect of the Al content in the barrier layers. <i>Journal of Crystal Growth</i> , <b>2003</b> , 251, 701-706	1.6	11
51	Influence of DX centers on the performance of unipolar semiconductor lasers based on GaAs-Al <sub>x</sub> Ga <sub>1-x</sub> As. <i>IEEE Photonics Technology Letters</i> , <b>1999</b> , 11, 1090-1092	2.2	11
50	High temperature metamaterial terahertz quantum detector. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 251102	3.4	11
49	Carrier Recombination, Long-Wavelength Photoluminescence, and Stimulated Emission in HgCdTe Quantum Well Heterostructures. <i>Physica Status Solidi (B): Basic Research</i> , <b>2019</b> , 256, 1800546	1.3	10
48	Radiatively Broadened Incandescent Sources. <i>ACS Photonics</i> , <b>2015</b> , 2, 1663-1668	6.3	9
47	Absorption Engineering in an Ultrasubwavelength Quantum System. <i>Nano Letters</i> , <b>2020</b> , 20, 4430-4436	11.5	9
46	Direct surface cyclotron resonance terahertz emission from a quantum cascade structure. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 102103	3.4	9
45	Design and operation of mid-infrared light-emitting devices ( $\lambda_{approx} 11 \mu\text{m}$ ) based on a chirped superlattice. <i>Semiconductor Science and Technology</i> , <b>2000</b> , 15, 44-50	1.8	9
44	Photocurrent reversal induced by localized continuum resonances in asymmetric quantum semiconductor structures. <i>Applied Physics Letters</i> , <b>1993</b> , 63, 2670-2672	3.4	9

43	Noise characterization of patch antenna THz photodetectors. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 161105	3.4	8
42	Stark-tunable electroluminescence from cavity polariton states. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 171105	3.4	7
41	Spectral Properties of THz Quantum-Cascade Lasers: Frequency Noise, Phase-Locking and Absolute Frequency Measurement. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2013</b> , 34, 342-356	2.2	6
40	Electrical excitation of superradiant intersubband plasmons. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 241112	3.4	6
39	Ultrafast coherent electron transport in GaAs/AlGaAs quantum cascade structures. <i>Physica B: Condensed Matter</i> , <b>2002</b> , 314, 314-322	2.8	6
38	Formation of new energy bands and minigap suppression by hybridization of barrier and well resonances in semiconductor superlattices. <i>Applied Physics Letters</i> , <b>1994</b> , 64, 2982-2984	3.4	6
37	Time resolved Fabry-Perot measurements of cavity temperature in pulsed QCLs. <i>Optics Express</i> , <b>2018</b> , 26, 6572-6580	3.3	5
36	Near-field spectroscopy and tuning of sub-surface modes in plasmonic terahertz resonators. <i>Optics Express</i> , <b>2018</b> , 26, 7437-7450	3.3	5
35	Nanoscale electromagnetic confinement in THz circuit resonators. <i>Optics Express</i> , <b>2017</b> , 25, 28718	3.3	5
34	Integrated quantum cascade laser-modulator using vertically coupled cavities. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 211105	3.4	5
33	Optical Mode Control of Surface-Plasmon Quantum Cascade Lasers. <i>IEEE Photonics Technology Letters</i> , <b>2006</b> , 18, 2499-2501	2.2	5
32	Material engineering for InAs/GaSb/AlSb quantum cascade light emitting devices. <i>Journal of Crystal Growth</i> , <b>2003</b> , 251, 723-728	1.6	5
31	Unambiguous real-time terahertz frequency metrology using dual 10 GHz femtosecond frequency combs. <i>Optica</i> , <b>2018</b> , 5, 1431	8.6	5
30	Mixing Properties of Room Temperature Patch-Antenna Receivers in a Mid-Infrared (100 $\mu\text{m}$ ) Heterodyne System. <i>Laser and Photonics Reviews</i> , <b>2020</b> , 14, 1900207	8.3	5
29	Patch antenna microcavity terahertz sources with enhanced emission. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 141103	3.4	5
28	Coulomb forces in THz electromechanical meta-atoms. <i>Nanophotonics</i> , <b>2019</b> , 8, 2269-2277	6.3	5
27	High performance single mode GaAs quantum cascade lasers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2002</b> , 13, 840-843	3	4
26	Facet temperature mapping of GaAs/AlGaAs quantum cascade lasers by photoluminescence microprobe. <i>Optical Materials</i> , <b>2001</b> , 17, 219-222	3.3	4

25	Tunability of the Free-Spectral Range by Microwave Injection into a Mid-Infrared Quantum Cascade Laser. <i>Laser and Photonics Reviews</i> , <b>2020</b> , 14, 1900389	8.3	4
24	Optical sideband generation up to room temperature with mid-infrared quantum cascade lasers. <i>Optics Express</i> , <b>2015</b> , 23, 4012-20	3.3	3
23	Multi-Terahertz Sideband Generation on an Optical Telecom Carrier with a Quantum Cascade Laser. <i>ACS Photonics</i> , <b>2018</b> , 5, 890-896	6.3	3
22	Chapter 2 Nonlinear Optics in Coupled-Quantum-Well Quasi-Molecules. <i>Semiconductors and Semimetals</i> , <b>1999</b> , 66, 85-125	0.6	3
21	Long wavelength vertical transition quantum cascade lasers operating CW at 110K. <i>Superlattices and Microstructures</i> , <b>1996</b> , 19, 357-363	2.8	3
20	Semiconductor Quantum Plasmonics. <i>Physical Review Letters</i> , <b>2020</b> , 125, 187401	7.4	3
19	10 Gbit s <sup>-1</sup> Free Space Data Transmission at 9 μm Wavelength With Unipolar Quantum Optoelectronics. <i>Laser and Photonics Reviews</i> , <b>2022</b> , 16, 2100414	8.3	3
18	Terahertz Emission from HgCdTe QWs under Long-Wavelength Optical Pumping. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2020</b> , 41, 750-757	2.2	2
17	Engineering the Losses and Beam Divergence in Arrays of Patch Antenna Microcavities for Terahertz Sources. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2017</b> , 38, 1321-1330	2.2	2
16	Mode stabilization in quantum cascade lasers via an intra-cavity cascaded nonlinearity. <i>Optics Express</i> , <b>2017</b> , 25, 1847-1855	3.3	2
15	Terahertz Quantum Cascade Devices: From Intersubband Transition to Microcavity Laser. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2008</b> , 14, 307-314	3.8	2
14	Chapter 2 Quantum Interference Effects in Intersubband Transitions. <i>Semiconductors and Semimetals</i> , <b>1999</b> , 62, 101-128	0.6	2
13	Broadband Enhancement of Mid-Wave Infrared Absorption in a Multi-Resonant Nanocrystal-Based Device. <i>Advanced Optical Materials</i> , <b>2020</b> , 2200297	8.1	2
12	Quantum Theory of Multisubband Plasmon-Phonon Coupling. <i>Photonics</i> , <b>2020</b> , 7, 19	2.2	1
11	Microring Diode Laser for THz Generation. <i>IEEE Transactions on Terahertz Science and Technology</i> , <b>2013</b> , 3, 472-478	3.4	1
10	QUANTUM CASCADE NANOSTRUCTURES UNDER HIGH MAGNETIC FIELD. <i>International Journal of Modern Physics B</i> , <b>2009</b> , 23, 2861-2866	1.1	1
9	QUANTUM EFFICIENCY OF A 2-LEVEL InAs/AlSb QUANTUM CASCADE STRUCTURE. <i>International Journal of Modern Physics B</i> , <b>2007</b> , 21, 1471-1475	1.1	1
8	GaAs quantum cascade laser spectroscopy by tunnelling magnetotransport. <i>Physica B: Condensed Matter</i> , <b>2001</b> , 298, 348-352	2.8	1

- 7 Monitoring the ultrafast electric field change at a mid-infrared plasma Bragg mirror. *Optics Letters*, **2001**, 26, 1618-20 3 1
- 6 New optical absorption and photocurrent reversal phenomena induced by localized continuum resonances in quantum well heterostructures. *Solid-State Electronics*, **1994**, 37, 1191-1194 1.7 1
- 5 Optomechanical temporal sampling of terahertz signals. *Applied Physics Letters*, **2021**, 119, 181103 3.4 1
- 4 Energy relaxation of magnetically confined electrons in quantum cascade lasers. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 20, 503-506 3
- 3 Semiconductor quantum plasmons for high frequency thermal emission. *Nanophotonics*, **2020**, 10, 607-615 3.5
- 2 Quasi-static and propagating modes in three-dimensional THz circuits. *Optics Express*, **2020**, 28, 16982-16995 3.5
- 1 Long wavelength ( $\approx 13 \mu\text{m}$ ) quantum cascade laser based on diagonal transition and three-phonon-resonance design. *Applied Physics Letters*, **2021**, 119, 131105 3.4