

Alessandro Tredicucci

List of Publications by Year in descending order

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300
papers

14,487
citations

28274
55
h-index

20961
115
g-index

308
all docs

308
docs citations

308
times ranked

12590
citing authors

#	ARTICLE	IF	CITATIONS
1	Terahertz semiconductor-heterostructure laser. <i>Nature</i> , 2002, 417, 156-159.	27.8	2,539
2	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. <i>Nanoscale</i> , 2015, 7, 4598-4810.	5.6	2,452
3	Graphene field-effect transistors as room-temperature terahertz detectors. <i>Nature Materials</i> , 2012, 11, 865-871.	27.5	931
4	Sub-cycle switch-on of ultrastrong light-matter interaction. <i>Nature</i> , 2009, 458, 178-181.	27.8	498
5	Black Phosphorus Terahertz Photodetectors. <i>Advanced Materials</i> , 2015, 27, 5567-5572.	21.0	269
6	Signatures of the ultrastrong light-matter coupling regime. <i>Physical Review B</i> , 2009, 79, .	3.2	268
7	Microcavity Polariton Splitting of Intersubband Transitions. <i>Physical Review Letters</i> , 2003, 90, 116401.	7.8	226
8	Far-infrared surface-plasmon quantum-cascade lasers at $21.5 \frac{1}{4}m$ and $24 \frac{1}{4}m$ wavelengths. <i>Applied Physics Letters</i> , 2001, 78, 2620-2622.	3.3	193
9	Room-Temperature Terahertz Detectors Based on Semiconductor Nanowire Field-Effect Transistors. <i>Nano Letters</i> , 2012, 12, 96-101.	9.1	171
10	Terahertz quantum cascade laser as local oscillator in a heterodyne receiver. <i>Optics Express</i> , 2005, 13, 5890.	3.4	156
11	High performance interminiband quantum cascade lasers with graded superlattices. <i>Applied Physics Letters</i> , 1998, 73, 2101-2103.	3.3	151
12	New frontiers in quantum cascade lasers and applications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2000, 6, 931-947.	2.9	149
13	High performance bilayer-graphene terahertz detectors. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	149
14	Quantum-limited frequency fluctuations in a terahertz laser. <i>Nature Photonics</i> , 2012, 6, 525-528.	31.4	146
15	High-resolution gas phase spectroscopy with a distributed feedback terahertz quantum cascade laser. <i>Applied Physics Letters</i> , 2006, 89, 061115.	3.3	141
16	Single-mode surface-plasmon laser. <i>Applied Physics Letters</i> , 2000, 76, 2164-2166.	3.3	127
17	Continuous-wave and high-power pulsed operation of index-coupled distributed feedback quantum cascade laser at $\lambda \approx 8.5 \mu m$. <i>Applied Physics Letters</i> , 1998, 72, 1430-1432.	3.3	126
18	Vertically emitting microdisk lasers. <i>Nature Photonics</i> , 2009, 3, 46-49.	31.4	119

#	ARTICLE	IF	CITATIONS
19	Device Concepts for Graphene-Based Terahertz Photonics. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014, 20, 130-138.	2.9	118
20	High-power continuous-wave quantum cascade lasers. <i>IEEE Journal of Quantum Electronics</i> , 1998, 34, 336-343.	1.9	117
21	High-power $\lambda \approx 8\text{ }{\mu}\text{m}$ quantum cascade lasers with near optimum performance. <i>Applied Physics Letters</i> , 1998, 72, 3130-3132.	3.3	110
22	Controlled photon emission in porous silicon microcavities. <i>Applied Physics Letters</i> , 1995, 67, 3280-3282.	3.3	107
23	Phase-locking to a free-space terahertz comb for metrological-grade terahertz lasers. <i>Nature Communications</i> , 2012, 3, 1040.	12.8	105
24	Design and simulation of terahertz quantum cascade lasers. <i>Applied Physics Letters</i> , 2001, 79, 3920-3922.	3.3	100
25	Quasi-periodic distributed feedback laser. <i>Nature Photonics</i> , 2010, 4, 165-169.	31.4	99
26	Long wavelength superlattice quantum cascade lasers at $\lambda \approx 17\text{ }{\mu}\text{m}$. <i>Applied Physics Letters</i> , 1999, 74, 638-640.	3.3	96
27	Center-of-mass quantization of excitons and polariton interference in GaAs thin layers. <i>Physical Review B</i> , 1993, 47, 10348-10357.	3.2	93
28	Terahertz saturable absorbers from liquid phase exfoliation of graphite. <i>Nature Communications</i> , 2017, 8, 15763.	12.8	93
29	A multiwavelength semiconductor laser. <i>Nature</i> , 1998, 396, 350-353.	27.8	92
30	Enhanced optical properties in porous silicon microcavities. <i>Physical Review B</i> , 1995, 52, R14328-R14331.	3.2	90
31	Dependence of the device performance on the number of stages in quantum-cascade lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 1999, 5, 808-816.	2.9	89
32	Tunable Emission in THz Quantum Cascade Lasers. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2011, 1, 76-84.	3.1	88
33	Linewidth enhancement factor of terahertz quantum cascade lasers. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	87
34	Controlled Exciton-Photon Interaction in Semiconductor Bulk Microcavities. <i>Physical Review Letters</i> , 1995, 75, 3906-3909.	7.8	85
35	Improved CW operation of quantum cascade lasers with epitaxial-side heat-sinking. <i>IEEE Photonics Technology Letters</i> , 1999, 11, 1369-1371.	2.5	85
36	Nanometer size field effect transistors for terahertz detectors. <i>Nanotechnology</i> , 2013, 24, 214002.	2.6	80

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37	High-performance operation of single-mode terahertz quantum cascade lasers with metallic gratings. <i>Applied Physics Letters</i> , 2005, 87, 181101.	3.3	77
38	Tunable terahertz quantum cascade lasers with an external cavity. <i>Applied Physics Letters</i> , 2007, 91, 121104.	3.3	74
39	Bulk exciton polaritons in GaAs microcavities. <i>Physical Review B</i> , 1995, 52, 1800-1805.	3.2	71
40	Terahertz heterodyne receiver with quantum cascade laser and hot electron bolometer mixer in a pulse tube cooler. <i>Applied Physics Letters</i> , 2008, 93, 141108.	3.3	71
41	Perfect energy-feeding into strongly coupled systems and interferometric control of polariton absorption. <i>Nature Physics</i> , 2014, 10, 830-834.	16.7	71
42	High-performance superlattice quantum cascade lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 1999, 5, 792-807.	2.9	69
43	Single-mode tunable, pulsed, and continuous wave quantum-cascade distributed feedback lasers at $\lambda = 4.6\text{--}4.7\text{ }\mu\text{m}$. <i>Applied Physics Letters</i> , 2000, 76, 1092-1094.	3.3	69
44	Electrical control of polariton coupling in intersubband microcavities. <i>Applied Physics Letters</i> , 2005, 87, 051105.	3.3	68
45	Single-mode operation of terahertz quantum cascade lasers with distributed feedback resonators. <i>Applied Physics Letters</i> , 2004, 84, 5446-5448.	3.3	67
46	High-performance continuous-wave operation of superlattice terahertz quantum-cascade lasers. <i>Applied Physics Letters</i> , 2003, 82, 1518-1520.	3.3	66
47	High-power inter-miniband lasing in intrinsic superlattices. <i>Applied Physics Letters</i> , 1998, 72, 2388-2390.	3.3	64
48	Surface plasmon photonic structures in terahertz quantum cascade lasers. <i>Optics Express</i> , 2006, 14, 5335.	3.4	64
49	Submegahertz frequency stabilization of a terahertz quantum cascade laser to a molecular absorption line. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	63
50	Optical bistability of semiconductor microcavities in the strong-coupling regime. <i>Physical Review A</i> , 1996, 54, 3493-3498.	2.5	62
51	High-speed modulation and free-space optical audio/video transmission using quantum cascade lasers. <i>Electronics Letters</i> , 2001, 37, 191.	1.0	62
52	Photonic quasi-crystal terahertz lasers. <i>Nature Communications</i> , 2014, 5, 5884.	12.8	59
53	Temperature profile of GaInAs/AlInAs/InP quantum cascade-laser facets measured by microprobe photoluminescence. <i>Applied Physics Letters</i> , 2001, 78, 2095-2097.	3.3	58
54	Bidirectional Semiconductor Laser. <i>Science</i> , 1999, 286, 749-752.	12.6	57

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55	Terahertz quantum-cascade lasers based on an interlaced photon-phonon cascade. <i>Applied Physics Letters</i> , 2004, 84, 1266-1268.	3.3	56
56	Excitonic properties of $Zn_{1-x}Cd_xSe/ZnSe$ strained quantum wells. <i>Physical Review B</i> , 1995, 51, 5171-5175.	3.2	55
57	High Performance Quantum Cascade Lasers. <i>Optics and Photonics News</i> , 1999, 10, 31.	0.5	55
58	Terahertz detection by epitaxial-graphene field-effect-transistors on silicon carbide. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	55
59	Terahertz confocal microscopy with a quantum cascade laser source. <i>Optics Express</i> , 2012, 20, 21924.	3.4	52
60	Strong opto-electro-mechanical coupling in a silicon photonic crystal cavity. <i>Optics Express</i> , 2015, 23, 3196.	3.4	52
61	Semiconductor nanowires for highly sensitive, room-temperature detection of terahertz quantum cascade laser emission. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	50
62	Mid-infrared tunable quantum cascade lasers for gas-sensing applications. <i>IEEE Circuits and Devices: the Magazine of Electronic and Photonic Systems</i> , 2000, 16, 10-18.	0.4	48
63	Terahertz semiconductor-heterostructure lasers. , 0, , .		46
64	High-intensity interminiband terahertz emission from chirped superlattices. <i>Applied Physics Letters</i> , 2002, 80, 1867-1869.	3.3	45
65	Injectorless quantum-cascade lasers. <i>Applied Physics Letters</i> , 2001, 78, 3950-3952.	3.3	43
66	Terahertz quantum cascade lasersâ€”first demonstration and novel concepts. <i>Semiconductor Science and Technology</i> , 2005, 20, S222-S227.	2.0	42
67	High-power surface emission from terahertz distributed feedback lasers with a dual-slit unit cell. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	42
68	Surface plasmon quantum cascade lasers at $\lambda \approx 1.9 \mu m$. <i>Applied Physics Letters</i> , 2000, 77, 2286-2288.	3.3	41
69	Nanowire-based field effect transistors for terahertz detection and imaging systems. <i>Nanotechnology</i> , 2013, 24, 214005.	2.6	40
70	Hyperuniform disordered terahertz quantum cascade laser. <i>Scientific Reports</i> , 2016, 6, 19325.	3.3	40
71	Magneto-optic transmittance modulation observed in a hybrid grapheneâ€“split ring resonator terahertz metasurface. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	39
72	Electron-lattice coupling in bound-to-continuum THz quantum-cascade lasers. <i>Applied Physics Letters</i> , 2006, 88, 241109.	3.3	38

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73	Dual-wavelength emission from optically cascaded intersubband transitions. <i>Optics Letters</i> , 1998, 23, 463.	3.3	36
74	MBE growth of terahertz quantum cascade lasers. <i>Journal of Crystal Growth</i> , 2005, 278, 756-764.	1.5	33
75	Tunnel-assisted manipulation of intersubband polaritons in asymmetric coupled quantum wells. <i>Applied Physics Letters</i> , 2006, 89, 171109.	3.3	33
76	Nonadiabatic switching of a photonic band structure: Ultrastrong light-matter coupling and slow-down of light. <i>Physical Review B</i> , 2012, 85, .	3.2	33
77	Magnetic field in-plane quantization and tuning of population inversion in a THz superlattice quantum cascade laser. <i>Physical Review B</i> , 2003, 68, .	3.2	32
78	Continuous-wave operation of terahertz quantum-cascade lasers. <i>IEEE Journal of Quantum Electronics</i> , 2003, 39, 586-591.	1.9	31
79	Distributed feedback ring resonators for vertically emitting terahertz quantum cascade lasers. <i>Optics Express</i> , 2009, 17, 13031.	3.4	31
80	Tuning a distributed feedback laser with a coupled microcavity. <i>Optics Express</i> , 2010, 18, 19185.	3.4	30
81	Photocurrent-based detection of terahertz radiation in graphene. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	29
82	Gain recovery dynamics of a terahertz quantum cascade laser. <i>Physical Review B</i> , 2009, 80, .	3.2	28
83	Non-invasive absolute measurement of leaf water content using terahertz quantum cascade lasers. <i>Plant Methods</i> , 2017, 13, 51.	4.3	28
84	Patterned tungsten disulfide/graphene heterostructures for efficient multifunctional optoelectronic devices. <i>Nanoscale</i> , 2018, 10, 4332-4338.	5.6	28
85	Room-temperature High-Gain Long-Wavelength Photodetector via Optical-Electrical Controlling of Hot Carriers in Graphene. <i>Advanced Optical Materials</i> , 2018, 6, 1800836.	7.3	28
86	Electronic distribution in superlattice quantum cascade lasers. <i>Applied Physics Letters</i> , 2000, 77, 1088-1090.	3.3	27
87	Coupling external cavity mid-IR quantum cascade lasers with low loss hollow metallic/dielectric waveguides. <i>Applied Physics B: Lasers and Optics</i> , 2012, 108, 255-260.	2.2	27
88	Intersubband polaritons in a one-dimensional surface plasmon photonic crystal. <i>Applied Physics Letters</i> , 2010, 97, 231123.	3.3	26
89	Interferometric control of absorption in thin plasmonic metamaterials: general two port theory and broadband operation. <i>Optics Express</i> , 2015, 23, 9202.	3.4	26
90	Low-threshold quantum-cascade lasers at 35 THz ($\lambda = 85 \text{ \AA}$). <i>Optics Letters</i> , 2003, 28, 810.	3.3	25

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91	Cavity polaritons from excited-subband transitions. <i>Applied Physics Letters</i> , 2007, 91, 231118.	3.3	25
92	High efficiency coupling of Terahertz micro-ring quantum cascade lasers to the low-loss optical modes of hollow metallic waveguides. <i>Optics Express</i> , 2011, 19, 1122.	3.4	25
93	Terahertz detection by heterostructured InAs/InSb nanowire based field effect transistors. <i>Applied Physics Letters</i> , 2012, 101, 141103.	3.3	25
94	Se-doping dependence of the transport properties in CBE-grown InAs nanowire field effect transistors. <i>Nanoscale Research Letters</i> , 2012, 7, 159.	5.7	25
95	Non-equilibrium longitudinal and transverse optical phonons in terahertz quantum cascade lasers. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	24
96	Optomechanics of Chiral Dielectric Metasurfaces. <i>Advanced Optical Materials</i> , 2020, 8, 1901507.	7.3	24
97	Polaritons in anisotropic semiconductors. <i>European Physical Journal B</i> , 1995, 98, 39-47.	1.5	23
98	Modification of excitonic emission in a GaAs bulk microcavity. <i>Applied Physics Letters</i> , 1995, 66, 2388-2390.	3.3	23
99	Polaritonic effects in superlattices. <i>Physical Review B</i> , 1996, 54, 2035-2043.	3.2	23
100	High-power, continuous-wave, current-tunable, single-mode quantum-cascade distributed-feedback lasers at $\lambda = 52$ and 795 nm . <i>Optics Letters</i> , 2000, 25, 230.	3.3	23
101	Mid-infrared intersubband polaritons in dispersive metal-insulator-metal resonators. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	23
102	Tuning a microcavity-coupled terahertz laser. <i>Applied Physics Letters</i> , 2015, 107, 261108.	3.3	23
103	THz saturable absorption in turbostratic multilayer graphene on silicon carbide. <i>Optics Express</i> , 2015, 23, 11632.	3.4	23
104	Gate-Tunable Spatial Modulation of Localized Plasmon Resonances. <i>Nano Letters</i> , 2016, 16, 5688-5693.	9.1	23
105	Impact of nonequilibrium phonons on the electron dynamics in terahertz quantum cascade lasers. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	22
106	Long-wavelength interminiband Fabry-Pérot and distributed feedback quantum cascade lasers. <i>Semiconductor Science and Technology</i> , 1998, 13, 1333-1339.	2.0	21
107	Noncascaded intersubband injection lasers at $\lambda = 7.7 \text{ } \mu\text{m}$. <i>Applied Physics Letters</i> , 1998, 73, 3830-3832.	3.3	21
108	InAs/InP/InSb Nanowires as Low Capacitance math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block"> $\text{Heterojunction Diodes.}$	8.9	21

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109	Ultrafast optical bleaching of intersubband cavity polaritons. Physical Review B, 2012, 86, .		3.2	21
110	Physics and technology of Terahertz quantum cascade lasers. Advances in Physics: X, 2021, 6, .		4.1	21
111	Long wavelength (Å 13 [micro sign]m) quantum cascade lasers. Electronics Letters, 1998, 34, 1103.		1.0	20
112	Spectral behavior of a terahertz quantum-cascade laser. Optics Express, 2009, 17, 20476.		3.4	19
113	Coherent absorption of light by graphene and other optically conducting surfaces in realistic on-substrate configurations. APL Photonics, 2017, 2, .		5.7	19
114	Dynamical back-action at 5.5 GHz in a corrugated optomechanical beam. AIP Advances, 2014, 4, .		1.3	18
115	Distributed feedback terahertz frequency quantum cascade lasers with dual periodicity gratings. Applied Physics Letters, 2015, 106, .		3.3	18
116	Boundary problems for polariton propagation in thin layers and quantum wells. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1992, 14, 1203-1215.		0.4	17
117	High temperature ($T \approx 425$ K) pulsed operation of quantum cascade lasers. Electronics Letters, 2000, 36, 723.		1.0	17
118	Resonant tuning fork detector for THz radiation. Optics Express, 2009, 17, 14069.		3.4	17
119	Guiding a terahertz quantum cascade laser into a flexible silver-coated waveguide. Journal of Applied Physics, 2011, 110, .		2.5	17
120	Photonic bands, superchirality, and inverse design of a chiral minimal metasurface. Nanophotonics, 2019, 8, 2291-2301.		6.0	17
121	Molecular Spectroscopy with TeraHertz Quantum Cascade Lasers. Journal of Nanoelectronics and Optoelectronics, 2007, 2, 101-107.		0.5	17
122	Micromechanical Bolometers for Subterahertz Detection at Room Temperature. ACS Photonics, 2022, 9, 360-367.		6.6	17
123	Band offsets in $Zn_{1-x}Cd_xSe/ZnSe$ multiple quantum wells. Journal of Applied Physics, 1996, 79, 929.		2.5	16
124	Quantum devices, MBE technology for the 21st century. Journal of Crystal Growth, 2001, 227-228, 1-7.		1.5	16
125	Amplification of terahertz radiation in quantum cascade structures. Journal of Applied Physics, 2007, 102, 063101.		2.5	16
126	Wide dynamic range terahertz detector pixel for active spectroscopic imaging with quantum cascade lasers. Applied Physics Letters, 2009, 95, .		3.3	16

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127	Long life in zero dimensions. <i>Nature Materials</i> , 2009, 8, 775-776.	27.5	15
128	Electron beam induced current in InSb-InAs nanowire type-III heterostructures. <i>Applied Physics Letters</i> , 2012, 101, 063116.	3.3	15
129	Analysis of line shapes and strong coupling with intersubband transitions in one-dimensional metallo dielectric photonic crystal slabs. <i>Physical Review B</i> , 2012, 85, .	3.2	15
130	Universal lineshapes at the crossover between weak and strong critical coupling in Fano-resonant coupled oscillators. <i>Scientific Reports</i> , 2016, 6, 24592.	3.3	15
131	THz Water Transmittance and Leaf Surface Area: An Effective Nondestructive Method for Determining Leaf Water Content. <i>Sensors</i> , 2019, 19, 4838.	3.8	15
132	Single-mode tunable quantum cascade lasers in the spectral range of the CO ₂ laser at $\lambda=9.5\text{--}10.5 \mu\text{m}$. <i>IEEE Photonics Technology Letters</i> , 2000, 12, 474-476.	2.5	14
133	Advances in THz quantum cascade lasers: fulfilling the application potential. , 2005, 5738, 146.		14
134	Differential Near-Field Scanning Optical Microscopy with THz quantum cascade laser sources. <i>Optics Express</i> , 2009, 17, 23785.	3.4	14
135	Terahertz photodetectors based on tapered semiconductor nanowires. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	14
136	Controlling local deformation in graphene using micrometric polymeric actuators. <i>2D Materials</i> , 2018, 5, 045032.	4.4	14
137	Detection of fungal infections in chestnuts: a terahertz imaging-based approach. <i>Food Control</i> , 2021, 123, 107700.	5.5	14
138	Terahertz quantum cascade lasers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2004, 21, 846-851.	2.7	13
139	THz quantum cascade designs for optimized injection. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 2207-2209.	2.7	13
140	Photonic engineering of surface-emitting terahertz quantum cascade lasers. <i>Laser and Photonics Reviews</i> , 2011, 5, 647-658.	8.7	13
141	Reflectivity of GaAs Thin Films. <i>Physica Status Solidi (B): Basic Research</i> , 1993, 180, 115-125.	1.5	12
142	Very long wavelength ($\approx 16 \mu\text{m}$) whispering gallery mode microdisk lasers. <i>Electronics Letters</i> , 2000, 36, 328.	1.0	12
143	Continuous wave operation of long wavelength ($\approx 11 \mu\text{m}$) inter-miniband lasers. <i>Electronics Letters</i> , 2000, 36, 876.	1.0	12
144	Finite size effects in surface emitting Terahertz quantum cascade lasers. <i>Optics Express</i> , 2009, 17, 6703.	3.4	12

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145	Continuous-wave laser operation of a dipole antenna terahertz microresonator. <i>Light: Science and Applications</i> , 2017, 6, e17054-e17054.	16.6	12
146	Saturation and bistability of defect-mode intersubband polaritons. <i>Physical Review B</i> , 2015, 91, .	3.2	11
147	Anisotropic straining of graphene using micropatterned SiN membranes. <i>APL Materials</i> , 2016, 4, .	5.1	11
148	An insight into the intermolecular vibrational modes of dicationic ionic liquids through far-infrared spectroscopy and DFT calculations. <i>RSC Advances</i> , 2019, 9, 30269-30276.	3.6	11
149	Intersubband electroluminescence from long-side-cleaved quantum-cascade lasers above threshold: Investigation of phonon bottleneck effects. <i>Applied Physics Letters</i> , 2000, 77, 3893-3895.	3.3	10
150	Porous-silicon microcavities. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1996, 18, 1213-1223.	0.4	9
151	Marriage of Two Device Concepts. <i>Science</i> , 2003, 302, 1346-1347.	12.6	9
152	Frequency Characterization of a Terahertz Quantum-Cascade Laser. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2007, 56, 262-265.	4.7	9
153	Switching ultrastrong light-matter coupling on a subcycle scale. <i>Journal of Applied Physics</i> , 2011, 109, 102418.	2.5	9
154	THz quantum cascade lasers based on a hyperuniform design. <i>Proceedings of SPIE</i> , 2015, , .	0.8	9
155	Local tuning of WS ₂ photoluminescence using polymeric micro-actuators in a monolithic van der Waals heterostructure. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	9
156	Unexpected Electron Transport Suppression in a Heterostructured Graphene-MoS ₂ Multiple Field-Effect Transistor Architecture. <i>ACS Nano</i> , 2022, 16, 1291-1300.	14.6	9
157	High power and tunable single-mode quantum cascade lasers. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2000, 75, 93-99.	3.5	8
158	High-performance quantum cascade lasers with electric-field-free undoped superlattice. <i>IEEE Photonics Technology Letters</i> , 2000, 12, 260-262.	2.5	8
159	Quantum cascade lasers emitting at lambda greater than 100...[micro sign]m. <i>Electronics Letters</i> , 2003, 39, 1254.	1.0	8
160	Giant intersubband polariton splitting in InAs/AlSb microcavities. <i>Solid State Communications</i> , 2007, 142, 311-313.	1.9	8
161	One-dimensional surface-plasmon gratings for the excitation of intersubband polaritons in suspended membranes. <i>Solid State Communications</i> , 2011, 151, 1725-1727.	1.9	8
162	Terahertz probe of individual subwavelength objects in a water environment. <i>Laser and Photonics Reviews</i> , 2014, 8, 734-742.	8.7	8

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163	Coherent perfect absorption in photonic structures. <i>Rendiconti Lincei</i> , 2015, 26, 219-230.	2.2	8
164	Saturable absorption of femtosecond optical pulses in multilayer turbostratic graphene. <i>Optics Express</i> , 2016, 24, 15261.	3.4	8
165	Thermal noise and optomechanical features in the emission of a membrane-coupled compound cavity laser diode. <i>Scientific Reports</i> , 2016, 6, 31489.	3.3	8
166	Multipolaritons in semiconductor thin layers: Interference effects in the reflectance spectra. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1993, 15, 337-345.	0.4	7
167	Band-offset determination in multiple quantum wells. <i>Journal of Crystal Growth</i> , 1996, 159, 498-501.	1.5	7
168	Continuous wave operation of ~ 19 [micro sign]m surface-plasmon quantum cascade lasers. <i>Electronics Letters</i> , 2001, 37, 1023.	1.0	7
169	Novel quantum cascade devices for long wavelength IR emission. <i>Optical Materials</i> , 2001, 17, 211-217.	3.6	7
170	Mechanical oscillations in lasing microspheres. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	7
171	Symmetry enhanced non-reciprocal polarization rotation in a terahertz metal-graphene metasurface. <i>Optics Express</i> , 2018, 26, 3328.	3.4	7
172	Antenna-Coupled Graphene Field-Effect Transistors as a Terahertz Imaging Array. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2021, 11, 70-78.	3.1	7
173	High duty cycle operation of quantum cascade lasers based on graded superlattice active regions. <i>Journal of Applied Physics</i> , 2001, 89, 7735-7738.	2.5	6
174	Contacts shielding in nanowire field effect transistors. <i>Journal of Applied Physics</i> , 2012, 111, 064301.	2.5	6
175	Quantum cascade laser: a compact, low cost, solid-state source for plasma diagnostics. <i>Journal of Instrumentation</i> , 2012, 7, C02018-C02018.	1.2	6
176	Flexible, Low-loss Waveguide Designs for Efficient Coupling to Quantum Cascade Lasers in the Far-infrared. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2012, 33, 319-326.	2.2	6
177	Mid-infrared spectroscopic characterization of Pr^{3+} : Lu_2O_3 . <i>Optical Materials Express</i> , 2019, 9, 4464.	3.0	6
178	Optomechanical Modulation Spectroscopy of Bound States in the Continuum in a Dielectric Metasurface. <i>Physical Review Applied</i> , 2022, 17, .	3.8	6
179	Quantum cascade lasers with double-quantum-well superlattices. <i>IEEE Photonics Technology Letters</i> , 2001, 13, 278-280.	2.5	5
180	An ultrafast amplifier. <i>Nature Photonics</i> , 2009, 3, 681-682.	81.4	5

#	ARTICLE	IF	CITATIONS
181	Polaritons in semiconductor microcavities : effect of Bragg confinement. European Physical Journal Special Topics, 1993, 03, 453-456.	0.2	5
182	Optomechanical response with nanometer resolution in the self-mixing signal of a terahertz quantum cascade laser. Optics Letters, 2019, 44, 5663.	3.3	5
183	Electron localization in periodically strained graphene. Journal of Applied Physics, 2022, 131, 085103.	2.5	5
184	Heavy- and light-hole excitons in anisotropic semiconductors. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1992, 14, 1283-1286.	0.4	4
185	Excitonic polaritons in superlattices. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1995, 17, 1417-1422.	0.4	4
186	Electrical properties and band diagram of InSb-InAs nanowire type-III heterojunctions. Journal of Applied Physics, 2013, 113, .	2.5	4
187	Photonic bands and defect modes in metallo-dielectric photonic crystal slabs. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 1451.	2.1	4
188	Terahertz quantum cascade lasers., 2003, .		3
189	Controlling polariton coupling in intersubband microcavities. Superlattices and Microstructures, 2007, 41, 308-312.	3.1	3
190	Lasing in planar semiconductor diodes. Applied Physics Letters, 2011, 99, 261110.	3.3	3
191	Tubeless biochip for chemical stimulation of cells in closed-bioreactors: anti-cancer activity of the catechinâ€“dextran conjugate. RSC Advances, 2014, 4, 35017-35026.	3.6	3
192	Stressâ€“strain in electron-beam activated polymeric micro-actuators. Journal of Applied Physics, 2020, 128, 115104.	2.5	3
193	Leaf water diffusion dynamics in vivo through a sub-terahertz portable imaging system. Journal of Physics: Conference Series, 2020, 1548, 012002.	0.4	3
194	Highly resolved ultra-strong coupling between graphene plasmons and intersubband polaritons. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 19.	2.1	3
195	Superlattice quantum cascade lasers., 1999, .		2
196	Heterodyne receiver at 2.5 THz with quantum cascade laser and hot electron bolometric mixer., 2006, 6275, 132.		2
197	High Resolution Gas Phase Spectroscopy with a Quantum Cascade Laser at 2.5 THz., 2006, .		2
198	Round-Robin Measurements of Linewidth Enhancement Factor of Semiconductor Lasers in COST 288 Action., 2007, .		2

#	ARTICLE	IF	CITATIONS
199	Low cost thermopile detectors for THz imaging and sensing. , 2008, , .	2	
200	Laser Local Oscillators for Heterodyne Receivers beyond 2 Terahertz. Frequenz, 2008, 62, 111-117.	0.9	2
201	How fast electrons and photons mix: Sub-cycle switching of intersubband cavity polaritons. Journal of Physics: Conference Series, 2009, 193, 012060.	0.4	2
202	THz communication system based on a THz Quantum Cascade Laser and a Hot Electron Bolometer. , 2010, , .	2	
203	Nanotransistor based THz plasma detectors: low tempeatures, graphene, linearity, and circular polarization studies. , 2013, , .	2	
204	Far-field characterization of the thermal dynamics in lasing microspheres. Scientific Reports, 2015, 5, 14452.	3.3	2
205	Understanding and overcoming fundamental limits of asymmetric light-light switches. Optics Express, 2018, 26, 3618.	3.4	2
206	Line-defect photonic crystal terahertz quantum cascade laser. Journal of Applied Physics, 2019, 126, , .	2.5	2
207	Development of graphene-based ionizing radiation sensors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 936, 666-668.	1.6	2
208	Broadband Dynamic Polarization Conversion in Optomechanical Metasurfaces. Frontiers in Physics, 2020, 7, .	2.1	2
209	Cryptographic Strain-Dependent Light Pattern Generators. Advanced Materials Technologies, 0, , 2101129.	5.8	2
210	An External Cavity 4.7 Terahertz Quantum Cascade Laser. , 2007, , .	2	
211	Excitonic polariton interference in the reflectance of GaAs thin films. European Physical Journal Special Topics, 1993, 03, 389-392.	0.2	1
212	Electronic and lattice temperatures in bound-to-continuum terahertz quantum cascade lasers. , 2006, , .	1	
213	Recent advances and future prospects of THz quantum cascade lasers. , 2007, , .	1	
214	Antireflection Coating for External-Cavity Quantum Cascade Laser Near 5 THz. Materials Research Society Symposia Proceedings, 2007, 1016, 1.	0.1	1
215	Progress towards a 2.5-THz solid state heterodyne receiver with quantum cascade laser and hot electron bolometric mixer. , 2008, , .	1	
216	Vertically emitting microdisk lasers. , 2008, , .	1	

#	ARTICLE	IF	CITATIONS
217	Development of a THz heterodyne receiver with quantum cascade laser and hot electron bolometer mixer for standoff detection of explosive material. <i>Proceedings of SPIE</i> , 2009, , .	0.8	1
218	Optical characterization of a superconducting hotspot air-bridge bolometer. , 2010, , .		1
219	Using terahertz cascade lasers for determination of optical losses in active medium of silicon intracenter lasers. , 2010, , .		1
220	Monolithic focal plane arrays for terahertz active spectroscopic imaging: an experimental study. , 2011, , .		1
221	Terahertz confocal microscopy with a quantum cascade laser source. , 2012, , .		1
222	Semiconductor nanowire field-effect transistors: towards high-frequency THz detectors. , 2012, , .		1
223	Fast, sensitive and low-noise nanowire and graphene field effect transistors for room-temperature detection of Terahertz quantum cascade laser emission. , 2013, , .		1
224	Water-Dispersible Three-Dimensional LC-Nanoresonators. <i>PLoS ONE</i> , 2014, 9, e105474.	2.5	1
225	Vertical coupling of laser glass microspheres to buried silicon nitride ellipses and waveguides. <i>Journal of Applied Physics</i> , 2015, 118, 093103.	2.5	1
226	Ultrafast optical modulation of magneto-optical terahertz effects occurring in a graphene-loaded resonant metasurface. <i>Proceedings of SPIE</i> , 2016, , .	0.8	1
227	Coherent perfect absorption and transparency in lossy and loss/gain metasurface-embedding structures. , 2017, , .		1
228	Chiral Dielectric Metasurfaces: Optomechanics of Chiral Dielectric Metasurfaces (Advanced Optical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5		
229	Superlattice QC lasers towards the far-infrared. , 2001, , 101-114.		1
230	Demonstration of an External Cavity Terahertz Quantum Cascade Laser. , 2005, , .		1
231	Bulk semiconductors and porous silicon: controlled exciton-photon interaction in active microcavities. <i>Physica Scripta</i> , 1996, T66, 126-129.	2.5	1
232	Low-threshold, Single-mode Defect Line Terahertz Quantum Cascade Laser. , 2016, , .		1
233	Graphene Saturable Absorbers at Terahertz Frequency from Liquid Phase Exfoliation of Graphite. , 2018, , .		1
234	Magnetoexciton ground state for heavy- and light-hole excitons in anisotropic semiconductors. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1993, 15, 927-931.	0.4	0

#	ARTICLE	IF	CITATIONS
235	Exciton-photon coupling in GaAs bulk microcavities. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1995, 17, 1747-1751.	0.4	0
236	Exciton-polariton dynamics in a GaAs bulk microcavity. <i>Superlattices and Microstructures</i> , 1998, 23, 177-180.	3.1	0
237	High performance quantum cascade lasers for the $\lambda=4$ to $17\text{ }\mu\text{m}$ region and their chemical sensing applications. , 0, , .		0
238	Quantum cascade lasers using double quantum well superlattices. , 0, , .		0
239	MBE growth of terahertz quantum cascade semiconductor lasers. , 0, , .		0
240	Continuous wave terahertz quantum cascade laser. , 0, , .		0
241	Terahertz quantum cascade lasers. , 0, , .		0
242	Terahertz heterostructure lasers. , 0, , .		0
243	Characterization of a quantum cascade laser as local oscillator in a heterodyne receiver at 2.5 THz. , 0, , .		0
244	Controlling the emission of THz Quantum Cascade Lasers. , 2006, , .		0
245	Linewidth enhancement factor of a THz quantum cascade laser. , 2007, , .		0
246	Spectral characterization of terahertz quantum cascade lasers by heterodyne and homodyne mixing. , 2007, , .		0
247	Terahertz Quantum Cascade Lasers: Novel Resonators and Linewidth Properties. , 2007, , .		0
248	Terahertz receivers development for astronomy and security applications. , 2007, , .		0
249	Controlling Polariton Coupling in Intersubband Microcavities. <i>AIP Conference Proceedings</i> , 2007, , .	0.4	0
250	Frequency tuning of THz quantum cascade lasers. , 2007, , .		0
251	Tailoring light-matter interaction in intersubband microcavities. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 1906-1908.	2.7	0
252	Terahertz quantum cascade lasers with quasi-periodic resonators. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 2176-2178.	2.7	0

#	ARTICLE	IF	CITATIONS
253	THECAMAP: Terahertz Camera for Medical Application. , 2008, , .	0	
254	Frequency tunability and mode switching of 2.5 THz quantum cascade lasers. , 2008, , .	0	
255	High-resolution molecular spectroscopy with 2.5 terahertz quantum cascade lasers. , 2008, , .	0	
256	Ultra-intense THz source and extreme THz nonlinearities in condensed matter. , 2009, , .	0	
257	Distributed feedback ring resonators for vertically emitting terahertz quantum cascade lasers. , 2009, , .	0	
258	THz differential near-field scanning optical microscopy for biological applications. , 2009, , .	0	
259	Engineering vertical emission in THz quantum cascade lasers. Proceedings of SPIE, 2010, , .	0.8	0
260	Superconducting microbolometer with microsecond time constant coupled to quantum cascade lasers. , 2010, , .	0	
261	Non-equilibrium LO and TO phonon generation by electron transport in Terahertz quantum cascade lasers. , 2010, , .	0	
262	Extreme THz nonlinearities in bulk and nanostructured semiconductors. Proceedings of SPIE, 2010, , .	0.8	0
263	Terahertz quantum optics with solid-state systems. , 2010, , .	0	
264	Differential Scanning Optical Microscopy with a THz quantum cascade laser source. , 2010, , .	0	
265	Guiding a terahertz quantum cascade laser into low-loss hollow waveguides. , 2011, , .	0	
266	Nanowire-based architectures for the detection of THz radiation. , 2011, , .	0	
267	Frontend for a 2.5-THz heterodyne spectrometer without liquid cryogen. , 2011, , .	0	
268	Low-loss hollow metallic waveguides efficiently coupled to Terahertz micro-ring quantum cascade lasers. , 2011, , .	0	
269	Terahertz quantum cascade laser coupled with high efficiency to the low loss optical modes of cylindrical hollow-core waveguides. Proceedings of SPIE, 2011, , .	0.8	0
270	Room temperature terahertz detectors based on semiconductor nanowire field effect transistors. , 2012, , .	0	

#	ARTICLE	IF	CITATIONS
271	Terahertz rectification by graphene field effect transistors. , 2012, , .	0	
272	Sub-Cycle Switching of Ultrastrong Light-Matter Interaction in a 1D Photonic Bandstructure. , 2012, , .	0	
273	Phase-locking a THz quantum cascade laser to a THz comb through an all-optical beating. , 2012, , .	0	
274	The intrinsic linewidth of a THz quantum cascade laser. , 2012, , .	0	
275	Nanowire and graphene architectures for Room Temperature THz detection. , 2012, , .	0	
276	Distributed feedback Terahertz QCLs with a quasi-periodic Penrose patterning. , 2013, , .	0	
277	Detection of a 2.8 THz quantum cascade laser with a semiconductor nanowire FET. , 2013, , .	0	
278	Quantum-limited linewidth in THz quantum cascade lasers. Proceedings of SPIE, 2013, , .	0.8	0
279	Room-temperature nanowire terahertz photodetectors. Proceedings of SPIE, 2013, , .	0.8	0
280	THz-comb-assisted molecular spectroscopy. , 2013, , .	0	
281	Sub-cycle switching of a photonic bandstructure via ultrastrong light-matter coupling. EPJ Web of Conferences, 2013, 41, 09009.	0.3	0
282	THz detection in graphene nanotransistors. , 2014, , .	0	
283	Coherent absorption control in polaritonic systems. , 2015, , .	0	
284	Microphotoluminescence ($\frac{1}{4}$ PL) measurements of bidimensional materials in a custom-made setup. Journal of Physics: Conference Series, 2019, 1226, 012008.	0.4	0
285	Mid-Infrared Spectroscopy of Pr ³⁺ :Lu ₂ O ₃ Single Crystal. , 2019, , .	0	
286	Continuous wave vertical emission from terahertz microcavity lasers with a dual injection scheme. Optics Express, 2021, 29, 33602.	3.4	0
287	High Frequency Modulation and Optical Free Space Video Transmission using Quantum Cascade Lasers. , 2001, , .	0	
288	THz Quantum Cascade Lasers: Developing New Operating Concepts and Advancing Application Technologies. , 2005, , .	0	

#	ARTICLE	IF	CITATIONS
289	Quantum Cascade Lasers. , 2005, , 1-9.		0
290	New detection scheme for THz radiation — photon momentum detector. , 2008, , .		0
291	Femtosecond Formation of Ultrastrong Light-Matter Interaction. Springer Series in Chemical Physics, 2009, , 295-297.	0.2	0
292	Switch-on of Ultrastrong Light-Matter Interaction Faster than a Cycle of Light. , 2009, , .		0
293	Slits, curves, chains and rings: how to mix the right ingredients for surface-emitting THz quantum cascade lasers. , 2010, , .		0
294	The intrinsic linewidth of THz quantum cascade lasers. , 2012, , .		0
295	High performance quantum cascade lasers with superlattice active regions. , 1999, , .		0
296	Selfmix and optomechanics with silicon nitride membrane. , 2017, , .		0
297	Terahertz quantum cascade dipole-antenna vertically emitting continuous wave laser. , 2017, , .		0
298	Chiral metasurface optomechanics. , 2019, , .		0
299	Cryptographic Strain-Dependent Light Pattern Generators (Adv. Mater. Technol. 1/2022). Advanced Materials Technologies, 2022, 7, 2270002.	5.8	0
300	Tailoring the Emission of Terahertz Quantum Cascade Lasers. , 0, , 41-54.		0