Gaetano Scamarcio

List of Publications by Year
in descending order

255 papers	6,272 citations	57758 44 h-index	91884 69 g-index
258 all docs	258 docs citations	258 times ranked	4165 citing authors

#	Article	IF	Citations
1	Large-Area Interfaces for Single-Molecule Label-free Bioelectronic Detection. Chemical Reviews, 2022, 122, 4636-4699.	47.7	43
2	A large-area organic transistor with 3D-printed sensing gate for noninvasive single-molecule detection of pancreatic mucinous cyst markers. Analytical and Bioanalytical Chemistry, 2022, 414, 5657-5669.	3.7	11
3	Why a Diffusing Singleâ€Molecule can be Detected in Few Minutes by a Large Capturing Bioelectronic Interface. Advanced Science, 2022, 9, e2104381.	11.2	16
4	Physical Modelling of Large-Area Single-Molecule Organic Transistors. , 2022, , .		0
5	Negatively charged ions to probe self-assembled monolayer reorganization driven by interchain interactions. Journal of Materials Chemistry C, 2021, 9, 10935-10943.	5.5	5
6	Terahertz near-field nanoscopy based on detectorless laser feedback interferometry under different feedback regimes. APL Photonics, 2021, 6, .	5.7	23
7	Terahertz Near-field Nanoscopy Based on Self-mixing Interferometry with Quantum Cascade Resonators. , 2021, , .		0
8	Surface composition of mixed self-assembled monolayers on Au by infrared attenuated total reflection spectroscopy. Applied Surface Science, 2021, 559, 149883.	6.1	7
9	Tunable, Gratingâ€Gated, Grapheneâ€Onâ€Polyimide Terahertz Modulators. Advanced Functional Materials, 2021, 31, 2008039.	14.9	31
10	Mapping propagation of collective modes in Bi2Se3 and Bi2Te2.2Se0.8 topological insulators by near-field terahertz nanoscopy. Nature Communications, 2021, 12, 6672.	12.8	36
11	Ultimately Sensitive Organic Bioelectronic Transistor Sensors by Materials and Device Structure Design. Advanced Functional Materials, 2020, 30, 1904513.	14.9	97
12	Ultra-low HIV-1 p24 detection limits with a bioelectronic sensor. Analytical and Bioanalytical Chemistry, 2020, 412, 811-818.	3.7	42
13	Versatile Multimodality Imaging System Based on Detectorless and Scanless Optical Feedback Interferometryâ€"A Retrospective Overview for A Prospective Vision. Sensors, 2020, 20, 5930.	3.8	9
14	Printed, cost-effective and stable poly(3-hexylthiophene) electrolyte-gated field-effect transistors. Journal of Materials Chemistry C, 2020, 8, 15312-15321.	5.5	33
15	Organic Field-Effect Transistor Platform for Label-Free, Single-Molecule Detection of Genomic Biomarkers. ACS Sensors, 2020, 5, 1822-1830.	7.8	59
16	New trends in single-molecule bioanalytical detection. Analytical and Bioanalytical Chemistry, 2020, 412, 5005-5014.	3.7	33
17	Enhancing the Sensitivity of Biotinylated Surfaces by Tailoring the Design of the Mixed Self-Assembled Monolayer Synthesis. ACS Omega, 2020, 5, 16762-16771.	3.5	22
18	Standalone operation of an EGOFET for ultra-sensitive detection of HIV. Biosensors and Bioelectronics, 2020, 156, 112103.	10.1	57

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19	About the amplification factors in organic bioelectronic sensors. Materials Horizons, 2020, 7, 999-1013.	12.2	86
20	Electrically Tunable Graphene-on-Polyimide Terahertz Modulators. , 2020, , .		0
21	Investigation and Modelling of Single-Molecule Organic Transistors. , 2019, , .		0
22	Analysis of Label-Free Single-Molecule Biosensors based on Gate-Biofunctionalized Organic Transistors. , 2019, , .		0
23	A label-free immunosensor based on a graphene water-gated field-effect transistor. , 2019, , .		3
24	A Study on the Stability of Water-Gated Organic Field-Effect-Transistors Based on a Commercial p-Type Polymer. Frontiers in Chemistry, 2019, 7, 667.	3.6	29
25	Selective single-molecule analytical detection of C-reactive protein in saliva with an organic transistor. Analytical and Bioanalytical Chemistry, 2019, 411, 4899-4908.	3.7	66
26	Effect of the ionic-strength of the gating-solution on a bioelectronic response. , 2019, , .		1
27	Label-Free and Selective Single-Molecule Bioelectronic Sensing with a Millimeter-Wide Self-Assembled Monolayer of Anti-Immunoglobulins. Chemistry of Materials, 2019, 31, 6476-6483.	6.7	62
28	Large area laser-induced periodic surface structures on steel by bursts of femtosecond pulses with picosecond delays. Optics and Lasers in Engineering, 2019, 114, 15-21.	3.8	39
29	1-D and 2-D surface structuring of steel by bursts of femtosecond laser pulses. , 2019, , .		1
30	Improved Performance p-type Polymer (P3HT) / n-type Nanotubes (WS2) Electrolyte Gated Thin-Film Transistor. MRS Advances, 2018, 3, 1525-1533.	0.9	3
31	Phase-resolved terahertz near-field nanoscopy of a topological insulator phonon-polariton mode. , 2018, , .		1
32	High degradation and no bioavailability of artichoke miRNAs assessed using an in vitro digestion/Caco-2 cell model. Nutrition Research, 2018, 60, 68-76.	2.9	12
33	Phase-resolved terahertz self-detection near-field microscopy. Optics Express, 2018, 26, 18423.	3.4	70
34	Single-molecule detection with a millimetre-sized transistor. Nature Communications, 2018, 9, 3223.	12.8	184
35	Sub-wavelength near field imaging techniques at terahertz frequencies. , 2018, , .		0
36	Characterization of Covalently Bound Antiâ€Human Immunoglobulins on Selfâ€Assembled Monolayer Modified Gold Electrodes. Advanced Biology, 2017, 1, e1700055.	3.0	51

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37	The double layer capacitance of ionic liquids for electrolyte gating of ZnO thin film transistors and effect of gate electrodes. Journal of Materials Chemistry C, 2017, 5, 3509-3518.	5.5	66
38	Characterization of modified working electrodes for sensing applications by means of electrolyte-gated TFT and cyclic voltammetry. , 2017, , .		0
39	Electrolyte gated TFT biosensors based on the Donnan's capacitance of anchored biomolecules. , 2017, , .		2
40	In Vitro Assessment of the Antibacterial Potential of Silver Nano-Coatings on Cotton Gauzes for Prevention of Wound Infections. Materials, 2016, 9, 411.	2.9	31
41	Improved Tuning Fork for Terahertz Quartz-Enhanced Photoacoustic Spectroscopy. Sensors, 2016, 16, 439.	3.8	59
42	Low-Loss Coupling of Quantum Cascade Lasers into Hollow-Core Waveguides with Single-Mode Output in the 3.7â€“7.6 Î¼m Spectral Range. Sensors, 2016, 16, 533.	3.8	21
43	Highly sensitive gas leak detector based on a quartz-enhanced photoacoustic SF6 sensor. Optics Express, 2016, 24, 15872.	3.4	57
44	Linewidth measurement of a NIR VCSEL by self-mixing interferometry using voltage detection scheme. , 2016, , .		0
45	Linewidth Estimation Of A Mid Infrared Quantum Cascade Laser By Voltage Noise Spectral Density Measurement. , 2016, , .		0
46	Linewidth measurement of mid infrared quantum cascade laser by optical feedback interferometry. Applied Physics Letters, 2016, 108, .	3.3	19
47	Laser self-detection operation of a mid-IR near-field microscope. , 2016, , .		0
48	Innovative quartz enhanced photoacoustic sensors for trace gas detection. , 2016, , .		2
49	Templateless synthesis of polypyrrole nanowires by non-static solution-surface electropolymerization. Journal of Solid State Electrochemistry, 2016, 20, 2143-2151.	2.5	15
50	New developments in THz quartz enhanced photoacoustic spectroscopy. , 2016, , .		1
51	Effect of the gate metal work function on water-gated ZnO thin-film transistor performance. Journal Physics D: Applied Physics, 2016, 49, 275101.	2.8	18
52	Allan Deviation Plot as a Tool for Quartz-Enhanced Photoacoustic Sensors Noise Analysis. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 555-560.	3.0	72
53	Hollow-core waveguide for single-mode laser beam propagation in the spectral range of 3.7-7.3 Î¼m. , 2016, , .		0
54	Quartz enhanced photoacoustic leak sensor for mechatronic components. Proceedings of SPIE, 2016, , .	0.8	0

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55	Quartz tuning forks with novel geometries for optoacoustic gas sensing. , 2016, , .		0
56	Analysis of the electro-elastic properties of custom quartz tuning forks for optoacoustic gas sensing. Sensors and Actuators B: Chemical, 2016, 227, 539-546.	7.8	110
57	Au/In₂O₃ and Au/ZrO₂ composite nanoparticles via in situ sacrificial gold electrolysis. Materials Express, 2015, 5, 171-179.	0.5	4
58	Photo-generated metamaterials induce modulation of CW terahertz quantum cascade lasers. Scientific Reports, 2015, 5, 16207.	3.3	23
59	Quartz-enhanced photoacoustic spectroscopy exploiting tuning fork overtone modes. Applied Physics Letters, 2015, 107, .	3.3	61
60	Electrochemical deposition of gold on indium zirconate (InZrOx with In/Zr atomic ratio 1.0) for high temperature automobile exhaust gas sensors. Journal of Solid State Electrochemistry, 2015, 19, 2859-2868.	2.5	5
61	Nanoscale Displacement Sensing Based on Nonlinear Frequency Mixing in Quantum Cascade Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 107-114.	2.9	16
62	UV crosslinked poly(acrylic acid): a simple method to bio-functionalize electrolyte-gated OFET biosensors. Journal of Materials Chemistry B, 2015, 3, 5049-5057.	5.8	41
63	A quartz-enhanced photoacoustic sensor for H2S trace-gas detection at 2.6ÂÎ¼m. Applied Physics B: Lasers and Optics, 2015, 119, 21-27.	2.2	37
64	Quantum cascade lasers with optical feedback: regular multimode dynamics. Proceedings of SPIE, 2015, , .	0.8	1
65	Quartz-enhanced photoacoustic sensors for H2S trace gas detection. , 2015, , .		1
66	Nonlinear frequency mixing in QCL-based interferometry: beyond the intrinsic resolution. Proceedings of SPIE, 2015, , .	0.8	0
67	New approaches in quartz-enhanced photoacoustic sensing. Proceedings of SPIE, 2015, , .	0.8	2
68	THz Quartz-enhanced photoacoustic sensor for H_2S trace gas detection. Optics Express, 2015, 23, 7574.	3.4	76
69	Single mode operation with mid-IR hollow fibers in the range 51-105 Âµm. Optics Express, 2015, 23, 195.	3.4	32
70	Mid-IR quantum cascade laser mode coupling in hollow-core, fiber-optic waveguides with single-mode beam delivery. Proceedings of SPIE, 2015, , .	0.8	3
71	High finesse optical cavity coupled with a quartz-enhanced photoacoustic spectroscopic sensor. Analyst, The, 2015, 140, 736-743.	3.5	41
72	Bio-functionalization of ZnO water gated thin-film transistors. , 2015, , .		8

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73	Continuous-Wave Reflection Imaging Using Optical Feedback Interferometry in Terahertz and Mid-Infrared Quantum Cascade Lasers. IEEE Transactions on Terahertz Science and Technology, 2014, 4, 631-633.	3.1	23
74	A Comparative Study of the Gas Sensing Behavior in P3HT- and PBTTT-Based OTFTs: The Influence of Film Morphology and Contact Electrode Position. Sensors, 2014, 14, 16869-16880.	3.8	31
75	Measurement of relative velocity of independent targets by a quantum cascade laser subject to optical feedback. , 2014, , .		0
76	THz imaging of free carrier density based on quantum cascade lasers under optical feedback. , 2014, , .		0
77	Intracavity Quartz-Enhanced Photoacoustic Sensor for Mid-Infrared Trace-Gas Detection. , 2014, , .		0
78	Widely-tunable mid-infrared fiber-coupled quartz-enhanced photoacoustic sensor for environmental monitoring. Optics Express, 2014, 22, 28222.	3.4	93
79	Quartz-Enhanced Photoacoustic Spectroscopy: A Review. Sensors, 2014, 14, 6165-6206.	3.8	336
80	A quartz enhanced photo-acoustic gas sensor based on a custom tuning fork and a terahertz quantum cascade laser. Analyst, The, 2014, 139, 2079-2087.	3.5	77
81	Electronic Transduction of Proton Translocations in Nanoassembled Lamellae of Bacteriorhodopsin. ACS Nano, 2014, 8, 7834-7845.	14.6	20
82	Intracavity quartz-enhanced photoacoustic sensor. Applied Physics Letters, 2014, 104, .	3.3	115
83	Structural and Morphological Study of a Poly(3-hexylthiophene)/Streptavidin Multilayer Structure Serving as Active Layer in Ultra-Sensitive OFET Biosensors. Journal of Physical Chemistry C, 2014, 118, 15853-15862.	3.1	14
84	QCL-based nonlinear sensing of independent targets dynamics. Optics Express, 2014, 22, 5867.	3.4	26
85	Imaging of free carriers in semiconductors via optical feedback in terahertz quantum cascade lasers. Applied Physics Letters, 2014, 104, .	3.3	37
86	Carriers density imaging by self-mixing interferometry in a THz quantum cascade laser. , 2014, , .		1
87	Quartz Enhanced Photoacoustic Sensors for Trace Gas Detection in the IR and THz Spectral Range. NATO Science for Peace and Security Series B: Physics and Biophysics, 2014, , 139-151.	0.3	0
88	Terahertz quartz enhanced photo-acoustic sensor. Applied Physics Letters, 2013, 103, .	3.3	107
89	Hot Electrons in THz Quantum Cascade Lasers. Journal of Infrared, Millimeter, and Terahertz Waves, 2013, 34, 357-373.	2.2	7
90	On Line Sensing of Ultrafast Laser Microdrilling Processes by Optical Feedback Interferometry. Physics Procedia, 2013, 41, 670-676.	1.2	6

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91	THz quartz-enhanced photoacoustic sensor employing a quantum cascade laser source. Proceedings of SPIE, 2013, , .	0.8	2
92	Single QCL-based sensor measuring the simultaneous displacement of independent targets. Proceedings of SPIE, 2013, , .	0.8	0
93	Electronic temperature in phonon-photon-phonon terahertz quantum cascade devices with high-operating temperature performance. , 2013, , .		0
94	Mid-infrared fiber-coupled QCL-QEPAS sensor. Applied Physics B: Lasers and Optics, 2013, 112, 25-33.	2.2	66
95	Low-Loss Hollow Waveguide Fibers for Mid-Infrared Quantum Cascade Laser Sensing Applications. Sensors, 2013, 13, 1329-1340.	3.8	42
96	Part-per-trillion level detection of SF₆using a single-mode fiber-coupled quantum cascade laser and a quartz enhanced photoacoustic sensor. Proceedings of SPIE, 2013, , .	0.8	0
97	Volatile general anesthetic sensing with organic field-effect transistors integrating phospholipid membranes. Biosensors and Bioelectronics, 2013, 40, 303-307.	10.1	17
98	Electronic temperatures of terahertz quantum cascade active regions with phonon scattering assisted injection and extraction scheme. Optics Express, 2013, 21, 10172.	3.4	8
99	Intrinsic stability of quantum cascade lasers against optical feedback. Optics Express, 2013, 21, 13748.	3.4	103
100	Cavity and quartz enhanced photo-acoustic mid-IR sensor. , 2013, , .		1
101	Quantum cascade laser-based sensing to investigate fast laser ablation process. , 2013, , .		0
102	THz quantum cascade laser-based quartz enhanced photo-acoustic sensor. , 2013, , .		1
103	Coherent imaging with mid-IR and THz quantum cascade lasers through optical feedback interferometry. , 2013, , .		1
104	Non-equilibrium longitudinal and transverse optical phonons in terahertz quantum cascade lasers. Applied Physics Letters, 2012, 100, .	3.3	24
105	Real time ablation rate measurement during high aspect-ratio hole drilling with a 120-ps fiber laser. Optics Express, 2012, 20, 663.	3.4	18
106	Self-mixing in multi-transverse mode semiconductor lasers: model and potential application to multi-parametric sensing. Optics Express, 2012, 20, 6286.	3.4	9
107	Interfacial electronic effects in functional biolayers integrated into organic field-effect transistors. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6429-6434.	7.1	109
108	Part-per-trillion level SF_6 detection using a quartz enhanced photoacoustic spectroscopy-based sensor with single-mode fiber-coupled quantum cascade laser excitation. Optics Letters, 2012, 37, 4461.	3.3	142

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109	Self-mixing in VCSELs for multi-parametric sensing applications: theory and experiment. Proceedings of SPIE, 2012, , .	0.8	0
110	Coupling external cavity mid-IR quantum cascade lasers with low loss hollow metallic/dielectric waveguides. Applied Physics B: Lasers and Optics, 2012, 108, 255-260.	2.2	27
111	Direct investigation of the ablation rate evolution during laser drilling of high aspect ratio micro-holes. Proceedings of SPIE, 2012, , .	0.8	2
112	Detection of ultrafast laser ablation using quantum cascade laser-based sensing. Applied Physics Letters, 2012, 101, .	3.3	18
113	Laser ablation dynamics in metals: The thermal regime. Applied Physics Letters, 2012, 101, .	3.3	8
114	Optical Anisotropy in Single Light-Emitting Polymer Nanofibers. Journal of Physical Chemistry C, 2011, 115, 20399-20405.	3.1	58
115	Core-shell gold nanoparticles and gold-decorated metal oxides for gas sensing applications. , 2011, , .		0
116	Laser-Self-Mixing Fiber Sensor for Integral Strain Measurement. Journal of Lightwave Technology, 2011, 29, 335-340.	4.6	17
117	Simultaneous measurement of multiple target displacements by self-mixing interferometry in a single laser diode. Optics Express, 2011, 19, 16160.	3.4	30
118	High-resolution monitoring of the hole depth during ultrafast laser ablation drilling by diode laser self-mixing interferometry. Optics Letters, 2011, 36, 822.	3.3	45
119	A new three degrees-of-freedom motion sensor based on laser-self-mixing with pigtailed sources. , 2011, , .		0
120	Laser self-mixing sensor to monitor in situ the penetration depth during short pulse laser drilling of metal targets. Proceedings of SPIE, 2011, , .	0.8	0
121	Innovative electronic biosensors based on organic thin film transistors. , 2011, , .		0
122	Real-time in-situ measurement of the penetration depth in short pulse laser percussion drilling of metal targets. , 2011, , .		0
123	Monolithic focal plane arrays for terahertz active spectroscopic imaging: an experimental study. , 2011, , .		1
124	Direct in-situ measurement of the ablation rate in short pulse laser percussion drilling of metal targets. , 2011, , .		0
125	Quantum-cascade-laser-based optoacoustic detection: application to nitric oxide and formaldehyde. Proceedings of SPIE, 2010, , .	0.8	0
126	Trace gas sensing using quantum cascade lasers and a fiber-coupled optoacoustic sensor: Application to formaldehyde. Journal of Physics: Conference Series, 2010, 214, 012037.	0.4	5

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127	Impact of nonequilibrium phonons on the electron dynamics in terahertz quantum cascade lasers. Applied Physics Letters, 2010, 97, .	3.3	22
128	Non-equilibrium LO and TO phonon generation by electron transport in Terahertz quantum cascade lasers. , 2010, , .		0
129	Anisotropic heat propagation velocity in quantum cascade lasers. Applied Physics Letters, 2010, 96, 101101.	3.3	9
130	Perspectives in the design of monolithic focal plane arrays for terahertz active spectroscopic imaging. , 2010, , .		0
131	Laser-self-mixing interferometry in the Gaussian beam approximation: experiments and theory. Optics Express, 2010, 18, 10323.	3.4	19
132	Advanced optoacoustic sensor designs for environmental applications. Proceedings of SPIE, 2010, , .	0.8	0
133	Heat transport in terahertz quantum cascade lasers. Optical Engineering, 2010, 49, 111115.	1.0	2
134	Heat transfer speed and phonon related phenomena in terahertz quantum cascade lasers. , 2010, , .		0
135	Heat transfer dynamics and temperature performance degradation in terahertz quantum cascade lasers. , 2009, , .		0
136	Time of flight measurements of the nanoscale heat transfer dynamic in terahertz quantum cascade lasers. , 2009, , .		0
137	All-interferometric six-degrees-of-freedom sensor based on laser self-mixing. , 2009, , .		0
138	Hot electron effects and nanoscale heat transfer in Terahertz quantum cascade lasers. Proceedings of SPIE, 2009, , .	0.8	2
139	Photoacoustic trace gas sensing with mid-IR quantum cascade lasers. , 2009, , .		1
140	Quantum Cascade Laser-Based Photoacoustic Sensor for Trace Detection of Formaldehyde Gas. Sensors, 2009, 9, 2697-2705.	3.8	36
141	Optical and Electronic NOx Sensors for Applications in Mechatronics. Sensors, 2009, 9, 3337-3356.	3.8	25
142	Laserâ€Selfâ€Mixing Interferometry for Mechatronics Applications. Sensors, 2009, 9, 3527-3548.	3.8	35
143	Probing quantum efficiency by laser-induced hot-electron cooling. Applied Physics Letters, 2009, 94, 021115.	3.3	21
144	Hot-electron cooling in THz quantum cascade lasers. , 2009, , .		0

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145	Correlation between laser-induced hot-electron cooling and quantum efficiency in THz quantum cascade lasers. , 2009, , .		0
146	Simultaneous measurement of linear and transverse displacements by laser self-mixing. Applied Optics, 2009, 48, 1784.	2.1	17
147	Trace gas sensing using quantum cascade lasers and optoacoustic detection. Proceedings of SPIE, 2009, , .	0.8	0
148	A self-mixing laser sensor for the real-time correction of straightness/flatness deviations of a linear slide. Proceedings of SPIE, 2009, , .	0.8	1
149	Laser-self-mixing interferometric fiber strain sensor. Proceedings of SPIE, 2009, , .	0.8	1
150	Thermal Modelling of Quantum Cascade Lasers. Acta Physica Polonica A, 2009, 116, 451-454.	0.5	1
151	Nanoscale heat transfer in quantum cascade lasers. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1780-1784.	2.7	25
152	Plasma treatment effects on Si and Si/dielectric film heterostructures. Journal of Materials Processing Technology, 2008, 206, 462-466.	6.3	1
153	Influence of substrate pre-treatments on the growth of SixNyHz thin films by plasma enhanced chemical vapor deposition. Surface and Coatings Technology, 2008, 202, 3081-3087.	4.8	0
154	A Compact Three Degrees-of-Freedom Motion Sensor Based on the Laser-Self-Mixing Effect. IEEE Photonics Technology Letters, 2008, 20, 1360-1362.	2.5	29
155	Temperature Dependence of Thermal Conductivity and Boundary Resistance in THz Quantum Cascade Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 431-435.	2.9	52
156	A no-contact laser sensor based on the Self-Mixing effect for the measurement of rotations. , 2008, , .		1
157	Thermal Modeling of Terahertz Quantum-Cascade Lasers: Comparison of Optical Waveguides. IEEE Journal of Quantum Electronics, 2008, 44, 680-685.	1.9	38
158	All fiber strain sensor based on the Laser-Self-Mixing effect. , 2008, , .		0
159	Improved thermal management of mid-IR quantum cascade lasers. Journal of Applied Physics, 2008, 103, .	2.5	35
160	Microprobe photoluminescence assessment of the wall-plug efficiency in interband cascade lasers. Journal of Applied Physics, 2008, 104, 046101.	2.5	1
161	Wide wavelength tuning of GaAsâˆ•AlxGa1âˆ’xAs bound-to-continuum quantum cascade lasers by aluminum content control. Applied Physics Letters, 2008, 92, .	3.3	5
162	Time-resolved measurement of the local lattice temperature in terahertz quantum cascade lasers. Applied Physics Letters, 2008, 92, 101116.	3.3	28

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163	Correlation between the subband electronic temperatures and the internal quantum efficiency of THz quantum cascade lasers. , 2008, , .		0
164	Experimental Investigation of Hot Carriers in Terahertz Quantum Cascade Lasers. Acta Physica Polonica A, 2008, 113, 787-794.	0.5	0
165	Comparative Analysis of THz Quantum Cascade Lasers. , 2007, , .		0
166	Influence of InAs, AlAs Î´ layers on the optical, electronic, and thermal characteristics of strain-compensated GaInAsâˆ•AlInAs quantum-cascade lasers. Applied Physics Letters, 2007, 91, .	3.3	43
167	Experimental investigation of the lattice and electronic temperatures in Ga0.47In0.53Asâˆ•Al0.62Ga0.38As1â^'xSbx quantum-cascade lasers. Applied Physics Letters, 2007, 90, 121109.	3.3	24
168	Terahertz quantum cascade lasers with large wall-plug efficiency. Applied Physics Letters, 2007, 90, 191115.	3.3	60
169	Experimental measurement of the wall-plug efficiency in THz quantum cascade lasers. , 2007, , .		0
170	Electronic and thermal properties of Sb-based QCLs operating in the first atmospheric window. , 2007, , .		1
171	High performance THz quantum cascade laser with different optical waveguide configurations. , 2007, , .		0
172	Hot-phonon generation in THz quantum cascade lasers. Journal of Physics: Conference Series, 2007, 92, 012018.	0.4	8
173	Comparative analysis of resonant phonon THz quantum cascade lasers. Journal of Applied Physics, 2007, 101, 086109.	2.5	44
174	Functionalized interfaces by plasma treatments on silicon and silicon dioxide substrates. Thin Solid Films, 2007, 515, 7195-7202.	1.8	4
175	Electronic and Thermal properties of THz Quantum Cascade. , 2006, , .		0
176	Thermal properties of THz quantum cascade lasers based on different optical waveguide configurations. Applied Physics Letters, 2006, 89, 021111.	3.3	46
177	Non equilibrium electrons in THz quantum cascade lasers. , 2006, 6133, 126.		3
178	Photoacoustic Spectroscopy with Quantum Cascade Lasers for Trace Gas Detection. Sensors, 2006, 6, 1411-1419.	3.8	28
179	Quantum cascade laser-based photoacoustic spectroscopy of volatile chemicals: Application to hexamethyldisilazane. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 64, 426-429.	3.9	6
180	Electronic and lattice temperatures in bound-to-continuum terahertz quantum cascade lasers. , 2006, , .		1

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181	Subband electronic temperatures and electron-lattice energy relaxation in terahertz quantum cascade lasers with different conduction band offsets. Applied Physics Letters, 2006, 89, 131114.	3.3	32
182	Electron-lattice coupling in bound-to-continuum THz quantum-cascade lasers. Applied Physics Letters, 2006, 88, 241109.	3.3	38
183	Thermal modeling of GaInAsâˆ•AlInAs quantum cascade lasers. Journal of Applied Physics, 2006, 100, 043109.	2.5	73
184	Experimental Investigation of Hot Carriers in THz and Mid-IR Quantum Cascade Lasers. Springer Proceedings in Physics, 2006, , 89-93.	0.2	0
185	Electron Transport in Novel Sb-based Quantum Cascade Lasers. , 2006, , 295-299.		0
186	Hot electrons in resonant-phonon terahertz quantum cascade lasers. , 2005, , .		0
187	Measurement of subband electronic temperatures and population inversion in THz quantum-cascade lasers. Applied Physics Letters, 2005, 86, 111115.	3.3	123
188	Electronic spatial distribution of In0.53Ga0.47Asâˆ•AlAs0.56Sb0.44 quantum-cascade lasers. Journal of Applied Physics, 2005, 98, 086106.	2.5	1
189	Influence of the band-offset on the electronic temperature of GaAs/Al(Ga)As superlattice quantum cascade lasers. Semiconductor Science and Technology, 2004, 19, S110-S112.	2.0	17
190	Three-terminal mid-IR tunable emitters based on Wannierâ€“Stark ladder transitions in semiconductor superlattices. Semiconductor Science and Technology, 2004, 19, S87-S88.	2.0	2
191	Simultaneous measurement of the electronic and lattice temperatures in GaAs/Al0.45Ga0.55As quantum-cascade lasers: Influence on the optical performance. Applied Physics Letters, 2004, 84, 3690-3692.	3.3	70
192	Optical far-IR wave generation - state-of-the-art and advanced device structures. , 2004, , .		4
193	Experimental determination of the temperature distribution in trench-confined oxide vertical-cavity surface-emitting lasers. IEEE Journal of Quantum Electronics, 2003, 39, 701-707.	1.9	15
194	Thermal characteristics of quantum-cascade lasers by micro-probe optical spectroscopy. IEE Proceedings: Optoelectronics, 2003, 150, 298.	0.8	22
195	Reliability of visible GaN LEDs in plastic package. Microelectronics Reliability, 2003, 43, 1737-1742.	1.7	50
196	Thermoelastic stress in GaAs/AlGaAs quantum cascade lasers. Applied Physics Letters, 2003, 82, 4639-4641.	3.3	15
197	Monte Carlo simulation of tunable mid-infrared emission from coupled Wannierâ€“Stark ladders in semiconductor superlattices. Applied Physics Letters, 2003, 82, 4029-4031.	3.3	11
198	Direct measurement of the local temperature distribution in oxide VCSELs. , 2002, , .		4

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