A Giles Davies

List of Publications by Year
in descending order

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440	14,279	34016	24915
papers	citations	52 h-index	109 g-index

447	447	447	9310
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Terahertz semiconductor-heterostructure laser. Nature, 2002, 417, 156-159.	13.7	2,539
2	The 2017 terahertz science and technology roadmap. Journal Physics D: Applied Physics, 2017, 50, 043001.	1.3	1,160
3	Terahertz spectroscopy of explosives and drugs. Materials Today, 2008, 11, 18-26.	8.3	447
4	Electrically pumped topological laser with valley edge modes. Nature, 2020, 578, 246-250.	13.7	341
5	Electrically pumped photonic-crystal terahertz lasers controlled by boundary conditions. Nature, 2009, 457, 174-178.	13.7	334
6	Simulation of terahertz generation at semiconductor surfaces. Physical Review B, 2002, 65, .	1.1	308
7	Designer spoof surface plasmon structures collimate terahertz laser beams. Nature Materials, 2010, 9, 730-735.	13.3	260
8	Room-temperature nine-Âµm-wavelength photodetectors and GHz-frequency heterodyne receivers. Nature, 2018, 556, 85-88.	13.7	197
9	Terahertz quantum cascade lasers with copper metal-metal waveguides operating up to 178 K. Optics Express, 2008, 16, 3242.	1.7	194
10	Coherent sampling of active mode-locked terahertz quantum cascade lasers and frequency synthesis. Nature Photonics, 2011, 5, 306-313.	15.6	189
11	Ultrabroadband terahertz radiation from low-temperature-grown GaAs photoconductive emitters. Applied Physics Letters, 2003, 83, 3117-3119.	1.5	180
12	Temperature-dependent low-frequency vibrational spectra of purine and adenine. Applied Physics Letters, 2003, 82, 2350-2352.	1.5	170
13	Integrated Terahertz Graphene Modulator with 100% Modulation Depth. ACS Photonics, 2015, 2, 1559-1566.	3.2	158
14	Terahertz imaging through self-mixing in a quantum cascade laser. Optics Letters, 2011, 36, 2587.	1.7	149
15	Generation and detection of ultrabroadband terahertz radiation using photoconductive emitters and receivers. Applied Physics Letters, 2004, 85, 164-166.	1.5	144
16	Terahertz imaging using quantum cascade lasersâ€"a review of systems and applications. Journal Physics D: Applied Physics, 2014, 47, 374008.	1.3	141
17	The development of terahertz sources and their applications. Physics in Medicine and Biology, 2002, 47, 3679-3689.	1.6	128
18	High resistivity annealed low-temperature GaAs with 100 fs lifetimes. Applied Physics Letters, 2003, 83, 4199-4201.	1.5	127

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19	Linewidth and tuning characteristics of terahertz quantum cascade lasers. Optics Letters, 2004, 29, 575.	1.7	125
20	Surface emitting terahertz quantum cascade laser with a double-metal waveguide. Optics Express, 2006, 14, 11672.	1.7	121
21	Efficient power extraction in surface-emitting semiconductor lasers using graded photonic heterostructures. Nature Communications, 2012, 3, 952.	5.8	120
22	High-Temperature Operation of Terahertz Quantum Cascade Laser Sources. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 952-967.	1.9	111
23	Label-free electrochemical impedance biosensor to detect human interleukin-8 in serum with sub-pg/ml sensitivity. Biosensors and Bioelectronics, 2016, 80, 607-613.	5.3	111
24	Injection-locking of terahertz quantum cascade lasers up to 35GHz using RF amplitude modulation. Optics Express, 2010, 18, 20799.	1.7	103
25	Far-Infrared Spectroscopic Characterization of Explosives for Security Applications Using Broadband Terahertz Time-Domain Spectroscopy. Applied Spectroscopy, 2007, 61, 638-643.	1.2	99
26	Enhanced coherent terahertz emission from indium arsenide in the presence of a magnetic field. Applied Physics Letters, 2000, 76, 2038-2040.	1.5	98
27	Terahertz time-domain spectroscopy of glucose and uric Acid. Journal of Biological Physics, 2003, 29, 117-121.	0.7	97
28	Terahertz saturable absorbers from liquid phase exfoliation of graphite. Nature Communications, 2017, 8, 15763.	5.8	93
29	Swept-frequency feedback interferometry using terahertz frequency QCLs: a method for imaging and materials analysis. Optics Express, 2013, 21, 22194.	1.7	91
30	Acoustically induced current flow in graphene. Applied Physics Letters, 2012, 100, .	1.5	90
31	Alignment of particles in microfluidic systems using standing surface acoustic waves. Applied Physics Letters, 2008, 92, .	1.5	89
32	Magneto-optical probe of two-dimensional electron liquid and solid phases. Physical Review B, 1992, 46, 7957-7960.	1.1	88
33	Terahertz Transmission Spectroscopy of Nonpolar Materials and Relationship with Composition and Properties. Journal of Infrared, Millimeter and Terahertz Waves, 2005, 26, 55-64.	0.6	82
34	The use of Fourier-transform infrared spectroscopy for the quantitative determination of glucose concentration in whole blood. Physics in Medicine and Biology, 2003, 48, 2023-2032.	1.6	78
35	Controlled wave-function mixing in strongly coupled one-dimensional wires. Physical Review B, 1999, 59, 12252-12255.	1.1	72
36	Broadband terahertz time-domain spectroscopy of drugs-of-abuse and the use of principal component analysis. Analyst, The, 2009, 134, 1658.	1.7	70

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37	Phase-resolved terahertz self-detection near-field microscopy. Optics Express, 2018, 26, 18423.	1.7	70
38	Fully phase-stabilized quantum cascade laser frequency comb. Nature Communications, 2019, 10, 2938.	5.8	69
39	Formation and manipulation of two-dimensional arrays of micron-scale particles in microfluidic systems by surface acoustic waves. Applied Physics Letters, 2009, 94, .	1.5	68
40	Terahertz amplifier based on gain switching in a quantum cascade laser. Nature Photonics, 2009, 3, 715-719.	15.6	68
41	Single-mode operation of terahertz quantum cascade lasers with distributed feedback resonators. Applied Physics Letters, 2004, 84, 5446-5448.	1.5	67
42	Aperture less near-field terahertz imaging using the self-mixing effect in a quantum cascade laser. Applied Physics Letters, 2016, 108, .	1.5	67
43	Theory of magnetic-field enhancement of surface-field terahertz emission. Journal of Applied Physics, 2002, 91, 2104-2106.	1.1	66
44	High-performance continuous-wave operation of superlattice terahertz quantum-cascade lasers. Applied Physics Letters, 2003, 82, 1518-1520.	1.5	66
45	Demonstration of a self-mixing displacement sensor based on terahertz quantum cascade lasers. Applied Physics Letters, 2011, 99, .	1.5	63
46	Terahertz pulsed imaging with 1.06 Î¼m laser excitation. Applied Physics Letters, 2003, 83, 4113-4115.	1.5	61
47	Coherent terahertz photonics. Optics Express, 2013, 21, 22988.	1.7	61
48	Patch antenna terahertz photodetectors. Applied Physics Letters, 2015, 106, .	1.5	61
49	Limiting Factors to the Temperature Performance of THz Quantum Cascade Lasers Based on the Resonant-Phonon Depopulation Scheme. IEEE Transactions on Terahertz Science and Technology, 2012, 2, 83-92.	2.0	59
50	Photonic quasi-crystal terahertz lasers. Nature Communications, 2014, 5, 5884.	5.8	59
51	Evolution of Fractal Patterns during a Classical-Quantum Transition. Physical Review Letters, 2001, 87, 036802.	2.9	57
52	Terahertz quantum-cascade lasers based on an interlaced photon-phonon cascade. Applied Physics Letters, 2004, 84, 1266-1268.	1.5	56
53	Terahertz frequency range band-stop filters. Applied Physics Letters, 2005, 86, 213503.	1.5	54
54	Generation of high-power terahertz pulses in a prism. Optics Letters, 2002, 27, 1935.	1.7	53

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55	Excitation-density-dependent generation of broadband terahertz radiation in an asymmetrically excited photoconductive antenna. Optics Letters, 2007, 32, 2297.	1.7	52
56	Surface-Immobilized Peptide Aptamers as Probe Molecules for Protein Detection. Analytical Chemistry, 2008, 80, 978-983.	3.2	52
57	Generating ultrafast pulses of light from quantum cascade lasers. Optica, 2015, 2, 944.	4.8	52
58	Increasing the sensitivity of terahertz split ring resonator metamaterials for dielectric sensing by localized substrate etching. Optics Express, 2019, 27, 23164.	1.7	52
59	Selective dielectrophoretic manipulation of surface-immobilized DNA molecules. Nanotechnology, 2003, 14, 896-902.	1.3	51
60	Terahertz vibrational absorption spectroscopy using microstrip-line waveguides. Applied Physics Letters, 2008, 93, 182904.	1.5	51
61	Terahertz emission from metal-organic chemical vapor deposition grown Fe:InGaAs using 830 nm to 1.55â€‚Î¼m excitation. Applied Physics Letters, 2010, 96, .	1.5	51
62	Characterization of Crystalline Phaseâ€Transformations in Theophylline by Timeâ€Domain Terahertz Spectroscopy. Spectroscopy Letters, 2006, 39, 215-224.	0.5	46
63	Wide-ridge metal-metal terahertz quantum cascade lasers with high-order lateral mode suppression. Applied Physics Letters, 2008, 92, .	1.5	46
64	Fabrication and characterization of gold nano-wires templated on virus-like arrays of tobacco mosaic virus coat proteins. Nanotechnology, 2013, 24, 025605.	1.3	46
65	Hybridization of single- and double-layer behavior in a double-quantum-well structure. Physical Review B, 1996, 54, R17331-R17334.	1.1	45
66	High-intensity interminiband terahertz emission from chirped superlattices. Applied Physics Letters, 2002, 80, 1867-1869.	1.5	45
67	Coherent three-dimensional terahertz imaging through self-mixing in a quantum cascade laser. Applied Physics Letters, 2013, 103, .	1.5	45
68	Electrical protein detection in cell lysates using high-density peptide-aptamer microarrays. Journal of Biology, 2008, 7, 3.	2.7	44
69	Graded photonic crystal terahertz quantum cascade lasers. Applied Physics Letters, 2010, 96, .	1.5	44
70	The analysis of human cortical bone by terahertz time-domain spectroscopy. Physics in Medicine and Biology, 2005, 50, 3211-3219.	1.6	42
71	Dual-frequency imaging using an electrically tunable terahertz quantum cascade laser. Optics Express, 2009, 17, 20631.	1.7	42
72	High-contrast coherent terahertz imaging of porcine tissue via swept-frequency feedback interferometry. Biomedical Optics Express, 2014, 5, 3981.	1.5	41

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73	High Dynamic Range, Heterogeneous, Terahertz Quantum Cascade Lasers Featuring Thermally Tunable Frequency Comb Operation over a Broad Current Range. ACS Photonics, 2019, 6, 73-78.	3.2	41
74	Quantum cascade laser based hybrid dual comb spectrometer. Communications Physics, 2020, 3, .	2.0	40
75	Simultaneous measurement of orthogonal components of polarization in a free-space propagating terahertz signal using electro-optic detection. Applied Physics Letters, 2011, 98, .	1.5	39
76	Determination of Glucose Concentration in Whole Blood using Fourier-Transform Infrared Spectroscopy. Journal of Biological Physics, 2003, 29, 129-133.	0.7	38
77	The MBE growth and optimization of high performance terahertz frequency quantum cascade lasers. Optics Express, 2015, 23, 2720.	1.7	38
78	Ultrastrong Lightâ€“Matter Coupling in Deeply Subwavelength THz LC Resonators. ACS Photonics, 2019, 6, 1207-1215.	3.2	37
79	Terahertz inverse synthetic aperture radar imaging using self-mixing interferometry with a quantum cascade laser. Optics Letters, 2014, 39, 2629.	1.7	36
80	Resonant dipole antennas for continuous-wave terahertz photomixers. Applied Physics Letters, 2004, 85, 1622-1624.	1.5	35
81	Three-dimensional terahertz imaging using swept-frequency feedback interferometry with a quantum cascade laser. Optics Letters, 2015, 40, 994.	1.7	35
82	10 Gbit s^{â^'1} Free Space Data Transmission at 9ÂÂµm Wavelength With Unipolar Quantum Optoelectronics. Laser and Photonics Reviews, 2022, 16, .	4.4	35
83	Electrically tunable terahertz quantum-cascade laser with a heterogeneous active region. Applied Physics Letters, 2009, 95, 181101.	1.5	33
84	Terahertz-frequency photoconductive detectors fabricated from metal-organic chemical vapor deposition-grown Fe-doped InGaAs. Applied Physics Letters, 2011, 98, .	1.5	33
85	On-Chip Picosecond Pulse Detection and Generation Using Graphene Photoconductive Switches. Nano Letters, 2015, 15, 1591-1596.	4.5	33
86	Frequency-tunable continuous-wave random lasers at terahertz frequencies. Light: Science and Applications, 2019, 8, 43.	7.7	33
87	Long-wavelength infrared photovoltaic heterodyne receivers using patch-antenna quantum cascade detectors. Applied Physics Letters, 2020, 116, .	1.5	33
88	Terahertz generation from coherent optical phonons in a biased GaAs photoconductive emitter. Physical Review B, 2004, 69, .	1.1	32
89	Comparison of near infrared laser excitation wavelengths and its influence on the interrogation of seized drugsâ€ofâ€abuse by Raman spectroscopy. Journal of Raman Spectroscopy, 2009, 40, 1974-1983.	1.2	32
90	Efficient prediction of terahertz quantum cascade laser dynamics from steady-state simulations. Applied Physics Letters, 2015, 106, .	1.5	32

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91	Rapid cell separation with minimal manipulation for autologous cell therapies. Scientific Reports, 2017, 7, 41872.	1.6	32
92	Tunable and compact dispersion compensation of broadband THz quantum cascade laser frequency combs. Optics Express, 2019, 27, 20231.	1.7	32
93	Direct Selective Functionalization of Nanometer-Separated Gold Electrodes with DNA Oligonucleotides. Langmuir, 2003, 19, 981-984.	1.6	31
94	Terahertz pulsed spectroscopic imaging using optimized binary masks. Applied Physics Letters, 2009, 95, 231112.	1.5	31
95	GaAs/Al0.15Ga0.85As terahertz quantum cascade lasers with double-phonon resonant depopulation operating up to 172 K. Applied Physics Letters, 2010, 97, 131111.	1.5	31
96	Millimeter wave photonics with terahertz semiconductor lasers. Nature Communications, 2021, 12, 1427.	5.8	31
97	Tunable, Gratingâ€Gated, Grapheneâ€Onâ€Polyimide Terahertz Modulators. Advanced Functional Materials, 2021, 31, 2008039.	7.8	31
98	Coherent imaging using laser feedback interferometry with pulsed-mode terahertz quantum cascade lasers. Optics Express, 2019, 27, 10221.	1.7	31
99	Predictable surface emission patterns in terahertz photonic-crystal quantum cascade lasers. Optics Express, 2009, 17, 9491.	1.7	30
100	Calculation and Measurement of Terahertz Active Normal Modes in Crystalline PETN. ChemPhysChem, 2010, 11, 368-378.	1.0	30
101	Laser-seeding dynamics with few-cycle pulses: Maxwell-Bloch finite-difference time-domain simulations of terahertz quantum cascade lasers. Physical Review A, 2013, 87, .	1.0	30
102	Coupled-cavity terahertz quantum cascade lasers for single mode operation. Applied Physics Letters, 2014, 104, .	1.5	30
103	Continuous-wave highly-efficient low-divergence terahertz wire lasers. Nature Communications, 2018, 9, 1122.	5.8	30
104	Single-mode surface-emitting concentric-circular-grating terahertz quantum cascade lasers. Applied Physics Letters, 2013, 102, 031119.	1.5	29
105	Gain recovery time in a terahertz quantum cascade laser. Applied Physics Letters, 2016, 108, .	1.5	28
106	Injection locking of a terahertz quantum cascade laser to a telecommunications wavelength frequency comb. Optica, 2017, 4, 1059.	4.8	28
107	Acousto-microfluidics: Transporting microbubble and microparticle arrays in acoustic traps using surface acoustic waves. Journal of Applied Physics, 2012, 111, .	1.1	27
108	Discrete Vernier tuning in terahertz quantum cascade lasers using coupled cavities. Optics Express, 2014, 22, 16595.	1.7	27

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109	Laser Feedback Interferometry as a Tool for Analysis of Granular Materials at Terahertz Frequencies: Towards Imaging and Identification of Plastic Explosives. Sensors, 2016, 16, 352.	2.1	27
110	Designer Multimode Localized Random Lasing in Amorphous Lattices at Terahertz Frequencies. ACS Photonics, 2016, 3, 2453-2460.	3.2	27
111	Terahertz Frequency Combs Exploiting an On-Chip, Solution-Processed, Graphene-Quantum Cascade Laser Coupled-Cavity. ACS Photonics, 2020, 7, 3489-3498.	3.2	26
112	High-speed modulation of a terahertz quantum cascade laser by coherent acoustic phonon pulses. Nature Communications, 2020, 11, 835.	5.8	26
113	Low-threshold quantum-cascade lasers at 35 THz (Î» = 85 Âµm). Optics Letters, 2003, 28, 810.	1.7	25
114	Mode-locking of a terahertz laser by direct phase synchronization. Optics Express, 2012, 20, 20855.	1.7	25
115	Spectroscopy of polycrystalline materials using thinned-substrate planar Goubau line at cryogenic temperatures. Lab on A Chip, 2013, 13, 4065.	3.1	25
116	Electrically pumped semiconductor laser with monolithic control of circular polarization. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5623-32.	3.3	25
117	Surface-emitting terahertz quantum cascade lasers with continuous-wave power in the tens of milliwatt range. Applied Physics Letters, 2014, 104, 091112.	1.5	25
118	Multiple-frequency terahertz pulsed sensing of dielectric films. Applied Physics Letters, 2006, 88, 071112.	1.5	24
119	Terahertz time domain spectroscopy of phonon-depopulation based quantum cascade lasers. Applied Physics Letters, 2009, 94, 251108.	1.5	24
120	Improving the Dielectric Properties of Ethylene-Glycol Alkanethiol Self-Assembled Monolayers. Langmuir, 2014, 30, 1321-1326.	1.6	24
121	Fractional quantum Hall effect in high-mobility two-dimensional hole gases in tilted magnetic fields. Physical Review B, 1991, 44, 13128-13131.	1.1	23
122	Terahertz ambipolar dual-wavelength quantum cascade laser. Optics Express, 2009, 17, 19926.	1.7	23
123	Surface acoustic wave generation and detection using graphene interdigitated transducers on lithium niobate. Applied Physics Letters, 2014, 104, .	1.5	23
124	Tuning a microcavity-coupled terahertz laser. Applied Physics Letters, 2015, 107, 261108.	1.5	23
125	Antibody mimetic receptor proteins for label-free biosensors. Analyst, The, 2015, 140, 803-810.	1.7	23
126	Monolithic Semiconductor Lasers with Dynamically Tunable Linear-to-Circular Polarization. ACS Photonics, 2017, 4, 517-524.	3.2	23

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127	High temperature metamaterial terahertz quantum detector. Applied Physics Letters, 2020, 117, .	1.5	23
128	Electromagnetic simulation of terahertz frequency range filters for genetic sensing. Journal of Applied Physics, 2006, 100, 066105.	1.1	22
129	Vertical subwavelength mode confinement in terahertz and mid-infrared quantum cascade lasers. Applied Physics Letters, 2011, 98, .	1.5	22
130	Integrated On-Chip THz Sensors for Fluidic Systems Fabricated Using Flexible Polyimide Films. IEEE Transactions on Terahertz Science and Technology, 2016, 6, 619-624.	2.0	22
131	On-Chip Terahertz-Frequency Measurements of Liquids. Analytical Chemistry, 2017, 89, 7981-7987.	3.2	22
132	Influence of alternating current electrokinetic forces and torque on the elongation of immobilized DNA. Journal of Applied Physics, 2005, 97, 014702.	1.1	21
133	On-chip terahertz Goubau-line waveguides with integrated photoconductive emitters and mode-discriminating detectors. Applied Physics Letters, 2009, 95, .	1.5	21
134	Measuring the sampling coherence of a terahertz quantum cascade laser. Optics Express, 2012, 20, 16662.	1.7	21
135	THz quantum cascade lasers operating on the radiative modes of a 2D photonic crystal. Optics Letters, 2014, 39, 3962.	1.7	21
136	Excitation, detection and electrostatic manipulation of terahertz-frequency range plasmons in a two-dimensional electron system. Scientific Reports, 2015, 5, 15420.	1.6	21
137	Free-space terahertz radiation from a LT-GaAs-on-quartz large-area photoconductive emitter. Optics Express, 2016, 24, 26986.	1.7	21
138	Generation of Terahertz Radiation from Fe-doped InGaAsP Using 800Ânm to 1550Ânm Pulsed Laser Excitation. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 415-425.	1.2	21
139	Silver-based surface plasmon waveguide for terahertz quantum cascade lasers. Optics Express, 2018, 26, 3814.	1.7	21
140	Absorption Engineering in an Ultrasubwavelength Quantum System. Nano Letters, 2020, 20, 4430-4436.	4.5	21
141	Terahertz evanescent field microscopy of dielectric materials using on-chip waveguides. Applied Physics Letters, 2008, 92, 032903.	1.5	20
142	Low divergence single-mode surface-emitting concentric-circular-grating terahertz quantum cascade lasers. Optics Express, 2013, 21, 31872.	1.7	20
143	Measurement of the emission spectrum of a semiconductor laser using laser-feedback interferometry. Scientific Reports, 2017, 7, 7236.	1.6	20
144	Ultrafast terahertz detectors based on three-dimensional meta-atoms. Optica, 2017, 4, 1451.	4.8	20

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145	Effects of magnetic field and optical fluence on terahertz emission in gallium arsenide. Physical Review B, 2001, 64, .	1.1	19
146	Generation of Bessel beams using a terahertz quantum cascade laser. Optics Letters, 2009, 34, 1030.	1.7	19
147	Terahertz master-oscillator power-amplifier quantum cascade lasers. Applied Physics Letters, 2016, 109, .	1.5	19
148	Two-Dimensional Multimode Terahertz Random Lasing with Metal Pillars. ACS Photonics, 2018, 5, 2928-2935.	3.2	19
149	Ultrafast terahertz saturable absorbers using tailored intersubband polaritons. Nature Communications, 2020, 11, 4290.	5.8	19
150	Observation of optical feedback dynamics in single-mode terahertz quantum cascade lasers: Transient instabilities. Physical Review A, 2021, 103, .	1.0	19
151	Tunable broadband terahertz polarizer using graphene-metal hybrid metasurface. Optics Express, 2019, 27, 33768.	1.7	19
152	Emission of collimated THz pulses from photo-excited semiconductors. Semiconductor Science and Technology, 2004, 19, S449-S451.	1.0	18
153	On-chip photoconductive excitation and detection of pulsed terahertz radiation at cryogenic temperatures. Applied Physics Letters, 2006, 88, 142103.	1.5	18
154	Broadband terahertz time-domain and Raman spectroscopy of explosives. , 2007, 6549, 40.		18
155	Distributed feedback terahertz frequency quantum cascade lasers with dual periodicity gratings. Applied Physics Letters, 2015, 106, .	1.5	18
156	Diffraction-limited ultrabroadband terahertz spectroscopy. Scientific Reports, 2016, 6, 24811.	1.6	18
157	Monolithic echo-less photoconductive switches as a high-resolution detector for terahertz time-domain spectroscopy. Applied Physics Letters, 2017, 110, .	1.5	18
158	High-sensitivity colorimetric detection of DNA hybridization on a gold surface with high spatial resolution. Nanotechnology, 2003, 14, 7-10.	1.3	17
159	Influence of the Thiol Position on the Attachment and Subsequent Hybridization of Thiolated DNA on Gold Surfaces. Langmuir, 2004, 20, 1527-1530.	1.6	17
160	Establishment of the ac electrokinetic elongation mechanism of DNA by three-dimensional fluorescent imaging. Applied Physics Letters, 2006, 88, 153901.	1.5	17
161	On-chip pulsed terahertz systems and their applications. Journal of Infrared, Millimeter and Terahertz Waves, 2007, 27, 557-569.	0.6	17
162	The growth and measurement of terahertz quantum cascade lasers. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1859-1861.	1.3	17

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163	Optimized surface-emitting photonic-crystal terahertz quantum cascade lasers with reduced resonator dimensions. Applied Physics Letters, 2010, 97, 131101.	1.5	17
164	Room temperature strong light-matter coupling in three dimensional terahertz meta-atoms. Applied Physics Letters, 2016, 108, .	1.5	17
165	Quasi-continuous frequency tunable terahertz quantum cascade lasers with coupled cavity and integrated photonic lattice. Optics Express, 2017, 25, 486.	1.7	17
166	Continuous Frequency Tuning with near Constant Output Power in Coupled Y-Branched Terahertz Quantum Cascade Lasers with Photonic Lattice. ACS Photonics, 2018, 5, 2912-2920.	3.2	17
167	Photoconductive arrays on insulating substrates for high-field terahertz generation. Optics Express, 2020, 28, 17219.	1.7	17
168	Terahertz quantum cascade lasers. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 215-231.	1.6	16
169	High order sideband generation in terahertz quantum cascade lasers. Applied Physics Letters, 2013, 102, .	1.5	16
170	Model for a pulsed terahertz quantum cascade laser under optical feedback. Optics Express, 2016, 24, 20554.	1.7	16
171	Infinite-Period Density-Matrix Model for Terahertz-Frequency Quantum Cascade Lasers. IEEE Transactions on Terahertz Science and Technology, 2017, 7, 368-377.	2.0	16
172	Ultrafast switch-on dynamics of frequency-tuneable semiconductor lasers. Nature Communications, 2018, 9, 3076.	5.8	16
173	Highly efficient surface-emitting semiconductor lasers exploiting quasi-crystalline distributed feedback photonic patterns. Light: Science and Applications, 2020, 9, 54.	7.7	16
174	Selfâ€Induced Phase Locking of Terahertz Frequency Combs in a Phaseâ€Sensitive Hyperspectral Nearâ€Field Nanoscope. Advanced Science, 2022, 9, .	5.6	16
175	Applying broadband terahertz time-domain spectroscopy to the analysis of crystalline proteins: a dehydration study. Journal of Applied Crystallography, 2011, 44, 129-133.	1.9	15
176	Multi-spectral terahertz sensing: proposal for a coupled-cavity quantum cascade laser based optical feedback interferometer. Optics Express, 2017, 25, 10153.	1.7	15
177	Ultrafast two-dimensional field spectroscopy of terahertz intersubband saturable absorbers. Optics Express, 2019, 27, 2248.	1.7	15
178	Detection sensitivity of laser feedback interferometry using a terahertz quantum cascade laser. Optics Letters, 2019, 44, 3314.	1.7	15
179	Three key questions on fractal conductance fluctuations: Dynamics, quantization, and coherence. Physical Review B, 2004, 70, .	1.1	14
180	Effect of transverse mode structure on the far field pattern of metal-metal terahertz quantum cascade lasers. Journal of Applied Physics, 2008, 104, 124513.	1.1	14

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181	On-chip terahertz spectroscopic techniques for measuring mesoscopic quantum systems. Review of Scientific Instruments, 2013, 84, 085101.	0.6	14
182	Terahertz quantum cascade lasers with thin resonant-phonon depopulation active regions and surface-plasmon waveguides. Journal of Applied Physics, 2013, 113, 113110.	1.1	14
183	Effect of Molecular Size and Particle Shape on the Terahertz Absorption of a Homologous Series of Tetraalkylammonium Salts. Analytical Chemistry, 2013, 85, 7926-7934.	3.2	14
184	Phase-locked arrays of surface-emitting graded-photonic-heterostructure terahertz semiconductor lasers. Optics Express, 2015, 23, 6915.	1.7	14
185	Coherent terahertz microscopy of modal field distributions in micro-resonators. APL Photonics, 2021, 6, .	3.0	14
186	Dependence of fractal conductance fluctuations on soft-wall profile in a double-layer semiconductor billiard. Applied Physics Letters, 2002, 80, 4381-4383.	1.5	13
187	AC electrokinetic manipulation of DNA. Journal Physics D: Applied Physics, 2007, 40, 114-118.	1.3	13
188	Impact of disorder on frequency scaling in the integer quantum Hall effect. Physical Review B, 2011, 84, .	1.1	13
189	Low temperature near-field scanning optical microscopy on infrared and terahertz photonic-crystal quantum cascade lasers. Applied Physics Letters, 2011, 98, .	1.5	13
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