GaÃ«l Mouret

List of Publications by Year
in descending order

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97	1,533	218381	344852
papers	citations	26 h-index	36 g-index

98	98	98	1127
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Optically Pumped Terahertz Molecular Laser: Gain Factor and Validation up to 5.5â€‰THz. Advanced Photonics Research, 2022, 3, .	1.7	9
2	Unlocking synchrotron sources for THz spectroscopy at sub-MHz resolution. Optics Express, 2022, 30, 7372.	1.7	4
3	MULTICHARME: a modified Chernin-type multi-pass cell designed for IR and THz long-path absorption measurements in the CHARME atmospheric simulation chamber. Atmospheric Measurement Techniques, 2022, 15, 1201-1215.	1.2	1
4	Kinetic and mechanistic study of the gas-phase reaction of ozone with Î³-terpinene. Atmospheric Environment, 2021, 246, 118073.	1.9	2
5	Terahertz Rotational Spectroscopy of Greenhouse Gases Using Long Interaction Path-Lengths. Applied Sciences (Switzerland), 2021, 11, 1229.	1.3	16
6	Formation of secondary organic aerosols from the reaction of Î³-terpinene with ozone: yields and morphology. Atmospheric Environment, 2021, 262, 118600.	1.9	1
7	Cavity based high resolution THz spectrometer. , 2021, , .		0
8	Self and N2 broadening coefficients of H2S probed by submillimeter spectroscopy: Comparison with IR measurements and semi-classical calculations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 247, 106955.	1.1	5
9	Characterization of the Observed Electric Field and Molecular Relaxation Times for Millimeter-Wave Chirped Pulse Instrumentation. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 1009-1021.	1.2	5
10	Continuous-wave lines up to 5.5 THz from the ammonia laser pumped by a quantum cascade laser. , 2020, , .		0
11	Molecules probed with a slow chirped-pulse excitation: Analytical model of the free-induction-decay signal. Physical Review A, 2019, 100, .	1.0	2
12	Enlarging the Frontiers of Research in the IR/mm Range Using Synchrotron Radiation. , 2019, , .		0
13	Conformational landscape and inertial defect of methoxyphenol isomers studied by mm-wave spectroscopy and quantum chemistry calculations. Journal of Chemical Physics, 2019, 150, 104303.	1.2	6
14	Free Induction Decay signals stimulated by photomixing. , 2019, , .		0
15	Spoilage of Salmon fillets as observed by THz waves. , 2019, , .		1
16	Terahertz gas phase spectroscopy using a high-finesse Fabryâ€“PÃ©rot cavity. Optica, 2019, 6, 1449.	4.8	34
17	Broadband terahertz heterodyne spectrometer exploiting synchrotron radiation at megahertz resolution. Optics Letters, 2019, 44, 4985.	1.7	8
18	Towards the Detection of Explosive Taggants: Microwave and Millimetreâ€Wave Gasâ€Phase Spectroscopies of 3â€Nitrotoluene. ChemPhysChem, 2018, 19, 1056-1067.	1.0	21

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19	Chirped Pulse Spectrometer Operating at 200 GHz. Journal of Infrared, Millimeter, and Terahertz Waves, 2018, 39, 105-119.	1.2	9
20	Full Conformational Landscape of 3â€Methoxyphenol Revealed by Room Temperature mmâ€wave Rotational Spectroscopy Supported by Quantum Chemical Calculations. ChemPhysChem, 2018, 19, 1572-1578.	1.0	11
21	Frequency comb for THz metrology and spectroscopy. EPJ Web of Conferences, 2018, 195, 02014.	0.1	0
22	Modelisation of a gas phase polarization induced by a 200 GHz chirped pulse. EPJ Web of Conferences, 2018, 195, 06001.	0.1	0
23	Monitoring of food spoilage by high resolution THz analysis. Analyst, The, 2018, 143, 5536-5544.	1.7	32
24	CH3D photomixing spectroscopy up to 2.5 THz: New set of rotational and dipole parameters, first THz self-broadening measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 189, 198-205.	1.1	7
25	Spectral lines of methane measured up to 2.6 THz at sub-MHz accuracy with a CW-THz photomixing spectrometer: Line positions of rotational transitions induced by centrifugal distortion. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 349-354.	1.1	12
26	High resolution spectroscopy of six SOCl2 isotopologues from the microwave to the far-infrared. Journal of Chemical Physics, 2016, 144, 084305.	1.2	8
27	Infrared spectroscopy of methoxyphenols involved as atmospheric secondary organic aerosol precursors: Gas-phase vibrational cross-sections. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 179, 51-58.	1.1	11
28	Continuous Monitoring of Formaldehyde Photolysis Products by THz Spectroscopy. IEEE Sensors Journal, 2015, 15, 6141-6146.	2.4	3
29	A COMPLETE SPECTROSCOPIC CHARACTERIZATION OF SO AND ITS ISOTOPOLOGUES UP TO THE TERAHERTZ DOMAIN. Astrophysical Journal, 2015, 799, 115.	1.6	18
30	Rotation-vibration interactions in the spectra of polycyclic aromatic hydrocarbons: Quinoline as a test-case species. Journal of Chemical Physics, 2015, 142, 104310.	1.2	14
31	High density terahertz frequency comb produced by coherent synchrotron radiation. Nature Communications, 2015, 6, 7733.	5.8	30
32	High-resolution synchrotron far infrared spectroscopy of thionyl chloride: Analysis of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si55.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>Î½</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></r and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si56.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>Î½</mml:mi></mml:mrow><mml:mrow><mml:mn>6</mml:mn></r Journal of Molecular Spectroscopy, 2015, 315, 30-36.	0.4	5
33	Synchrotron FT-FIR spectroscopy of nitro-derivatives vapors: New spectroscopic signatures of explosive taggants and degradation products. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 132, 838-845.	2.0	10
34	Rotational structure of the five lowest frequency fundamental vibrational states of dimethylsulfoxide. Chemical Physics Letters, 2013, 586, 10-15.	1.2	10
35	Analysis of self-broadened pure rotational and rovibrational lines of methyl chloride at room temperature. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 116, 87-100.	1.1	35
36	Versatile Sub-THz Spectrometer for Trace Gas Analysis. IEEE Sensors Journal, 2013, 13, 133-138.	2.4	28

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37	THz spectroscopy of radicals by means of photomixing experiment. , 2013, , .		0
38	Pollutants monitoring in the sub - THz frequency domain. , 2012, , .		1
39	Milliwatt-level power generated in the sub-terahertz range by photomixing in a metal-metal resonant cavity GaAs photoconductor. , 2012, , .		0
40	Milliwatt level output power generated by photomixing in a GaAs photoconductor. , 2012, , .		2
41	Rotational spectrum of formaldehyde reinvestigated using a photomixing THz synthesizer. Journal of Molecular Spectroscopy, 2012, 279, 12-15.	0.4	9
42	New investigation on THz spectra of OH and SH radicals (X<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 557 Td (xmlns:mml="http: Chemical Physics Letters, 2012, 550, 8-14.	1.2	22
43	Experimental studies by complementary terahertz techniques and semi-classical calculations of N2-broadening coefficients of CH335Cl. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1113-1126.	1.1	27
44	Theoretical and experimental studies of CH3Xâ€“Y2 rotational line shapes for atmospheric spectra modelling: application to room-temperature CH3Clâ€“O2. Physical Chemistry Chemical Physics, 2011, 13, 20326.	1.3	39
45	Frequency metrology of a cw-THz photomixing source. , 2011, , .		0
46	Large tuning range THz synthesiser by means of photomixing. , 2011, , .		0
47	Detection and analysis of OH and SH radicals by using THz photomixing synthesizer. , 2011, , .		0
48	Doppler limited rotational transitions of OH and SH radicals measured by continuous-wave terahertz photomixing. Journal of Molecular Structure, 2011, 1006, 13-19.	1.8	12
49	Widely tunable THz synthesizer. Applied Physics B: Lasers and Optics, 2011, 104, 763-768.	1.1	32
50	Milliwatt-level output power in the sub-terahertz range generated by photomixing in a GaAs photoconductor. Applied Physics Letters, 2011, 99, .	1.5	57
51	High efficiency optoelectronic terahertz sources. , 2010, , .		1
52	Frequency metrology of a photomixing source for gas phase spectroscopy. Proceedings of SPIE, 2010, , .	0.8	0
53	Far-infrared high resolution synchrotron FTIR spectroscopy of the Î½11 bending vibrational fundamental transition of dimethylsulfoxyde. Chemical Physics Letters, 2010, 492, 30-34.	1.2	11
54	Continuous-wave terahertz generation using a vertically integrated horn antenna photomixer. , 2010, , .		0

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55	THz synthesizer for high resolution spectroscopy. , 2010, , .		0
56	Gas phase THz spectroscopy of toxic agent simulant compounds using the AILES synchrotron beamline. , 2010, , .		6
57	Gas-Phase Synchrotron FTIR Spectroscopy of Weakly Volatile Alkyl Phosphonate and Alkyl Phosphate Compounds: Vibrational and Conformational Analysis in the Terahertz/Far-IR Spectral Domain. Journal of Physical Chemistry B, 2010, 114, 16936-16947.	1.2	14
58	Wide-band continuous-wave terahertz source with a vertically integrated photomixer. Applied Physics Letters, 2009, 95, .	1.5	17
59	Silicon substrate low-temperature-grown GaAs terahertz photomixers. , 2009, , .		0
60	Fiberâ€based telecoms components at 1550 nm for the generation of cwâ€THz by photomixing. Microwave and Optical Technology Letters, 2009, 51, 991-994.	0.9	3
61	Recent Developments of an Opto-Electronic THz Spectrometer for High-Resolution Spectroscopy. Sensors, 2009, 9, 9039-9057.	2.1	29
62	THz photomixing: Comparison between horn and spiral antennas. , 2009, , .		1
63	THz photomixing synthesizer based on a fiber frequency comb. Optics Express, 2009, 17, 22031.	1.7	50
64	Oxygen, nitrogen and air broadening of HCN spectral lines at terahertz frequencies. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 2857-2868.	1.1	30
65	Continuous-wave terahertz by photomixing: applications to gas phase pollutant detection and quantification. Comptes Rendus Physique, 2008, 9, 262-275.	0.3	44
66	Rotational spectroscopy and dynamics of carbonyl sulphide studied by terahertz free induction decays signals. Optics Communications, 2008, 281, 3111-3119.	1.0	17
67	High-efficiency uni-travelling-carrier photomixer at 1.55â€…[micro sign]m and spectroscopy application up to 1.4â€…THz. Electronics Letters, 2008, 44, 1320.	0.5	43
68	Integrated Horn Antenna for THz Photomixing in LTG-GaAs. , 2008, , .		1
69	Terahertz photomixing in InP/InGaAs UTC-PD integrated with TEM horn antennas. , 2008, , .		3
70	Continuous terahertz-wave generation using a monolithically integrated horn antenna. Applied Physics Letters, 2008, 93, .	1.5	37
71	Gas-Phase Vibrational Spectroscopy and Ab Initio Study of Organophosphorous Compounds: Discrimination between Species and Conformers. Journal of Physical Chemistry B, 2008, 112, 12516-12525.	1.2	43
72	Long path length cw-THz spectrometer using a multipass cell. , 2008, , .		1

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73	Frequency measurement in THz domain by using femtosecond laser frequency comb. , 2008, , .		0
74	A compact CW-THz spectrometer for applications to gas phase identification and quantification of multiple species. , 2007, , .		2
75	Multiple component analysis of cigarette smoke using THz spectroscopy, comparison with standard chemical analytical methods. Applied Physics B: Lasers and Optics, 2007, 86, 579-586.	1.1	42
76	THz media characterization by means of coherent homodyne detection, results and potential applications. Applied Physics B: Lasers and Optics, 2007, 89, 395-399.	1.1	26
77	THz analysis of mainstream cigarette smoke. , 2006, , .		1
78	Detection and quantification of multiple molecular species in mainstream cigarette smoke by continuous-wave terahertz spectroscopy. Optics Letters, 2006, 31, 2356.	1.7	115
79	Photomixing at 1.55 Âµm in ion-irradiated In(0.53)Ga(0.47)As on InP. Optics Express, 2006, 14, 1856.	1.7	17
80	Terahertz spectroscopy applied to the measurement of strengths and self-broadening coefficients for high-J lines of OCS. Journal of Molecular Spectroscopy, 2006, 239, 182-189.	0.4	31
81	Photomixing at 1.55 μm in ion-irradiated In_{0.53}Ga_{0.47}As on InP. , 2006, , .		0
82	Anomalous dispersion measurement in terahertz frequency region by photomixing. Applied Physics Letters, 2006, 88, 181105.	1.5	29
83	Far-infrared cw difference-frequency generation using vertically integrated and planar low temperature grown GaAs photomixers: application to H2S rotational spectrum up to 3ï¿½THz. Applied Physics B: Lasers and Optics, 2004, 79, 725-729.	1.1	41
84	GÃ©nÃ©ration et dÃ©tection cohÃ©rente d'onde THz par photomÃ©lange : vers la caractÃ©risation d'Ã©chantillons Ã forte dispersion. European Physical Journal Special Topics, 2004, 119, 231-232.	0.2	0
85	Terahertz frequency difference from vertically integrated low-temperature-grown GaAs photodetector. Applied Physics Letters, 2002, 81, 1174-1176.	1.5	54
86	Four-wave mixing in one-dimensional photonic crystals: inhomogeneous-wave excitation. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 1865.	0.9	15
87	Nonlinear process in photonic crystals under the noncollinear interaction. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 2083.	0.9	12
88	Terahertz electromagnetic generation via optical frequency difference. IEE Proceedings: Optoelectronics, 2002, 149, 82-87.	0.8	11
89	Mid-infrared trace gas detection using continuous-wave difference frequency generation in periodically poled RbTiOAsO4. Applied Physics B: Lasers and Optics, 2001, 72, 873-876.	1.1	52
90	Enhancement of sum frequency generation near the photonic band gap edge under the quasiphase matching conditions. Physical Review E, 2001, 63, 046609.	0.8	62

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91	Compression of femtosecond laser pulses in thin one-dimensional photonic crystals. Physical Review E, 2000, 63, 016602.	0.8	36
92	Gas filter correlation instrument for air monitoring at submillimeter wavelengths. Optics Letters, 1999, 24, 351.	1.7	23
93	Title is missing!. Journal of Infrared, Millimeter and Terahertz Waves, 1998, 19, 409-417.	0.6	6
94	High-power terahertz radiation from a high-repetition-rate large-aperture photoconducting antenna. Microwave and Optical Technology Letters, 1998, 17, 23-27.	0.9	8
95	Difference-frequency laser spectroscopy detection of acetylene trace constituent. Applied Physics B: Lasers and Optics, 1998, 67, 375-378.	1.1	33
96	Optogalvanic Spectrum of the (000)â€“(000) Band of theÃƒ1Aâ€³â€“X1Aâ€² System of HNO Using a Ti:Sapphire Laser. Journal of Molecular Spectroscopy, 1996, 180, 433-434.	0.4	1
97	An ultra-wide bandwidth photomixer with down conversion at terahertz frequency. , 0, , .		6