Maurizio De Rosa

List of Publications by Year
in descending order

80	1,499	304743	345221
papers	citations	22 h-index	36 g-index

82	82	82	1220
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Infrared Comb Spectroscopy of Buffer-Gas-Cooled Molecules: Toward Absolute Frequency Metrology of Cold Acetylene. International Journal of Molecular Sciences, 2021, 22, 250.	4.1	4
2	Optical Frequency Combs in Quadratically Nonlinear Resonators. Micromachines, 2020, 11, 230.	2.9	31
3	Experimental Observation of Optical Frequency Combs in Doubly Resonant Second Harmonic Generation. , 2019, , .		0
4	Quadratic Optical Frequency Combs. , 2019, , .		0
5	Lamb-dip spectroscopy of buffer-gas-cooled molecules. Optica, 2019, 6, 436.	9.3	15
6	Second order nonlinearities in silicon waveguides: from the physics to new applications (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		0
7	Modulation Instability Induced Frequency Comb Generation in a Continuously Pumped Optical Parametric Oscillator. Physical Review Letters, 2018, 121, 093903.	7.8	89
8	Frequency comb generation in a continuously pumped optical parametric oscillator. , 2018, , .		0
9	Directional quasi-phase matching AlGaAs waveguide microresonators for efficient generation of quadratic frequency combs. , 2017, , .		1
10	Singly resonant second-harmonic-generation frequency combs. Physical Review A, 2017, 95, .	2.5	35
11	Nonlinear dynamics of optical frequency combs. , 2017, , .		0
12	Directionally induced quasi-phase matching in homogeneous AlGaAs waveguides. Optics Letters, 2017, 42, 4287.	3.3	20
13	AlGaAs waveguide microresonators for efficient generation of quadratic frequency combs. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1842.	2.1	8
14	Control of squeezed light by optomechanical interaction. , 2017, , .		0
15	Frequency comb generation in continuously pumped optical parametric oscillator. , 2017, , .		0
16	Direct generation of optical frequency combs in Ï‡⁽²⁾ nonlinear cavities. Nanophotonics, 2016, 5, 316-331.	6.0	44
17	Single envelope equation modeling of multi-octave comb arrays in microresonators with quadratic and cubic nonlinearities. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1207.	2.1	33
18	Theory of quadratic optical frequency combs. , 2016, , .		0

#	Article	IF	Citations
19	Frequency-comb formation in doubly resonant second-harmonic generation. Physical Review A, 2016, 93, .	2.5	67
20	Walk-Off-Induced Modulation Instability, Temporal Pattern Formation, and Frequency Comb Generation in Cavity-Enhanced Second-Harmonic Generation. Physical Review Letters, 2016, 116, 033901.	7.8	100
21	Numerical modelling of frequency comb generation in nonlinear resonators. , 2016, , .		0
22	Comb-assisted cavity ring-down spectroscopy of a buffer-gas-cooled molecular beam. Physical Chemistry Chemical Physics, 2016, 18, 16715-16720.	2.8	23
23	Theory of Frequency Comb Generation in Cavity Enhanced Second Harmonic Generation. , 2016, , .		1
24	Frequency combs in quadratically nonlinear resonators. , 2016, , .		0
25	Single envelope equation modelling of frequency comb generation in quadratic and cubic nonlinear resonators. , 2016, , .		0
26	Frequency comb generation in continuously-pumped quadratic nonlinear media. , 2015, , .		0
27	Frequency comb generation in quadratic nonlinear media. Physical Review A, 2015, 91, .	2.5	84
28	Sub-kilohertz linewidth narrowing of a mid-infrared optical parametric oscillator idler frequency by direct cavity stabilization. Optics Letters, 2015, 40, 4743.	3.3	17
29	LOW-TEMPERATURE SPECTROSCOPY OF THE¹²C₂H₂(Ï...₁+) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 582 Td (4.5 9		
30	Assessing the time constancy of the proton-to-electron mass ratio by precision ro-vibrational spectroscopy of a cold molecular beam. Journal of Molecular Spectroscopy, 2014, 300, 116-123.	1.2	15
31	Sub-kHz-Linewidth Mid-infrared Optical Parametric Oscillator. , 2014, , .		0
32	Phase noise analysis of a 10 Watt Yb-doped fibre amplifier seeded by a 1-Hz-linewidth laser. Optics Express, 2013, 21, 14618.	3.4	18
33	High-speed multi-THz-range mode-hop-free tunable mid-IR laser spectrometer. Optics Letters, 2013, 38, 1972.	3.3	19
34	Atomic and molecular spectroscopy with optical-frequency-comb-referenced IR coherent sources. EPJ Web of Conferences, 2013, 57, 02003.	0.3	0
35	High-Speed, Multi-THz-Range Mode-Hop-Free Tunable Mid-IR OPO Spectrometer. , 2013, , .		0
36	A narrow-linewidth optical parametric oscillator for mid-infrared high-resolution spectroscopy. Molecular Physics, 2012, 110, 2103-2109.	1.7	19

#	Article	IF	Citations
37	A narrow-linewidth, frequency-stabilized OPO for sub-Doppler molecular spectroscopy around 3 Î¼m. , 2012, , .		3
38	Frequency-comb-referenced singly-resonant OPO for sub-Doppler spectroscopy. Optics Express, 2012, 20, 9178.	3.4	41
39	Absolute measurement of the S(0) and S(1) lines in the electric quadrupole fundamental band of D2 around 3â€‚Î¼m. Journal of Chemical Physics, 2010, 133, 154317.	3.0	30
40	Cavity-enhanced generation of 6 W cw second-harmonic power at 532 nm in periodically-poled MgO:LiTaO_3. Optics Express, 2010, 18, 10985.	3.4	24
41	Sum-frequency generation of cw ultraviolet radiation in periodically poled LiTaO_3. Optics Letters, 2009, 34, 1348.	3.3	27
42	LASER-BASED IN SITU GAS SENSORS FOR ENVIRONMENTAL MONITORING. Series in Optics and Photonics, 2009, , 468-493.	0.1	0
43	A joint search for gravitational wave bursts with AURIGA and LIGO. Classical and Quantum Gravity, 2008, 25, 095004.	4.0	16
44	Experimental study of face and edge-pumped ceramic slab DPSSLs in the 100-500W power range. , 2008, , .		0
45	Results of the IGEC-2 search for gravitational wave bursts during 2005. Physical Review D, 2007, 76, .	4.7	50
46	Measurement of the thermal expansion coefficients of ferroelectric crystals by a moirÃ© interferometer. Optics Communications, 2007, 277, 14-18.	2.1	32
47	Performance evaluation of fiber Bragg grating sensors by digital holographic technique, strain gauge measurement. Optics and Lasers in Engineering, 2007, 45, 385-389.	3.8	2
48	Optical metrology for massive detectors of gravitational waves. Optics and Lasers in Engineering, 2007, 45, 471-477.	3.8	1
49	Continuous in situ measurements of volcanic gases with a diode-laser-based spectrometer: CO2 and H2O concentration and soil degassing at Vulcano (Aeolian islands: Italy). Geochemical Transactions, 2007, 8, 5.	0.7	5
50	Interferometric measurement of thermal expansion coefficients and thermo-optic coefficients in ferroelectric crystals. , 2006, 6188, 163.		0
51	Experimental investigation of dynamic photo-thermal effect. Classical and Quantum Gravity, 2006, 23, S259-S266.	4.0	8
52	Measurement of thermal expansion and thermo-optic coefficients in LiNbO 3 and KTiOPO 4 crystals using dual-interferometric techniques. , 2006, 6341, 534.		2
53	Canard orbits in Fabry-Perot cavities induced by radiation pressure and photothermal effects. Physical Review E, 2006, 73, 026217.	2.1	20
54	Interferometric readout for acoustic gravitational wave detectors. AIP Conference Proceedings, 2005, , .	0.4	0

#	Article	IF	Citations
55	Upper Limits on Gravitational-Wave Emission in Association with the 27ÂDecÂ2004 Giant Flare of SGR1806-20. Physical Review Letters, 2005, 95, 081103.	7.8	19
56	An optical readout scheme for advanced acoustic GW detectors. Classical and Quantum Gravity, 2004, 21, S1237-S1240.	4.0	2
57	Signal processing and calibration procedures for in situ diode-laser absorption spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 1685-1705.	3.9	116
58	Two infrared laser spectrometers for the in situ measurement of stratospheric gas concentration. Infrared Physics and Technology, 2004, 46, 109-113.	2.9	9
59	A folded Fabryâ€“Perot cavity for optical sensing in gravitational wave detectors. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 309, 15-23.	2.1	20
60	High-spectral-purity laser system for the AURIGA detector optical readout. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 462.	2.1	19
61	Room temperature gravitational wave bar detector with optomechanical readout. Journal of Applied Physics, 2003, 93, 3589-3595.	2.5	26
62	Experimental Measurement of the Dynamic Photothermal Effect in Fabry-Perot Cavities for Gravitational Wave Detectors. Physical Review Letters, 2002, 89, 237402.	7.8	37
63	First room temperature operation of the AURIGA optical readout. Classical and Quantum Gravity, 2002, 19, 1919-1924.	4.0	15
64	Status report and near future prospects for the gravitational wave detector AURIGA. Classical and Quantum Gravity, 2002, 19, 1925-1933.	4.0	45
65	Tunable diode lasers and two-tone frequency modulation spectroscopy applied to atmospheric gas analysis. Optics and Lasers in Engineering, 2002, 37, 533-551.	3.8	17
66	Self- and foreign-broadening and shift coefficients for C2H2 lines at 1.54 Î¼m. European Physical Journal D, 2001, 17, 175-179.	1.3	22
67	New results for the temperature dependence of self-broadening and shift in the v2 ammonia band. Journal of Quantitative Spectroscopy and Radiative Transfer, 2000, 67, 365-374.	2.3	16
68	High-resolution investigation of the weak Î½1+3Î½21-Î½21+Î½3 band of CO2 around 2ÂÎ¼m. Applied Physics B: Lasers and Optics, 2000, 70, 879-881.	2.2	10
69	Low-amplitude-noise laser for AURIGA detector optical readout. Applied Optics, 2000, 39, 5732.	2.1	18
70	COLLISIONAL BROADENING AND SHIFT OF LINES IN THE 2Î½1+2Î½2+Î½3 BAND OF CO2. Journal of Quantitative Spectroscopy and Radiative Transfer, 1999, 61, 97-104.	2.3	27
71	Pressure broadening in the second overtone of NO, measured with a near infrared DFB diode laser. Optics Communications, 1999, 159, 80-83.	2.1	10
72	High-resolution measurements of line intensity, broadening and shift of CO $mathsf{_2}$ around $mathsf{2 mu}$ m. European Physical Journal D, 1999, 6, 327-332.	1.3	24

#	Article	IF	Citations
73	Diode laser spectroscopy of overtone bands of acetylene. Applied Physics B: Lasers and Optics, 1996, 63, 277-282.	2.2	30
74	Temperature dependence of self-shift of ammonia transitions in the Î½2 band. Journal of Quantitative Spectroscopy and Radiative Transfer, 1996, 55, 745-753.	2.3	11
75	Measurement of atmospheric CO concentration with tunable diode lasers. Infrared Physics and Technology, 1996, 37, 1-5.	2.9	7
76	Propagation of electromagnetic waves in inhomogeneous plasmas. Journal of Plasma Physics, 1994, 52, 443-456.	2.1	6
77	Detection of mercury in air by time-resolved laser-induced breakdown spectroscopy technique. Laser and Particle Beams, 1994, 12, 525-530.	1.0	52
78	Derivation of the critical angle for Mach reflection for strong shock waves. Physical Review A, 1992, 45, 6130-6132.	2.5	18
79	Simulation and experimental studies on the evolution of a laser spark in air. Laser and Particle Beams, 1992, 10, 707-713.	1.0	3
80	On the process of Mach wave generation in air. Laser and Particle Beams, 1991, 9, 453-464.	1.0	2