Aleksandra Foltynowicz

List of Publications by Year
in descending order

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102	1,879	279701	254106
papers	citations	23	43
		h-index	g-index

102	102	102	1059
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mid-infrared Fourier transform spectroscopy with a broadband frequency comb. Optics Express, 2010, 18, 21861.	1.7	230
2	Quantum-Noise-Limited Optical Frequency Comb Spectroscopy. Physical Review Letters, 2011, 107, 233002.	2.9	145
3	Cavity-enhanced optical frequency comb spectroscopy in the mid-infrared application to trace detection of hydrogen peroxide. Applied Physics B: Lasers and Optics, 2013, 110, 163-175.	1.1	134
4	Surpassing the path-limited resolution of Fourier-transform spectrometry with frequency combs. Physical Review A, 2016, 93, .	1.0	129
5	Noise-immune cavity-enhanced optical heterodyne molecular spectroscopy: Current status and future potential. Applied Physics B: Lasers and Optics, 2008, 92, 313.	1.1	122
6	Optical frequency comb Fourier transform spectroscopy with sub-nominal resolution and precision beyond the Voigt profile. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 204, 63-73.	1.1	79
7	Fourier transform and Vernier spectroscopy using an optical frequency comb at 3â€“54â€‰â€‰Î¼m. Optics Letters, 2016, 41, 2541.	1.7	67
8	High-power frequency comb source tunable from 27 to 42â€‰â€‰Î¼m based on difference frequency generation pumped by an Yb-doped fiber laser. Optics Letters, 2017, 42, 1748.	1.7	61
9	Fiber-laser-based noise-immune cavity-enhanced optical heterodyne molecular spectrometry for Doppler-broadened detection of C_2H_2 in the parts per trillion range. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 1392.	0.9	55
10	Theoretical description of Doppler-broadened noise-immune cavity-enhanced optical heterodyne molecular spectroscopy under optically saturated conditions. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 1144.	0.9	48
11	Optical frequency comb photoacoustic spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 27849-27855.	1.3	48
12	Hydrogen-Peroxide-Enhanced Nonthermal Plasma Effluent for Biomedical Applications. IEEE Transactions on Plasma Science, 2012, 40, 1984-1991.	0.6	45
13	Sub-Doppler dispersion and noise-immune cavity-enhanced optical heterodyne molecular spectroscopy revised. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 1166.	0.9	42
14	Characterization of fiber-laser-based sub-Doppler NICE-OHMS for quantitative trace gas detection. Optics Express, 2008, 16, 14689.	1.7	42
15	Cavity-enhanced optical frequency comb spectroscopy of high-temperature H_2O in a flame. Optics Express, 2014, 22, 13889.	1.7	39
16	Sensitive and broadband measurement of dispersion in a cavity using a Fourier transform spectrometer with kHz resolution. Optics Express, 2017, 25, 21711.	1.7	39
17	Doppler-broadened fiber-laser-based NICE-OHMS â€“ Improved detectability. Optics Express, 2007, 15, 10822.	1.7	38
18	Broadband photoacoustic spectroscopy of CH₄14 with a high-power mid-infrared optical frequency comb. Optics Letters, 2019, 44, 1142.	1.7	35

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19	Doppler-broadened noise-immune cavity-enhanced optical heterodyne molecular spectrometry signals from optically saturated transitions under low pressure conditions. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 1156.	0.9	34
20	Reduction of background signals in fiber-based NICE-OHMS. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 2797.	0.9	32
21	Distributed-feedback-laser-based NICE-OHMSâ€ïn the pressure-broadened regime. Optics Express, 2010, 18, 18580.	1.7	26
22	Use of etalon-immune distances to reduce the influence of background signals in frequency-modulation spectroscopy and noise-immune cavity-enhanced optical heterodyne molecular spectroscopy. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 2938.	0.9	26
23	Optical frequency comb Fourier transform spectroscopy of 14N216O at 7.8 Âµm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 271, 107734.	1.1	25
24	Noise-immune cavity-enhanced optical frequency comb spectroscopy. Optics Letters, 2014, 39, 5034.	1.7	23
25	Stabilized all-fiber source for generation of tunable broadband fCEO-free mid-IR frequency comb in the 7 â€“ 9 Âµm range. Optics Express, 2019, 27, 37435.	1.7	22
26	Noise-immune cavity-enhanced optical frequency comb spectroscopy: a sensitive technique for high-resolution broadband molecular detection. Applied Physics B: Lasers and Optics, 2015, 119, 87-96.	1.1	20
27	Mid-infrared continuous-filtering Vernier spectroscopy using a doubly resonant optical parametric oscillator. Applied Physics B: Lasers and Optics, 2017, 123, 1.	1.1	20
28	Sub-Doppler Double-Resonance Spectroscopy of Methane Using a Frequency Comb Probe. Physical Review Letters, 2021, 126, 063001.	2.9	20
29	Wavelength-modulated noise-immune cavity-enhanced optical heterodyne molecular spectroscopy signal line shapes in the Doppler limit. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 1384.	0.9	16
30	Highly sensitive dispersion spectroscopy by probing the free spectral range of an optical cavity using dual-frequency modulation. Applied Physics B: Lasers and Optics, 2010, 101, 497-509.	1.1	16
31	Optical measurement of the gas number density in a Fabryâ€“Perot cavity. Measurement Science and Technology, 2013, 24, 105207.	1.4	16
32	Fiber-laser-based noise-immune cavity-enhanced optical heterodyne molecular spectrometry incorporating an optical circulator. Optics Letters, 2014, 39, 279.	1.7	16
33	Broadband calibration-free cavity-enhanced complex refractive index spectroscopy using a frequency comb. Optics Express, 2018, 26, 20633.	1.7	16
34	Measurement and assignment of double-resonance transitions to the 8900â€“9100- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi mathvariant="normal">cm</mml:mi><mml:mrow><mml:mo>â^’</mml:mo><mml:mn>1</mml:mn></mml:mrow></mml:msup></mml:m levels of methane. Physical Review A, 2021, 103.	1.0	16
35	An experimental water line list at 1950 K in the 6250–6670 cm<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow /><mml:mrow><mml:mo>â^’</mml:mo><mml:mn>1</mml:mn></mml:mrow></mml:msup></mml:math> region. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 205, 213-219.	1.1	14
36	Time-resolved continuous-filtering Vernier spectroscopy of H₂O and OH radical in a flame. Optics Express, 2019, 27, 29521.	1.7	12

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37	Detection of OH in an atmospheric flame at 1.5 um using optical frequency comb spectroscopy. Photonics Letters of Poland, 2016, 8, 110.	0.2	12
38	Optical frequency comb Faraday rotation spectroscopy. Applied Physics B: Lasers and Optics, 2018, 124, 1.	1.1	11
39	Line positions and intensities of the Î½4 band of methyl iodide using mid-infrared optical frequency comb Fourier transform spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 255, 107263.	1.1	11
40	Compact mode-locked Er-doped fiber laser for broadband cavity-enhanced spectroscopy. Applied Physics B: Lasers and Optics, 2020, 126, 1.	1.1	11
41	A methane line list with sub-MHz accuracy in the 1250 to 1380 cmâ^'1 range from optical frequency comb Fourier transform spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 288, 108252.	1.1	11
42	Absorption Spectrometry by Narrowband Light in Optically Saturated and Optically Pumped Collision and Doppler Broadened Gaseous Media under Arbitrary Optical Thickness Conditions. Applied Spectroscopy, 2006, 60, 1217-1240.	1.2	9
43	Dual-Wavelength Pumped Highly Birefringent Microstructured Silica Fiber for Widely Tunable Soliton Self-Frequency Shift. Journal of Lightwave Technology, 2021, 39, 3260-3268.	2.7	9
44	NICE-OHMSâ€"Frequency Modulation Cavity-Enhanced Spectroscopyâ€"Principles and Performance. Springer Series in Optical Sciences, 2014, , 211-251.	0.5	9
45	Fiber-based optical frequency comb at 3.3 Âµm for broadband spectroscopy of hydrocarbons [Invited]. Chinese Optics Letters, 2021, 19, 081406.	1.3	6
46	Wavelength modulation absorption spectrometry from optically saturated collision-broadened transitions. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 94, 225-254.	1.1	4
47	Signal line shapes of Fourier-transform cavity-enhanced frequency modulation spectroscopy with optical frequency combs. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 358.	0.9	3
48	Robust, fast and sensitive near-infrared continuous-filtering Vernier spectrometer. Optics Express, 2021, 29, 30155.	1.7	3
49	Cavity-Enhanced Frequency Comb Vernier Spectroscopy. Photonics, 2022, 9, 222.	0.9	3
50	Optical-Optical Double-Resonance Spectroscopy of Methane Using a Cavity-Enhanced Comb Probe. , 2021, , .		2
51	In situ determination of the penetration depth of mirrors in Fabry-Perot refractometers and its influence on assessment of refractivity and pressure. Optics Express, 2022, 30, 25891.	1.7	2
52	Wavelength modulation absorption spectrometry from optically pumped collision broadened atoms and molecules. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 108, 220-238.	1.1	1
53	Cavity-enhanced continuous-filtering vernier spectroscopy at 3.3 Î¼m using a femtosecond optical parametric oscillator. , 2017, , .		1
54	Optical Frequency Comb Spectroscopy at 3.3 and 5.2 Âµm by a Tm:fiber-Laser-Pumped Optical Parametric Oscillator. , 2016, , .		1

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55	Mechanical Fourier Transform Spectrometer with kHz Resolution. , 2017, , .		1
56	Sensitive and broadband measurement of dispersion in a cavity using a Fourier transform spectrometer with kHz resolution: erratum. Optics Express, 2020, 28, 13290.	1.7	1
57	Cavity-Enhanced Optical Frequency Comb Spectroscopy of High-Temperature Water in a Flame. , 2015, , .		0
58	Fourier-Transform-Based Noise-Immune Cavity-Enhanced Optical Frequency Comb Spectroscopy. , 2015, , .		0
59	High-power broadband source tunable from 2.8 to 4 Î¼m based on difference frequency generation. , 2017, , .		0
60	Detection of OH and H<inf>2</inf>O in an atmospheric flame by near-infrared optical frequency comb spectroscopy. , 2017, , .		0
61	Faraday rotation spectroscopy using an optical frequency comb. , 2017, , .		0
62	Broadband and high resolution direct measurement of cavity resonances. , 2017, , .		0
63	Call for papers for special issue of Journal of Molecular Spectroscopy focusing on â€œFrequency-comb spectroscopyâ€• Journal of Molecular Spectroscopy, 2018, 345, 71.	0.4	0
64	Broadband Complex Refractive Index Spectroscopy via Measurement of Cavity Modes. , 2018, , .		0
65	Call for papers for special issue of Journal of Molecular Spectroscopy focusing on â€œFrequency-comb spectroscopyâ€• Journal of Molecular Spectroscopy, 2018, 347, 63.	0.4	0
66	Optical Frequency Comb Photoacoustic Spectroscopy. , 2019, , .		0
67	Time-Resolved Continuous-Filtering Vernier Spectroscopy in a Flame. , 2019, , .		0
68	Photoacoustic Optical Frequency Comb Spectroscopy of Radioactive Methane in the Mid-Infrared Region. , 2019, , .		0
69	Precise Comb-Based Fourier Transform Spectroscopy for Line Parameter Retrieval. , 2019, , .		0
70	Precision Measurements of 14N 16O Using a Comb-Based Fourier Transform Spectrometer at 7.8 Âµm. , 2021, , .		0
71	High-Resolution Measurements of Halogenated Volatile Organic Compounds Using Frequency Comb Fourier Transform Spectroscopy. , 2021, , .		0
72	Double-Resonance Spectroscopy of Methane Using a Comb Probe. , 2021, , .		0

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73	Frequency Comb Fourier Transform Spectroscopy at 8 Âµm Using a Compact Difference Frequency Generation Source. , 2021, , .		0
74	Robust and High-Speed Cavity-Enhanced Vernier Spectrometer. , 2021, , .		0
75	Fiber-Laser-Based NICE-OHMS for Ultra-sensitive Trace Species Detection. , 2008, , .		0
76	Broadband Molecular Detection with Cavity-Enhanced Optical Frequency Comb Spectroscopy. , 2014, , .		0
77	OPTICAL FREQUENCY COMB FOURIER TRANSFORM SPECTROSCOPY WITH RESOLUTION EXCEEDING THE LIMIT SET BY THE OPTICAL PATH DIFFERENCE. , 2015, , .		0
78	NOISE-IMMUNE CAVITY-ENHANCED OPTICAL FREQUENCY COMB SPECTROSCOPY. , 2015, , .		0
79	Near-Infrared Fourier Transform Cavity-Enhanced Optical Frequency Comb Spectroscopy. , 2016, , .		0
80	Fourier-Transform-Based Noise-Immune Cavity-Enhanced Optical Frequency Comb Spectroscopy. , 2016, , .		0
81	Fourier Transform and Vernier Spectroscopy with a Mid-Infrared Optical Frequency Comb. , 2016, , .		0
82	Optical Frequency Comb Fourier Transform Spectroscopy with Resolution beyond the Path Difference Limit. , 2016, , .		0
83	Cavity-Enhanced Optical Frequency Combs Spectroscopy in the Near- and Mid-Infrared. , 2016, , .		0
84	Cavity-Enhanced Fourier Transform and Vernier Spectroscopy with Optical Frequency Combs. , 2016, , .		0
85	Measurement of H2O and OH in a Flame by Optical Frequency Comb Spectroscopy. , 2016, , .		0
86	Continuous-Filtering Vernier Spectroscopy at 3.3 Î¼m Using a Femtosecond Optical Parametric Oscillator. , 2017, , .		0
87	Cavity-Enhanced Complex Refractive Index Spectroscopy of Entire Molecular Bands Using a Frequency Comb. , 2018, , .		0
88	Precision beyond the Voigt profile using optical frequency comb Fourier transform spectroscopy. , 2018, , .		0
89	Optical Frequency Comb Faraday Rotation Spectroscopy. , 2018, , .		0
90	Experimental 1.5-1.6 Î¼m Water Line List at 1950 K. , 2018, , .		0

#	Article	IF	Citations
91	Optical Frequency Comb Faraday Rotation Spectroscopy. , 2018, , .		0
92	CO2 Line Parameter Retrieval Beyond the Voigt Profile Using Comb-Based Fourier Transform Spectroscopy. , 2018, , .		0
93	Near-Infrared Continuous-Filtering Vernier Spectroscopy in a Flame. , 2019, , .		0
94	Optical Frequency Comb Photoacoustic Spectroscopy. , 2019, , .		0
95	Mid-infrared frequency comb covering the 6.5 â€“ 9 Î¼m range with active output power stabilization. , 2020, , .		0
96	Sub-Doppler Optical-Optical Double-Resonance Spectroscopy of Methane Using a Frequency Comb Probe. , 2021, , .		0
97	Mid-Infrared Comb-Based Fourier Transform Spectroscopy of Halogenated Volatile Organic Compounds. , 2020, , .		0
98	Towards a Transferable Standard for Nitrous Oxide Isotopomer Ratio. , 2020, , .		0
99	Compact 6.5 - 9 pm Frequency Comb Source for Fourier Transform Spectroscopy. , 2020, , .		0
100	Robust, Fast and Sensitive Near-Infrared Continuous- Filtering Vernier Spectrometer. , 2020, , .		0
101	Sub-Doppler Double-Resonance Spectroscopy of Methane Using a Frequency Comb Probe. , 2020, , .		0
102	Compact fiber-based mid-infrared frequency comb sources. , 2022, , .		0