Peter Cermak

List of Publications by Year
in descending order

38 papers	589 citations	687363 13 h-index	642732 23 g-index
38 all docs	38 docs citations	38 times ranked	735 citing authors

#	Article	IF	Citations
1	A review of the development of portable laser induced breakdown spectroscopy and its applications. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 101, 269-287.	2.9	135
2	Cavity-enhanced absorption spectroscopy with a red LED source for NOx trace analysis. Applied Physics B: Lasers and Optics, 2008, 91, 195-201.	2.2	59
3	Continuous measurements of isotopic composition of water vapour on the East Antarctic Plateau. Atmospheric Chemistry and Physics, 2016, 16, 8521-8538.	4.9	47
4	The self- and foreign-absorption continua of water vapor by cavity ring-down spectroscopy near 2.35 Î¼m. Physical Chemistry Chemical Physics, 2015, 17, 17762-17770.	2.8	27
5	Spectroscopy of 14NH3 and 15NH3 in the 2.3Î¼m spectral range with a new VECSEL laser source. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 137, 13-22.	2.3	24
6	New progress in spectroscopy of ammonia in the infrared <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0018.gif" overflow="scroll"><mml:mn>1.5</mml:mn><mml:mspace width="0.25em" /><mml:mi mathvariant="normal">Î¼</mml:mi><mml:mi mathvariant="normal">m</mml:mi></mml:math> range using evolution of spectra from 300 K down to 122 K. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1084-1091.	2.3	22
7	Spectroscopy of ammonia in the range 6626â€“6805Âcm^{âˆ’1}: using temperature dependence towards a complete list of lower state energy transitions. Molecular Physics, 2014, 112, 2476-2485.	1.7	21
8	Cavity ring-down spectroscopy of singlet oxygen generated in microwave plasma. Chemical Physics Letters, 2009, 467, 233-236.	2.6	19
9	The HD spectrum near 2.3 Î¼m by CRDS-VECSEL: Electric quadrupole transition and collision-induced absorption. Journal of Molecular Spectroscopy, 2016, 326, 9-16.	1.2	19
10	CRDS with a VECSEL for broad-band high sensitivity spectroscopy in the 2.3 <i>Î¼</i>m window. Review of Scientific Instruments, 2016, 87, 083109.	1.3	17
11	High sensitivity CRDS of CO 2 in the 1.74â€¯Âµm transparency window. A validation test for the spectroscopic databases. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 207, 95-103.	2.3	17
12	Extended Continuous Tuning of a Single-Frequency Diode-Pumped Vertical-External-Cavity Surface-Emitting Laser at 2.3 mum. IEEE Photonics Technology Letters, 2008, 20, 1947-1949.	2.5	16
13	The CO2 absorption spectrum in the 2.3 Âµm transparency window by high sensitivity CRDS: (II) Self-absorption continuum. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 187, 38-43.	2.3	15
14	Optical-Feedback Cavity-Enhanced Absorption Spectroscopy Using a Short-Cavity Vertical-External-Cavity Surface-Emitting Laser. IEEE Photonics Technology Letters, 2010, 22, 1607-1609.	2.5	13
15	Analysis and theoretical modeling of the 18O enriched carbon dioxide spectrum by CRDS near 1.74â€¯Âµm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 217, 73-85.	2.3	12
16	The 13CO2 absorption spectrum by CRDS near 1.74â€¯Âµm. Journal of Molecular Spectroscopy, 2018, 354, 54-59.	1.2	11
17	The update of the line positions and intensities in the line list of carbon dioxide for the HITRAN2020 spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 276, 107896.	2.3	11
18	The CO2 absorption spectrum in the 2.3 Âµm transparency window by high sensitivity CRDS: (I) Rovibrational lines. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 184, 233-240.	2.3	10

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19	The CO2 absorption continuum by high pressure CRDS in the 1.74 Âµm window. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 530-537.	2.3	10
20	First laboratory detection of an absorption line of the first overtone electric quadrupolar band of N2 by CRDS near 2.2 Î¼m. Chemical Physics Letters, 2017, 668, 90-94.	2.6	10
21	The absorption spectrum of water vapor in the 2.2 Î¼m transparency window: High sensitivity measurements and spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 189, 407-416.	2.3	9
22	Nuclear Spin Conversion in CH₄: A Multichannel Relaxation Mechanism. Journal of Physical Chemistry A, 2016, 120, 173-182.	2.5	8
23	Design and properties of high-power highly coherent single-frequency VECSEL emitting in the near- to mid-IR for photonic applications. Proceedings of SPIE, 2011, , .	0.8	7
24	The absorption spectrum of ammonia between 5650 and 6350 cmâˆ'1. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 258, 107334.	2.3	6
25	Hydrogen emission from meteors and meteorites: mapping traces of H2O molecules and organic compounds in small Solar system bodies. Monthly Notices of the Royal Astronomical Society, 2022, 513, 3982-3992.	4.4	6
26	ICLAS-VeCSEL and FTS spectroscopies of C2H2 between 9000 and 9500cmâˆ'1. Chemical Physics Letters, 2005, 403, 287-292.	2.6	5
27	Observation of methane nuclear spin isomers in gas phase at low temperature. Journal of Molecular Spectroscopy, 2012, 279, 37-43.	1.2	5
28	Accurate <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si4.svg"><mml:msup><mml:mrow /><mml:mn>14</mml:mn></mml:msup></mml:math>NH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.svg"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math> line-list for the 2.3Â<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si59.svg"><mml:mrow><mml:mi>Î¼</mml:mi>	2.3	5
29	The ammonia absorption spectrum between 3900 and 4700 cmâˆ'1. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 277, 107961.	2.3	5
30	Untangling the Herman-infrared spectra of nitrogen atmospheric-pressure dielectric-barrier discharge. Plasma Sources Science and Technology, 2018, 27, 055009.	3.1	4
31	Vacuum breakdown in microgaps between stainless-steel electrodes powered by direct-current and pulsed electric field. Vacuum, 2021, 191, 110327.	3.5	4
32	A new list of line positions and strengths of 15NH3 in the range 6369â€"6578 cmâˆ'1 at room temperature. Journal of Molecular Spectroscopy, 2016, 326, 122-129.	1.2	3
33	Monitoring active species in an atmospheric pressure dielectricâ€barrier discharge: Observation of the Hermanâ€infrared system. Contributions To Plasma Physics, 2017, 57, 67-75.	1.1	3
34	Electronic DFB laser switching for continuous wave cavity ring-down spectroscopy. Electronics Letters, 2010, 46, 523.	1.0	2
35	Optimization of data retrieval process for spectroscopic CO₂ isotopologue ratio measurements. Laser Physics, 2017, 27, 055701.	1.2	1
36	Spectroscopic Measurements of Methane Solidâ€"Gas Equilibrium Clapeyron Curve between 40 and 77 K. Journal of Physical Chemistry A, 2019, 123, 3518-3534.	2.5	1

#	Article	IF	Citations
37	Cavity ring-down spectroscopy using telecom diode lasers. Proceedings of SPIE, 2008, , .	0.8	0
38	Design and properties of high-power highly-coherent single-frequency VECSEL emitting in the near- to mid-IR for photonic applications. , 2017, , .		0