Roland TÃ³biÃ¡s

List of Publications by Year
in descending order

17	292	933447	888059
papers	citations	10	17
		h-index	g-index

17	17	17	178
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Accurate empirical rovibrational energies and transitions of H₂¹⁶O. Physical Chemistry Chemical Physics, 2019, 21, 3473-3495.	2.8	54
2	Spectroscopic-network-assisted precision spectroscopy and its application to water. Nature Communications, 2020, 11, 1708.	12.8	35
3	Critical evaluation of measured rotationalâ€“vibrational transitions of four sulphur isotopologues of S16O2. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 208, 152-163.	2.3	32
4	The W2020 Database of Validated Rovibrational Experimental Transitions and Empirical Energy Levels of Water Isotopologues. II. H217O and H218O with an Update to H216O. Journal of Physical and Chemical Reference Data, 2020, 49, .	4.2	28
5	W2020: A Database of Validated Rovibrational Experimental Transitions and Empirical Energy Levels of H216O. Journal of Physical and Chemical Reference Data, 2020, 49, .	4.2	23
6	An improved rovibrational linelist of formaldehyde, H<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"><mml:msubsup><mml:mrow /><mml:mn>2</mml:mn><mml:mrow><mml:mspace width="0.33em" /><mml:mn>12</mml:mn></mml:mrow></mml:msubsup></mml:math>C<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.svg"><mml:msup><mml:mrow /><mml:mn>16</mml:mn></mml:msup></mml:math>O from the measured high-resolution spectra. Journal of Quantitative Spectroscopy and Radiative	2.3	21
7	MARVEL analysis of the measured high-resolution spectra of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si105.svg"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>14</mml:mn></mml:mrow></mml:msup></mml:mrow></mml:math>NH. Journal of Molecular Spectroscopy, 2018, 352, 60-76.	1.2	20
8	Empirical rovibrational energy levels of ammonia up to 7500â€¯cm<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"><mml:msup><mml:mrow /><mml:mrow><mml:mo>â^’</mml:mo><mml:mn>1</mml:mn></mml:mrow></mml:msup></mml:math>. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 251, 107027.	2.3	20
9	Cycle bases to the rescue. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 557-564.	2.3	17
10	Network-Based Design of Near-Infrared Lamb-Dip Experiments and the Determination of Pure Rotational Energies of H218O at kHz Accuracy. Journal of Physical and Chemical Reference Data, 2021, 50, .	4.2	10
11	Simple algebraic solutions to the kinetic problems of triangle, quadrangle and pentangle reactions. Journal of Mathematical Chemistry, 2016, 54, 85-99.	1.5	9
12	Ultraprecise relative energies in the (2 0 0) vibrational band of H₂¹⁶O. Molecular Physics, 2022, 120, .	1.7	8
13	First-order chemical reaction networks I: theoretical considerations. Journal of Mathematical Chemistry, 2016, 54, 1863-1878.	1.5	5
14	autoECART: Automatic energy conservation analysis of rovibronic transitions. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 272, 107756.	2.3	5
15	Vector algebra and molecular symmetry: a tribute to Professor Josiah Willard Gibbs. Journal of Mathematical Chemistry, 2013, 51, 2187-2195.	1.5	2
16	Definitive thermochemistry and kinetics of the interconversions among conformers of nâ€butane and nâ€pentane. Journal of Computational Chemistry, 2018, 39, 424-437.	3.3	2
17	Normal-Mode Vibrational Analysis of Weakly Bound Oligomers at Constrained Stationary Points of Arbitrary Order. Journal of Chemical Theory and Computation, 2022, 18, 1788-1798.	5.3	1