

# Kirill Prozument

## List of Publications by Year in descending order

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27  
papers

853  
citations

430874

18  
h-index

526287

27  
g-index

27  
all docs

27  
docs citations

27  
times ranked

769  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spectrum and infrared intensities of OH-stretching bands of water dimers. Journal of Chemical Physics, 2010, 132, 014304.	3.0	110
2	Infrared intensity in small ammonia and water clusters. Journal of Chemical Physics, 2006, 124, 241101.	3.0	87
3	Design and evaluation of a pulsed-jet chirped-pulse millimeter-wave spectrometer for the 70–102 GHz region. Journal of Chemical Physics, 2011, 135, 024202.	3.0	70
4	Chirped-pulse millimeter-wave spectroscopy for dynamics and kinetics studies of pyrolysis reactions. Physical Chemistry Chemical Physics, 2014, 16, 15739-15751.	2.8	54
5	A chirped-pulse Fourier-transform microwave/pulsed uniform flow spectrometer. II. Performance and applications for reaction dynamics. Journal of Chemical Physics, 2014, 141, 214203.	3.0	54
6	A chirped-pulse Fourier-transform microwave/pulsed uniform flow spectrometer. I. The low-temperature flow system. Journal of Chemical Physics, 2014, 141, 154202.	3.0	46
7	Spectra of the $\hat{1}\frac{1}{2}1$ and $\hat{1}\frac{1}{2}3$ bands of water molecules in helium droplets. Chemical Physics Letters, 2006, 427, 5-9.	2.6	42
8	Hydrogen Clusters that Remain Fluid at Low Temperature. Physical Review Letters, 2008, 101, 205301.	7.8	40
9	A new approach toward transition state spectroscopy. Faraday Discussions, 2013, 163, 33.	3.2	39
10	Infrared Spectra and Intensities of the H <sub>2</sub> O and N <sub>2</sub> Complexes in the Range of the $\hat{1}\frac{1}{2}1$ - and $\hat{1}\frac{1}{2}3$ -Bands of Water. Journal of Physical Chemistry A, 2006, 110, 10046-10052.	2.5	32
11	Automated assignment of rotational spectra using artificial neural networks. Journal of Chemical Physics, 2018, 149, 104106.	3.0	29
12	A Signature of Roaming Dynamics in the Thermal Decomposition of Ethyl Nitrite: Chirped-Pulse Rotational Spectroscopy and Kinetic Modeling. Journal of Physical Chemistry Letters, 2014, 5, 3641-3648.	4.6	28
13	Substitution Reactions in the Pyrolysis of Acetone Revealed through a Modeling, Experiment, Theory Paradigm. Journal of the American Chemical Society, 2021, 143, 3124-3142.	13.7	28
14	Satellite Band in the Rovibrational Spectrum of CO <sub>2</sub> in Helium Droplets. Physical Review Letters, 2005, 94, 195301.	7.8	23
15	Chirped-Pulse Millimeter-Wave Spectroscopy of Rydberg-Rydberg Transitions. Physical Review Letters, 2011, 107, 143001.	7.8	22
16	Chirped-pulse millimeter-wave spectroscopy: Spectrum, dynamics, and manipulation of Rydberg–Rydberg transitions. Journal of Chemical Physics, 2013, 138, 014301.	3.0	20
17	Investigations of the interference of surface plasmons on rough silver surface by scanning plasmon near-field microscope. Ultramicroscopy, 2001, 88, 127-138.	1.9	19
18	Time-Resolved Kinetic Chirped-Pulse Rotational Spectroscopy in a Room-Temperature Flow Reactor. Journal of Physical Chemistry Letters, 2017, 8, 6180-6188.	4.6	18

#	ARTICLE	IF	CITATIONS
19	Infrared Spectroscopy and Structure of (NO) <sub>n</sub> Clusters. Journal of Physical Chemistry A, 2016, 120, 527-534.	2.5	16
20	Solid hydrogen Raman shifter for the mid-infrared range (44–8 1/4 μm). Applied Optics, 2004, 43, 6023.	2.1	14
21	The broadband rotational spectrum of fully deuterated acetaldehyde (CD <sub>3</sub> CDO) in a CW supersonic expansion. Journal of Molecular Spectroscopy, 2017, 342, 17-24.	1.2	12
22	Boundary-Layer Model to Predict Chemically Reacting Flow within Heated, High-Speed, Microtubular Reactors. International Journal of Chemical Kinetics, 2018, 50, 473-480.	1.6	12
23	Pseudo-equilibrium geometry of HNO determined by an E-Band CP-FTmmW spectrometer. Chemical Physics Letters, 2017, 680, 101-108.	2.6	11
24	Photodissociation transition states characterized by chirped pulse millimeter wave spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 146-151.	7.1	11
25	Computational optimal transport for molecular spectra: The fully discrete case. Journal of Chemical Physics, 2021, 155, 184101.	3.0	8
26	Computational optimal transport for molecular spectra: The semi-discrete case. Journal of Chemical Physics, 2022, 156, 134117.	3.0	5
27	Mixed ortho- H <sub>2</sub> and para- H <sub>2</sub> clusters studied by vibrational coherent anti-Stokes Raman spectroscopy. Physical Review B, 2020, 101, .	3.2	3