Susanna L Widicus Weaver

List of Publications by Year
in descending order

42 papers	1,792 citations	430874 18 h-index	276875 41 g-index
44 all docs	44 docs citations	44 times ranked	1560 citing authors

#	Article	IF	Citations
1	Complex Chemistry in Starâ€forming Regions: An Expanded Gasâ€Grain Warmâ€up Chemical Model. Astrophysical Journal, 2008, 682, 283-302.	4.5	721
2	Complex organic molecules in protoplanetary disks. Astronomy and Astrophysics, 2014, 563, A33.	5.1	169
3	FIRST DETECTION OF GAS-PHASE METHANOL IN A PROTOPLANETARY DISK. Astrophysical Journal Letters, 2016, 823, L10.	8.3	166
4	CONTRIBUTIONS FROM GRAIN SURFACE AND GAS PHASE CHEMISTRY TO THE FORMATION OF METHYL FORMATE AND ITS STRUCTURAL ISOMERS. Astrophysical Journal, 2011, 728, 71.	4.5	102
5	Simulations of Hot-Core Chemistry. Chemical Reviews, 2013, 113, 8939-8960.	47.7	56
6	A Ka-band chirped-pulse Fourier transform microwave spectrometer. Journal of Molecular Spectroscopy, 2012, 280, 68-76.	1.2	42
7	THE SUBMILLIMETER SPECTRUM OF GLYCOLALDEHYDE. Astrophysical Journal, 2010, 723, 845-849.	4.5	40
8	Spatial Distributions and Interstellar Reaction Processes. Journal of Physical Chemistry A, 2011, 115, 6472-6480.	2.5	39
9	Millimeterâ€Wave and Vibrational State Assignments for the Rotational Spectrum of Glycolaldehyde. Astrophysical Journal, Supplement Series, 2005, 158, 188-192.	7.7	36
10	IS HO⁺₂A DETECTABLE INTERSTELLAR MOLECULE?. Astrophysical Journal, 2009, 697, 601-609.	4.5	35
11	1,3-Dihydroxyacetone in Sagittarius B2(N-LMH): The First Interstellar Ketose. Astrophysical Journal, 2005, 624, L33-L36.	4.5	32
12	Theoretical Examination of O(¹D) Insertion Reactions to Form Methanediol, Methoxymethanol, and Aminomethanol. Journal of Physical Chemistry A, 2013, 117, 7142-7148.	2.5	32
13	A quantum cascade laser cw cavity ringdown spectrometer coupled to a supersonic expansion source. Review of Scientific Instruments, 2010, 81, 063102.	1.3	30
14	COMPLEX ORGANIC MOLECULES AT HIGH SPATIAL RESOLUTION TOWARD ORION-KL. I. SPATIAL SCALES. Astrophysical Journal, Supplement Series, 2012, 201, 16.	7.7	26
15	Complex organic molecules along the accretion flow in isolated and externally irradiated protoplanetary disks. Faraday Discussions, 2014, 168, 389-421.	3.2	23
16	Rotational spectroscopy of 2-methylfuran from 8.7 to 960GHz. Journal of Molecular Spectroscopy, 2012, 280, 27-33.	1.2	22
17	Millimeter/Submillimeter Spectroscopic Detection of Desorbed Ices: A New Technique in Laboratory Astrochemistry. Journal of Physical Chemistry A, 2019, 123, 8702-8708.	2.5	22
18	The pure rotational spectrum of glycolaldehyde isotopologues observed in natural abundance. Journal of Molecular Spectroscopy, 2013, 284-285, 21-28.	1.2	20

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19	Millimeterwave and Submillimeterwave Laboratory Spectroscopy in Support of Observational Astronomy. Annual Review of Astronomy and Astrophysics, 2019, 57, 79-112.	24.3	18
20	Weakly Bound Clusters in Astrochemistry? Millimeter and Submillimeter Spectroscopy of trans-HO₃ and Comparison to Astronomical Observations. Journal of Physical Chemistry A, 2016, 120, 657-667.	2.5	17
21	A Search for ortho -benzyne (o -C ₆ H ₄) in CRL 618. Astrophysical Journal, 2007, 671, L153-L156.	4.5	16
22	Do H₅⁺ and Its Isotopologues Have Rotational Spectra?. Journal of Physical Chemistry Letters, 2011, 2, 1405-1407.	4.6	14
23	Rotational spectral studies of O(1D) insertion reactions with methane and ethylene: Methanol and vinyl alcohol in a supersonic expansion. Chemical Physics Letters, 2015, 630, 18-26.	2.6	13
24	Multipass Millimeter/Submillimeter Spectrometer to Probe Dissociative Reaction Dynamics. Journal of Physical Chemistry A, 2013, 117, 9548-9554.	2.5	12
25	A CSO search for l-C3H+: detection in the Orion Bar PDR. Monthly Notices of the Royal Astronomical Society, 2014, 442, 2901-2908.	4.4	12
26	The rotational spectrum of methyl ethyl ketone in its ground vibrational state. Journal of Molecular Spectroscopy, 2014, 295, 52-57.	1.2	12
27	Extending high-finesse cavity techniques to the far-infrared. Review of Scientific Instruments, 2013, 84, 075107.	1.3	11
28	Millimeter and submillimeter spectrum of propylene oxide. Journal of Molecular Spectroscopy, 2017, 335, 49-53.	1.2	8
29	Extended analysis of hydroxyacetone in the torsional ground state. Journal of Molecular Spectroscopy, 2010, 264, 43-49.	1.2	7
30	A hollow-cathode THz spectrometer for the study of astrophysical ions and radicals: Benchmarking with N2H+ and extended measurements for N2D+. Journal of Molecular Spectroscopy, 2014, 306, 1-5.	1.2	7
31	Direct measurement of additional Arâ€“H2O vibrationâ€“rotation-tunneling bands in the millimeterâ€“submillimeter range. Journal of Molecular Spectroscopy, 2016, 324, 12-19.	1.2	7
32	Fast sweep direct absorption (sub)millimeter-wave spectroscopy. Review of Scientific Instruments, 2016, 87, 113109.	1.3	6
33	Continuous-wave cavity ringdown spectroscopy of the Meinel system (2,1) band. Journal of Molecular Spectroscopy, 2008, 249, 14-22.	1.2	3
34	THE MILLIMETER/SUBMILLIMETER SPECTRUM OF THE METHOXY RADICAL AT LOW TEMPERATURES. Astrophysical Journal, 2017, 835, 46.	4.5	3
35	AC Stark Effect Observed in a Microwaveâ€“Millimeter/Submillimeter Wave Double-Resonance Experiment. Journal of Physical Chemistry A, 2018, 122, 6321-6327.	2.5	3
36	Laser-Induced Chemistry Observed during 248 nm Vacuum Ultraviolet Photolysis of an O₃ and CH₃NH₂ Mixture. Journal of Physical Chemistry A, 2020, 124, 10838-10848.	2.5	3

#	Article	IF	Citations
37	Extending the Millimeter/Submillimeter Wave Spectrum of Ground State Pyruvic Acid for Comparison to Astronomical Data. ACS Earth and Space Chemistry, 2022, 6, 482-495.	2.7	3
38	Laboratory measurements of methanol photolysis branching ratios to guide astrochemical models. Proceedings of the International Astronomical Union, 2017, 13, 305-311.	0.0	1
39	Virtual Issue on Astrochemistry: From the Chemical Laboratory to the Stars. Journal of Physical Chemistry A, 2019, 123, 9881-9882.	2.5	1
40	Virtual Issue on Astrochemistry: From the Chemical Laboratory to the Stars. ACS Earth and Space Chemistry, 2019, 3, 2372-2373.	2.7	1
41	Models of Hot Cores with Complex Molecules. Proceedings of the International Astronomical Union, 2011, 7, 79-87.	0.0	0
42	The 75th International Symposium on Molecular Spectroscopy. Journal of Physical Chemistry A, 2020, 124, 4873-4874.	2.5	0