

Chris J Bennett

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4397884/publications.pdf>

Version: 2024-02-01

42
papers

2,059
citations

304743

22
h-index

265206

42
g-index

42
all docs

42
docs citations

42
times ranked

1696
citing authors

#	ARTICLE	IF	CITATIONS
1	A Geoscientific Review on CO and CO ₂ Ices in the Outer Solar System. <i>Geosciences (Switzerland)</i> , 2022, 12, 51.	2.2	7
2	Link between Polycyclic Aromatic Hydrocarbon Size and Aqueous Alteration in Carbonaceous Chondrites Revealed by Laser Mass Spectrometry. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 1413-1428.	2.7	7
3	A computational investigation of the equilibrium geometries, energetics, vibrational frequencies, infrared intensities and Raman activities of C ₂ O _{<i>i</i>} (<i>i</i> = 3, 4) species. <i>Molecular Physics</i> , 2021, 119, e1837404.	1.7	1
4	Role of Suprathermal Chemistry on the Evolution of Carbon Oxides and Organics within Interstellar and Cometary Ices. <i>Accounts of Chemical Research</i> , 2021, 54, 1067-1079.	15.6	4
5	SQUARREL: Scattering Quotient Analysis to Retrieve the Ratio of Elements in X-ray Ptychography. <i>Microscopy and Microanalysis</i> , 2019, 25, 112-113.	0.4	2
6	Multimodal x-ray and electron microscopy of the Allende meteorite. <i>Science Advances</i> , 2019, 5, eaax3009.	10.3	17
7	A Comparison of Medium-Sized Basis Sets for the Prediction of Geometries, Vibrational Frequencies, Infrared Intensities and Raman Activities for Water. <i>Journal of Physics: Conference Series</i> , 2019, 1290, 012013.	0.4	15
8	Rovibrational Spectral Analysis of CO ₃ and C ₂ O ₃ : Potential Sources for O ₂ Observed in Comet 67P/Churyumovâ€™Gerasimenko. <i>Astrophysical Journal Letters</i> , 2019, 886, L10.	8.3	10
9	A Possible Path to Prebiotic Peptides Involving Silica and Hydroxy Acidâ€™Mediated Amide Bond Formation. <i>ChemBioChem</i> , 2018, 19, 1913-1917.	2.6	14
10	Investigating potential sources of Mercury's exospheric Calcium: Photon-stimulated desorption of Calcium Sulfide. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 137-146.	3.6	16
11	IMPLANTATION OF ENERGETIC D ⁺ IONS INTO CARBON DIOXIDE ICES AND IMPLICATIONS FOR OUR SOLAR SYSTEM: FORMATION OF D ₂ O AND D ₂ CO ₃ . <i>Astrophysical Journal</i> , 2014, 794, 57.	4.5	13
12	EXPERIMENTAL STUDIES ON THE FORMATION OF D ₂ O AND D ₂ O ₂ BY IMPLANTATION OF ENERGETIC D ⁺ IONS INTO OXYGEN ICES. <i>Astrophysical Journal</i> , 2014, 782, 63.	4.5	16
13	Space-Weathering of Solar System Bodies: A Laboratory Perspective. <i>Chemical Reviews</i> , 2013, 113, 9086-9150.	47.7	130
14	High-Sensitivity Raman Spectrometer To Study Pristine and Irradiated Interstellar Ice Analogs. <i>Analytical Chemistry</i> , 2013, 85, 5659-5665.	6.5	41
15	On the formation of ozone in oxygen-rich solar system ices via ionizing radiation. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 9469.	2.8	22
16	On the Interaction of Methyl Azide (CH ₃ N ₃) Ices with Ionizing Radiation: Formation of Methanimine (CH ₂ NH), Hydrogen Cyanide (HCN), and Hydrogen Isocyanide (HNC). <i>Journal of Physical Chemistry A</i> , 2011, 115, 250-264.	2.5	26
17	LABORATORY STUDIES ON THE FORMATION OF FORMIC ACID (HCOOH) IN INTERSTELLAR AND COMETARY ICES. <i>Astrophysical Journal</i> , 2011, 727, 27.	4.5	84
18	ON THE INTERACTION OF ADENINE WITH IONIZING RADIATION: MECHANISTICAL STUDIES AND ASTROBIOLOGICAL IMPLICATIONS. <i>Astrophysical Journal</i> , 2011, 730, 69.	4.5	19

#	ARTICLE	IF	CITATIONS
19	A CROSSED MOLECULAR BEAM, LOW-TEMPERATURE KINETICS, AND THEORETICAL INVESTIGATION OF THE REACTION OF THE CYANO RADICAL (CN) WITH 1,3-BUTADIENE (C ₄ H ₆). A ROUTE TO COMPLEX NITROGEN-BEARING MOLECULES IN LOW-TEMPERATURE EXTRATERRESTRIAL ENVIRONMENTS. <i>Astrophysical Journal</i> , 2011, 742, 26.	4.5	45
20	MECHANISTICAL STUDIES ON THE PRODUCTION OF FORMAMIDE (H ₂ NCHO) WITHIN INTERSTELLAR ICE ANALOGS. <i>Astrophysical Journal</i> , 2011, 734, 78.	4.5	104
21	FORMATION OF D ₂ -WATER AND D ₂ -CARBONIC ACID IN OXYGEN-RICH SOLAR SYSTEM ICES VIA D ⁺ IRRADIATION. <i>Astrophysical Journal</i> , 2011, 733, 79.	4.5	10
22	FORMATION OF MOLECULAR HYDROGEN FROM METHANE ICE. <i>Astrophysical Journal</i> , 2010, 721, 1656-1662.	4.5	21
23	LABORATORY STUDIES ON THE IRRADIATION OF SOLID ETHANE ANALOG ICES AND IMPLICATIONS TO TITAN'S CHEMISTRY. <i>Astrophysical Journal</i> , 2010, 711, 744-756.	4.5	40
24	Mechanistical studies on the formation and destruction of carbon monoxide (CO), carbon dioxide (CO ₂), and carbon trioxide (CO ₃) in interstellar ice analog samples. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 4032.	2.8	55
25	A chemical dynamics, kinetics, and theoretical study on the reaction of the cyano radical (CN; X ²⁺) with phenylacetylene (C ₆ H ₅ CCH; X _{1A1}). <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 8737.	2.8	29
26	AN EXPERIMENTAL INVESTIGATION OF THE DECOMPOSITION OF CARBON MONOXIDE AND FORMATION ROUTES TO CARBON DIOXIDE IN INTERSTELLAR ICES. <i>Astrophysical Journal, Supplement Series</i> , 2009, 182, 1-11.	7.7	28
27	Mechanistical studies on the formation of carbon dioxide in extraterrestrial carbon monoxide ice analog samples. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 4210.	2.8	36
28	Mechanistic studies on the decomposition of carbon suboxide in a cometary ice analog. <i>Planetary and Space Science</i> , 2008, 56, 1181-1189.	1.7	13
29	On the Formation of Glycolaldehyde (HCOCH ₂ OH) and Methyl Formate (HCOOCH ₃) in Interstellar Ice Analogs. <i>Astrophysical Journal</i> , 2007, 661, 899-909.	4.5	147
30	The Formation of Acetic Acid (CH ₃ COOH) in Interstellar Ice Analogs. <i>Astrophysical Journal</i> , 2007, 660, 1289-1295.	4.5	75
31	Mechanistical Studies on the Irradiation of Methanol in Extraterrestrial Ices. <i>Astrophysical Journal</i> , 2007, 660, 1588-1608.	4.5	141
32	Laboratory Studies on the Irradiation of Methane in Interstellar, Cometary, and Solar System Ices. <i>Astrophysical Journal</i> , 2006, 653, 792-811.	4.5	146
33	Laboratory Studies on the Formation of Three C ₂ H ₄ O Isomers—Acetaldehyde (CH ₃ CHO), Ethylene Oxide (C ₂ H ₄ O), and Vinyl Alcohol (CH ₂ CHOH)—in Interstellar and Cometary Ices. <i>Astrophysical Journal</i> , 2005, 634, 698-711.	4.5	86
34	A Combined Experimental and Computational Investigation on the Synthesis of Acetaldehyde [CH ₃ CHO(X ¹⁺)] in Interstellar Ices. <i>Astrophysical Journal</i> , 2005, 624, 1097-1115.	4.5	115
35	Laboratory Studies on the Formation of Ozone (O ₃) on Icy Satellites and on Interstellar and Cometary Ices. <i>Astrophysical Journal</i> , 2005, 635, 1362-1369.	4.5	74
36	Investigating the Mechanism for the Formation of Nitrous Oxide [N ₂ O(X ¹⁺)] in Extraterrestrial Ices. <i>Astrophysical Journal</i> , 2005, 624, 436-447.	4.5	49

#	ARTICLE	IF	CITATIONS
37	Infrared spectroscopic detection of the methylsilyl (CH_3SiH_2 , $X_2A\hat{a}^{\epsilon 2}$) and the silylmethyl (CH_2SiH_3 , $X_2A\hat{a}^{\epsilon 2}$) radicals and their partially deuterated counterparts in low temperature matrices. <i>Chemical Physics</i> , 2005, 315, 41-52.	1.9	5
38	Infrared spectroscopic identification of the methylsilylydyne (SiCH_3 , $X_2A\hat{a}^{\epsilon 3}$) and the silenyl (H_2CSiH , $X_2A\hat{a}^{\epsilon 2}$) radicals in methane-silane matrices. <i>Chemical Physics Letters</i> , 2005, 404, 327-335.	2.6	11
39	A Combined Experimental and Theoretical Study on the Formation of the Amino Acid Glycine ($\text{NH}_2\text{CH}_2\text{COOH}$) and Its Isomer (CH_3NHCOOH) in Extraterrestrial Ices. <i>Astrophysical Journal</i> , 2005, 626, 940-952.	4.5	206
40	First infrared spectroscopic characterization of the disilyl (Si_2H_5) and d5-disilyl (Si_2D_5) radicals in low temperature silane matrices. <i>Chemical Physics</i> , 2004, 305, 141-153.	1.9	9
41	Infrared spectroscopic detection of the disilenyl (Si_2H_3) and d3-disilenyl (Si_2D_3) radicals in silane and d4-silane matrices. <i>Chemical Physics Letters</i> , 2004, 392, 541-548.	2.6	14
42	Untangling the formation of the cyclic carbon trioxide isomer in low temperature carbon dioxide ices. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 735.	2.8	156