

Eric Herbst

List of Publications by Year in descending order

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144
papers

13,370
citations

28736

57
h-index

24511

114
g-index

148
all docs

148
docs citations

148
times ranked

4790
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthetic Approaches to Complex Organic Molecules in the Cold Interstellar Medium. <i>Frontiers in Astronomy and Space Sciences</i> , 2022, 8, .	1.1	11
2	Formation of Complex Organic Molecules in Hot Molecular Cores through Nondiffusive Grain-surface and Ice-mantle Chemistry. <i>Astrophysical Journal, Supplement Series</i> , 2022, 259, 1.	3.0	50
3	The Kiloparsec-scale Neutral Atomic Carbon Outflow in the Nearby Type 2 Seyfert Galaxy NGC 1068: Evidence for Negative AGN Feedback. <i>Astrophysical Journal Letters</i> , 2022, 927, L32.	3.0	12
4	Misaligned Rotations of the Envelope, Outflow, and Disks in the Multiple Protostellar System of VLA 1623+2417: FAUST. III. <i>Astrophysical Journal</i> , 2022, 927, 54.	1.6	7
5	PDRs4All: A JWST Early Release Science Program on Radiative Feedback from Massive Stars. <i>Publications of the Astronomical Society of the Pacific</i> , 2022, 134, 054301.	1.0	26
6	Vibrationally Excited Lines of HC ₃ N Associated with the Molecular Disk around the G24.78+0.08 A1 Hypercompact H II Region. <i>Astrophysical Journal</i> , 2022, 931, 99.	1.6	3
7	Cold Chemistry and Beyond: The Astrochemical Context. , 2022, , 539-581.		1
8	Interstellar detection of the highly polar five-membered ring cyanocyclopentadiene. <i>Nature Astronomy</i> , 2021, 5, 176-180.	4.2	96
9	The First Mid-infrared Detection of HNC in the Interstellar Medium: Probing the Extreme Environment toward the Orion Hot Core. <i>Astrophysical Journal</i> , 2021, 907, 51.	1.6	9
10	An investigation of spectral line stacking techniques and application to the detection of HC ₁₁ N. <i>Nature Astronomy</i> , 2021, 5, 188-196.	4.2	49
11	Carbon Chain Chemistry in Hot-core Regions around Three Massive Young Stellar Objects Associated with 6.7 GHz Methanol Masers. <i>Astrophysical Journal</i> , 2021, 908, 100.	1.6	5
12	Detection of two interstellar polycyclic aromatic hydrocarbons via spectral matched filtering. <i>Science</i> , 2021, 371, 1265-1269.	6.0	236
13	FAUST. II. Discovery of a Secondary Outflow in IRAS 15398+3359: Variability in Outflow Direction during the Earliest Stage of Star Formation?. <i>Astrophysical Journal</i> , 2021, 910, 11.	1.6	19
14	Carbon-chain Chemistry versus Complex-organic-molecule Chemistry in Envelopes around Three Low-mass Young Stellar Objects in the Perseus Region. <i>Astrophysical Journal</i> , 2021, 910, 141.	1.6	6
15	Discovery of the Pure Polycyclic Aromatic Hydrocarbon Indene (c-C ₉ H ₈) with GOTHAM Observations of TMC-1. <i>Astrophysical Journal Letters</i> , 2021, 913, L18.	3.0	96
16	Modelling the insertion of O(1D) into methane on the surface of interstellar ice mantles. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 508, 1526-1532.	1.6	7
17	Chemical Compositions in the Vicinity of Protostars in Ophiuchus. <i>Astrophysical Journal</i> , 2021, 922, 152.	1.6	4
18	Unusual Chemical Processes in Interstellar Chemistry: Past and Present. <i>Frontiers in Astronomy and Space Sciences</i> , 2021, 8, .	1.1	24

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19	Investigation of chemical differentiation among the NGC 2264 cluster-forming clumps. Monthly Notices of the Royal Astronomical Society, 2020, 493, 2395-2409.	1.6	7
20	The Effect of Chemisorption on the Chemical Evolution of Star-forming Regions. Astrophysical Journal, Supplement Series, 2020, 247, 4.	3.0	1
21	Chemical models of interstellar cyanomethanimine isomers. Monthly Notices of the Royal Astronomical Society, 2020, 497, 609-625.	1.6	12
22	Efficient Production of S ₈ in Interstellar Ices: The Effects of Cosmic-Ray-driven Radiation Chemistry and Nondiffusive Bulk Reactions. Astrophysical Journal, 2020, 888, 52.	1.6	45
23	Complex Organic Molecules (COMs) in Star-Forming Regions: A Virtual Special Issue. ACS Earth and Space Chemistry, 2020, 4, 488-490.	1.2	5
24	The role of radiolysis in the modelling of C ₂ H ₄ O ₂ isomers and dimethyl ether in cold dark clouds. Monthly Notices of the Royal Astronomical Society, 2020, 500, 3414-3424.	1.6	17
25	Detection of Interstellar HC ₄ NC and an Investigation of Isocyanopolyne Chemistry under TMC-1 Conditions. Astrophysical Journal Letters, 2020, 900, L9.	3.0	32
26	Early Science from GOTHAM: Project Overview, Methods, and the Detection of Interstellar Propargyl Cyanide (HCCCH ₂ CN) in TMC-1. Astrophysical Journal Letters, 2020, 900, L10.	3.0	60
27	Cyanopolyne Chemistry around Massive Young Stellar Objects. Astrophysical Journal, 2019, 881, 57.	1.6	21
28	Investigation of ¹³ C Isotopic Fractionation of CCH in Two Starless Cores: L1521B and L134N. Astrophysical Journal, 2019, 884, 167.	1.6	10
29	Modeling C-shock Chemistry in Isolated Molecular Outflows. Astrophysical Journal, 2019, 881, 32.	1.6	24
30	ALMA Detection of Vibrationally Excited ($v_{\text{t}} = 1, 2$) Acetic Acid toward NGC 6334I. Astrophysical Journal, 2019, 882, 118.	1.6	7
31	On Simulating the Proton-irradiation of O ₂ and H ₂ O Ices Using Astrochemical-type Models, with Implications for Bulk Reactivity. Astrophysical Journal, 2019, 876, 140.	1.6	30
32	ALMA Observations of the Spatial Distribution of Three C ₂ H ₄ O ₂ Isomers toward Sgr B2(N). Astrophysical Journal, 2019, 871, 112.	1.6	19
33	Radiation chemistry in astrochemical models: From the laboratory to the ISM. Proceedings of the International Astronomical Union, 2019, 15, 454-455.	0.0	0
34	Virtual Issue on Astrochemistry: From the Chemical Laboratory to the Stars. Journal of Physical Chemistry A, 2019, 123, 9881-9882.	1.1	1
35	Virtual Issue on Astrochemistry: From the Chemical Laboratory to the Stars. ACS Earth and Space Chemistry, 2019, 3, 2372-2373.	1.2	1
36	Detection of the aromatic molecule benzonitrile (<i>c</i> -C ₆ H ₅ CN) in the interstellar medium. Science, 2018, 359, 202-205.	6.0	370

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37	High Spectral Resolution SOFIA/EXES Observations of C ₂ H ₂ toward Orion IRC2. <i>Astrophysical Journal</i> , 2018, 856, 9.	1.6	15
38	Multiple Paths of Deuterium Fractionation in Protoplanetary Disks. <i>Astrophysical Journal</i> , 2018, 855, 119.	1.6	27
39	A general method for the inclusion of radiation chemistry in astrochemical models. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 5359-5367.	1.3	51
40	Astrochemical Kinetic Grid Models of Groups of Observed Molecular Abundances: Taurus Molecular Cloud 1 (TMC-1). <i>Astrophysical Journal</i> , 2018, 868, 41.	1.6	12
41	A molecular line survey toward the nearby galaxies NGC 1068, NGC 253, and IC 342 at 3 mm with the Nobeyama 45 m radio telescope: Impact of an AGN on 1 kpc scale molecular abundances. <i>Publication of the Astronomical Society of Japan</i> , 2018, 70, .	1.0	17
42	Hot Cores in Magellanic Clouds. <i>Astrophysical Journal</i> , 2018, 859, 51.	1.6	12
43	On Cosmic-Ray-driven Grain Chemistry in Cold Core Models. <i>Astrophysical Journal</i> , 2018, 861, 20.	1.6	76
44	A Combined Experimental and Theoretical Study on the Formation of Interstellar Propylene Oxide (CH ₃ CH ₂ O) – A Chiral Molecule. <i>Astrophysical Journal</i> , 2018, 860, 108.	1.6	54
45	The Possibility of Forming Propargyl Alcohol in the Interstellar Medium. <i>Molecular Astrophysics</i> , 2017, 6, 36-46.	1.7	15
46	The synthesis of large interstellar molecules. <i>International Reviews in Physical Chemistry</i> , 2017, 36, 287-331.	0.9	78
47	A new model of the chemistry of ionizing radiation in solids: CIRIS. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 11043-11056.	1.3	26
48	Detection of Interstellar HC ₅ O in TMC-1 with the Green Bank Telescope. <i>Astrophysical Journal Letters</i> , 2017, 843, L28.	3.0	36
49	Gas-grain Fluorine and Chlorine Chemistry in the Interstellar Medium. <i>Astrophysical Journal</i> , 2017, 850, 105.	1.6	26
50	ALMA Detection of Interstellar Methoxymethanol (CH ₃ OCH ₂ OH). <i>Astrophysical Journal Letters</i> , 2017, 851, L46.	3.0	66
51	SIMULATIONS OF THE CHEMISTRY IN THE SMALL MAGELLANIC CLOUD. <i>Astrophysical Journal</i> , 2016, 822, 105.	1.6	11
52	A study of interstellar aldehydes and enols as tracers of a cosmic ray-driven nonequilibrium synthesis of complex organic molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 7727-7732.	3.3	99
53	CHEMICAL SIMULATIONS OF PREBIOTIC MOLECULES: INTERSTELLAR ETHANIMINE ISOMERS. <i>Astrophysical Journal</i> , 2016, 824, 129.	1.6	27
54	CSO AND CARMA OBSERVATIONS OF L1157. II. CHEMICAL COMPLEXITY IN THE SHOCKED OUTFLOW. <i>Astrophysical Journal</i> , 2016, 827, 21.	1.6	20

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55	ON THE INFERENCE OF THE COSMIC-RAY IONIZATION RATE $\hat{\eta}$ FROM THE HCO ⁺ -to-DCO ⁺ ABUNDANCE RATIO: THE EFFECT OF NUCLEAR SPIN. <i>Astrophysical Journal</i> , 2016, 830, 151.	1.6	15
56	UNIFIED MICROSCOPIC-MACROSCOPIC MONTE CARLO SIMULATIONS OF COMPLEX ORGANIC MOLECULE CHEMISTRY IN COLD CORES. <i>Astrophysical Journal</i> , 2016, 819, 145.	1.6	34
57	FIRST DETECTION OF GAS-PHASE METHANOL IN A PROTOPLANETARY DISK. <i>Astrophysical Journal Letters</i> , 2016, 823, L10.	3.0	166
58	Interstellar processes: Ortho/para conversion, radiative association, and dissociative recombination. <i>EPJ Web of Conferences</i> , 2015, 84, 06002.	0.1	10
59	MOLECULAR DEVELOPMENT IN THE LARGE MAGELLANIC CLOUD. <i>Astrophysical Journal</i> , 2015, 812, 142.	1.6	28
60	HERSCHEL OBSERVATIONS OF INTERSTELLAR CHLORONIUM. II. DETECTIONS TOWARD G29.96-0.02, W49N, W51, AND W3(OH), AND DETERMINATIONS OF THE ORTHO-TO-PARA AND ³⁵ Cl/ ³⁷ Cl ISOTOPIC RATIOS. <i>Astrophysical Journal</i> , 2015, 807, 54.	1.6	20
61	Distributions of molecules in the circumnuclear disk and surrounding starburst ring in the Seyfert galaxy NGC 1068 observed with ALMA. <i>Publication of the Astronomical Society of Japan</i> , 2014, 66, .	1.0	43
62	H ₂ FORMATION IN DIFFUSE CLOUDS: A NEW KINETIC MONTE CARLO STUDY. <i>Astrophysical Journal</i> , 2014, 784, 139.	1.6	14
63	THE HNC/HCN RATIO IN STAR-FORMING REGIONS. <i>Astrophysical Journal</i> , 2014, 787, 74.	1.6	83
64	Three milieux for interstellar chemistry: gas, dust, and ice. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3344-3359.	1.3	69
65	Concluding remarks: astrochemistry of dust, ice and gas. <i>Faraday Discussions</i> , 2014, 168, 617-634.	1.6	4
66	INTERSTELLAR SIMULATIONS USING A UNIFIED MICROSCOPIC-MACROSCOPIC MONTE CARLO MODEL WITH A FULL GAS-GRAIN NETWORK INCLUDING BULK DIFFUSION IN ICE MANTLES. <i>Astrophysical Journal</i> , 2014, 787, 135.	1.6	47
67	Complex organic molecules in protoplanetary disks. <i>Astronomy and Astrophysics</i> , 2014, 563, A33.	2.1	169
68	Introduction: Astrochemistry. <i>Chemical Reviews</i> , 2013, 113, 8707-8709.	23.0	37
69	REACTIVE DESORPTION AND RADIATIVE ASSOCIATION AS POSSIBLE DRIVERS OF COMPLEX MOLECULE FORMATION IN THE COLD INTERSTELLAR MEDIUM. <i>Astrophysical Journal</i> , 2013, 769, 34.	1.6	220
70	Interstellar Water Chemistry: From Laboratory to Observations. <i>Chemical Reviews</i> , 2013, 113, 9043-9085.	23.0	278
71	A UNIFIED MONTE CARLO TREATMENT OF GAS-GRAIN CHEMISTRY FOR LARGE REACTION NETWORKS. II. A MULTIPHASE GAS-SURFACE-LAYERED BULK MODEL. <i>Astrophysical Journal</i> , 2013, 762, 86.	1.6	113
72	MODELING THE MOLECULAR COMPOSITION IN AN ACTIVE GALACTIC NUCLEUS DISK. <i>Astrophysical Journal</i> , 2013, 765, 108.	1.6	47

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73	Deep observations of O ₂ toward a low-mass protostar with <i>Herschel</i> -HIFI. <i>Astronomy and Astrophysics</i> , 2013, 558, A58.	2.1	57
74	A UNIFIED MICROSCOPIC-MACROSCOPIC MONTE CARLO SIMULATION OF GAS-GRAIN CHEMISTRY IN COLD DENSE INTERSTELLAR CLOUDS. <i>Astrophysical Journal</i> , 2012, 759, 147.	1.6	45
75	KINETIC MONTE CARLO STUDIES OF H ₂ FORMATION ON GRAIN SURFACES OVER A WIDE TEMPERATURE RANGE. <i>Astrophysical Journal</i> , 2012, 751, 58.	1.6	32
76	Models of Hot Cores with Complex Molecules. <i>Proceedings of the International Astronomical Union</i> , 2011, 7, 79-87.	0.0	0
77	THE EFFECTS OF GRAIN SIZE AND GRAIN GROWTH ON THE CHEMICAL EVOLUTION OF COLD DENSE CLOUDS. <i>Astrophysical Journal</i> , 2011, 732, 73.	1.6	39
78	CARBON-CHAIN SPECIES IN WARM-UP MODELS. <i>Astrophysical Journal</i> , 2011, 743, 182.	1.6	23
79	CONTRIBUTIONS FROM GRAIN SURFACE AND GAS PHASE CHEMISTRY TO THE FORMATION OF METHYL FORMATE AND ITS STRUCTURAL ISOMERS. <i>Astrophysical Journal</i> , 2011, 728, 71.	1.6	102
80	GAS-GRAIN MODELING OF ISOCYANIC ACID (HNCO), CYANIC ACID (HOCN), FULMINIC ACID (HCNO), AND ISOFULMINIC ACID (HONC) IN ASSORTED INTERSTELLAR ENVIRONMENTS. <i>Astrophysical Journal</i> , 2010, 725, 2101-2109.	1.6	71
81	A NEW NETWORK FOR HIGHER-TEMPERATURE GAS-PHASE CHEMISTRY. I. A PRELIMINARY STUDY OF ACCRETION DISKS IN ACTIVE GALACTIC NUCLEI. <i>Astrophysical Journal</i> , 2010, 721, 1570-1578.	1.6	149
82	Radiative association and the formation of interstellar propylene. <i>Molecular Physics</i> , 2010, 108, 2171-2177.	0.8	18
83	QUANTUM CHEMICAL PREDICTIONS OF THE PROPERTIES OF KNOWN AND POSTULATED NEUTRAL INTERSTELLAR MOLECULES. <i>Astrophysical Journal</i> , Supplement Series, 2009, 185, 273-288.	3.0	153
84	Complex Organic Interstellar Molecules. <i>Annual Review of Astronomy and Astrophysics</i> , 2009, 47, 427-480.	8.1	1,265
85	Chemistry in the ISM: the ALMA (r)evolution. <i>Astrophysics and Space Science</i> , 2008, 313, 129-134.	0.5	7
86	Complex chemistry in star-forming regions. <i>Proceedings of the International Astronomical Union</i> , 2008, 4, 123-124.	0.0	2
87	Polycyclic Aromatic Hydrocarbons in Dense Cloud Chemistry. <i>Astrophysical Journal</i> , 2008, 680, 371-383.	1.6	234
88	The Chemistry of Cold Interstellar Cloud Cores. , 2008, , 1-54.		37
89	Modeling Carbon Chain Anions in L1527. <i>Astrophysical Journal</i> , 2008, 685, 272-280.	1.6	69
90	Complex Chemistry in Star-forming Regions: An Expanded Gas-Grain Warm-up Chemical Model. <i>Astrophysical Journal</i> , 2008, 682, 283-302.	1.6	721

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91	Molecular Evolution and Star Formation: From Prestellar Cores to Protostellar Cores. <i>Astrophysical Journal</i> , 2008, 674, 984-996.	1.6	195
92	Modeling the Lukewarm Corino Phase: Is L1527 Unique?. <i>Astrophysical Journal</i> , 2008, 681, 1385-1395.	1.6	90
93	Simulation of the Formation and Morphology of Ice Mantles on Interstellar Grains. <i>Astrophysical Journal</i> , 2007, 668, 294-309.	1.6	224
94	Are gas-phase models of interstellar chemistry tenable? The case of methanol. <i>Faraday Discussions</i> , 2006, 133, 51.	1.6	138
95	The temperature-dependence of rapid low temperature reactions: experiment, understanding and prediction. <i>Faraday Discussions</i> , 2006, 133, 137.	1.6	95
96	Monte Carlo studies of surface chemistry and nonthermal desorption involving interstellar grains. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 12257-12262.	3.3	56
97	Monte Carlo simulations of H ₂ formation on grains of varying surface roughness. <i>Monthly Notices of the Royal Astronomical Society</i> , 2005, 361, 565-576.	1.6	74
98	Chemistry of Star-Forming Regions. <i>Journal of Physical Chemistry A</i> , 2005, 109, 4017-4029.	1.1	95
99	Rapid neutral-neutral reactions at low temperatures: a new network and first results for TMC-1. <i>Monthly Notices of the Royal Astronomical Society</i> , 2004, 350, 323-330.	1.6	240
100	The Gas-Phase Formation of Methyl Formate in Hot Molecular Cores. <i>Astrophysical Journal</i> , 2004, 611, 605-614.	1.6	141
101	Isotopic Fractionation by Ion-Molecule Reactions. <i>Space Science Reviews</i> , 2003, 106, 293-304.	3.7	29
102	Enhanced Deuterium Fractionation in Dense Interstellar Cores Resulting from Multiply Deuterated H ₃ ⁺ . <i>Astrophysical Journal</i> , 2003, 591, L41-L44.	1.6	226
103	Observation and analysis of high-J _o inter-state transitions in CH ₂ DOH. <i>Journal of Chemical Physics</i> , 2002, 116, 3710-3717.	1.2	13
104	New models of interstellar gas-grain chemistry - I. Surface diffusion rates. <i>Monthly Notices of the Royal Astronomical Society</i> , 2002, 319, 837-850.	1.6	108
105	The importance of new rate coefficients for deuterium fractionation reactions in interstellar chemistry. <i>Monthly Notices of the Royal Astronomical Society</i> , 2002, 336, 283-290.	1.6	59
106	Deuterium fractionation on interstellar grains studied with modified rate equations and a Monte Carlo approach. <i>Planetary and Space Science</i> , 2002, 50, 1257-1266.	0.9	78
107	H ₃ ⁺ +HD ⁺ →H ₂ D ⁺ +H ₂ : low-temperature laboratory measurements and interstellar implications. <i>Planetary and Space Science</i> , 2002, 50, 1275-1285.	0.9	167
108	The Millimeter- and Submillimeter-Wave Spectrum of Glycolaldehyde (CH ₂ OHCHO). <i>Astrophysical Journal, Supplement Series</i> , 2001, 134, 319-321.	3.0	43

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109	New models of interstellar gas-grain chemistry - II. Surface photochemistry in quiescent cores. Monthly Notices of the Royal Astronomical Society, 2001, 322, 770-778.	1.6	63
110	New models of interstellar gas-grain chemistry - III. Solid CO ₂ . Monthly Notices of the Royal Astronomical Society, 2001, 324, 1054-1062.	1.6	79
111	The chemistry of interstellar space. Chemical Society Reviews, 2001, 30, 168-176.	18.7	320
112	The Physics and Chemistry of Small Translucent Molecular Clouds. XIII. The Basic Hydrocarbon Chemistry. Astrophysical Journal, Supplement Series, 2000, 126, 427-460.	3.0	116
113	Chemical Models of Circumstellar Disks. Symposium - International Astronomical Union, 2000, 197, 425-434.	0.1	0
114	Models of Gas-Grain Chemistry in Star-forming Regions. Symposium - International Astronomical Union, 2000, 197, 147-159.	0.1	9
115	The astrochemistry of H ₃ ⁺ . Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2000, 358, 2523-2534.	1.6	78
116	Deuterium Fractionation in Protoplanetary Disks. Astrophysical Journal, 1999, 526, 314-326.	1.6	131
117	A Molecular Orbital Study of the $\text{X}^2\Sigma^+$ state of NO. Molecular Physics, 1999, 97, 65-79.	1.6	55
118	Transitions between Hund's coupling cases for the $\text{X}^2\Sigma^+$ state of NO. Molecular Physics, 1999, 97, 65-79.	0.8	17
119	The Millimeter- and Submillimeter-wave Spectrum of Methyl Formate (HCOOCH ₃). Astrophysical Journal, 1999, 521, 255-260.	1.6	58
120	A Proposed Modification of the Rate Equations for Reactions on Grain Surfaces. Astrophysical Journal, 1998, 495, 309-316.	1.6	125
121	The Ionization Fraction in Dense Cloud Cores. Astrophysical Journal, 1998, 499, 234-249.	1.6	263
122	The Sensitivity of Gas-phase Chemical Models of Interstellar Clouds to C and O Elemental Abundances and to a New Formation Mechanism for Ammonia. Astrophysical Journal, 1998, 501, 207-220.	1.6	85
123	Some Interstellar Reactions Involving Electrons and Neutral Species: Attachment and Isomerization. Astrophysical Journal, 1997, 491, 210-215.	1.6	70
124	The Formation of Large Hydrocarbons and Carbon Clusters in Dense Interstellar Clouds. Astrophysical Journal, 1997, 478, 585-593.	1.6	74
125	Conference Summary: Molecules in astrophysics. Symposium - International Astronomical Union, 1997, 178, 1-12.	0.1	0
126	Classical studies of shock wave-induced desorption for model adsorbates. Journal of Chemical Physics, 1996, 105, 10868-10873.	1.2	4

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127	Effect of coupling between frustrated translation and libration on the nonthermal desorption of physisorbed CO: Three-dimensional quantum calculations. <i>Journal of Chemical Physics</i> , 1996, 104, 6330-6337.	1.2	5
128	Calculations of the low temperature pressure broadening of HCO ⁺ rotational spectral lines by H ₂ . <i>Journal of Chemical Physics</i> , 1996, 104, 3956-3961.	1.2	9
129	On the Stability of Interstellar Carbon Clusters: The Rate of the Reaction between C ₃ and O. <i>Astrophysical Journal</i> , 1996, 465, 795.	1.6	37
130	Chemistry in the Interstellar Medium. <i>Annual Review of Physical Chemistry</i> , 1995, 46, 27-54.	4.8	368
131	The Millimeter- and Submillimeter-Wave Spectrum of <i>trans</i> -Ethyl Alcohol. <i>Journal of Physical and Chemical Reference Data</i> , 1995, 24, 1-32.	1.9	59
132	Classical dynamics of adsorbate-surface systems: Application to nonthermal desorption. <i>Journal of Chemical Physics</i> , 1994, 100, 9205-9214.	1.2	16
133	The effect of varying cosmic-ray ionization rates on dark cloud chemistry. <i>Monthly Notices of the Royal Astronomical Society</i> , 1994, 269, 641-648.	1.6	28
134	Calculations on the competition between association and reaction for C ₃ H ⁺ +H ₂ . <i>Journal of Chemical Physics</i> , 1993, 99, 2812-2820.	1.2	38
135	New gas-grain chemical models of quiescent dense interstellar clouds: the effects of H ₂ tunnelling reactions and cosmic ray induced desorption. <i>Monthly Notices of the Royal Astronomical Society</i> , 1993, 261, 83-102.	1.6	448
136	Chemical differentiation between star-forming regions - The Orion Hot Core and Compact Ridge. <i>Astrophysical Journal</i> , 1993, 408, 548.	1.6	230
137	Calculations Concerning Interstellar Isomeric Abundance Ratios for C ₃ H and C ₃ H ₂ . <i>Astrophysical Journal</i> , 1993, 417, 181.	1.6	30
138	Calculations on the rate of the ion-molecule reaction C ₂ H ⁺ +H ₂ →C ₂ H ₃ +H. <i>Journal of Chemical Physics</i> , 1992, 96, 5801-5807.	1.2	14
139	Models of gas-grain chemistry in dense interstellar clouds with complex organic molecules. <i>Astrophysical Journal, Supplement Series</i> , 1992, 82, 167.	3.0	633
140	Chemical modelling of dark clouds in the LMC and SMC. <i>Monthly Notices of the Royal Astronomical Society</i> , 1990, 242, 92-97.	1.6	26
141	Deuterium fractionation in dense interstellar clouds. <i>Astrophysical Journal</i> , 1989, 340, 906.	1.6	360
142	Identification of interstellar methanol lines. <i>Astrophysical Journal</i> , 1988, 333, 359.	1.6	15
143	Effects of large rate coefficients for ion-polar neutral reactions on chemical models of dense interstellar clouds. <i>Astrophysical Journal</i> , 1986, 310, 378.	1.6	79
144	The Formation and Depletion of Molecules in Dense Interstellar Clouds. <i>Astrophysical Journal</i> , 1973, 185, 505.	1.6	924