

Jiao He

List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	BINDING ENERGY OF MOLECULES ON WATER ICE: LABORATORY MEASUREMENTS AND MODELING. <i>Astrophysical Journal</i> , 2016, 825, 89.	4.5	51
2	An experimental study of the surface formation of methane in interstellar molecular clouds. <i>Nature Astronomy</i> , 2020, 4, 781-785.	10.1	50
3	STICKING OF MOLECULES ON NONPOROUS AMORPHOUS WATER ICE. <i>Astrophysical Journal</i> , 2016, 823, 56.	4.5	48
4	ON WATER FORMATION IN THE INTERSTELLAR MEDIUM: LABORATORY STUDY OF THE O+D REACTION ON SURFACES. <i>Astrophysical Journal Letters</i> , 2011, 741, L9.	8.3	47
5	A NEW DETERMINATION OF THE BINDING ENERGY OF ATOMIC OXYGEN ON DUST GRAIN SURFACES: EXPERIMENTAL RESULTS AND SIMULATIONS. <i>Astrophysical Journal</i> , 2015, 801, 120.	4.5	41
6	Measurements of Diffusion of Volatiles in Amorphous Solid Water: Application to Interstellar Medium Environments. <i>Astrophysical Journal</i> , 2018, 863, 156.	4.5	39
7	FORMATION OF HYDROXYLAMINE ON DUST GRAINS VIA AMMONIA OXIDATION. <i>Astrophysical Journal</i> , 2015, 799, 49.	4.5	29
8	Formation of interstellar propanal and 1-propanol ice: a pathway involving solid-state CO hydrogenation. <i>Astronomy and Astrophysics</i> , 2019, 627, A1.	5.1	29
9	Interaction of hydrogen with surfaces of silicates: single crystal vs. amorphous. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 15803.	2.8	27
10	Atomic oxygen diffusion on and desorption from amorphous silicate surfaces. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3493.	2.8	23
11	FORMATION OF MOLECULAR OXYGEN AND OZONE ON AMORPHOUS SILICATES. <i>Astrophysical Journal</i> , 2012, 756, 98.	4.5	22
12	Application of a diffusion-desorption rate equation model in astrochemistry. <i>Faraday Discussions</i> , 2014, 168, 517-532.	3.2	22
13	FORMATION OF MOLECULAR HYDROGEN FROM METHANE ICE. <i>Astrophysical Journal</i> , 2010, 721, 1656-1662.	4.5	21
14	The Refractive Index of Amorphous and Crystalline Water Ice in the UV-vis. <i>Astrophysical Journal</i> , 2019, 875, 131.	4.5	20
15	EXPERIMENTS OF WATER FORMATION ON WARM SILICATES. <i>Astrophysical Journal</i> , 2014, 788, 50.	4.5	19
16	Diffusion and Clustering of Carbon Dioxide on Non-porous Amorphous Solid Water. <i>Astrophysical Journal</i> , 2017, 837, 65.	4.5	19
17	The ^{12}CO and ^{13}CO Absorption Bands as Tracers of the Thermal History of Interstellar Icy Grain Mantles. <i>Astrophysical Journal</i> , 2018, 869, 41.	4.5	17
18	Extension of the HCOOH and CO_2 solid-state reaction network during the CO freeze-out stage: inclusion of H_2CO . <i>Astronomy and Astrophysics</i> , 2019, 626, A118.	5.1	14

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19	Sputtering Effects and Water Formation on an Amorphous Silicate Surface. <i>Journal of Physical Chemistry A</i> , 2013, 117, 3009-3016.	2.5	13
20	Mechanism of Atomic Hydrogen Addition Reactions on np-ASW. <i>Astrophysical Journal</i> , 2017, 851, 104.	4.5	13
21	Characterization of thin film CO ₂ ice through the infrared $\hat{1}\frac{1}{2}1\hat{A}+\hat{A}\hat{1}\frac{1}{2}3$ combination mode. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 473, 860-866.	4.4	13
22	Alcohols on the Rocks: Solid-State Formation in a H ₃ CC% _i CH + OH Cocktail under Dark Cloud Conditions. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 986-999.	2.7	13
23	The Effective Surface Area of Amorphous Solid Water Measured by the Infrared Absorption of Carbon Monoxide. <i>Astrophysical Journal</i> , 2019, 878, 94.	4.5	12
24	Phase Transition of Interstellar CO Ice. <i>Astrophysical Journal Letters</i> , 2021, 915, L23.	8.3	11
25	Astrochemical Pathways to Complex Organic and Prebiotic Molecules: Experimental Perspectives for In Situ Solid-State Studies. <i>Life</i> , 2021, 11, 568.	2.4	8
26	Methoxymethanol formation starting from CO hydrogenation. <i>Astronomy and Astrophysics</i> , 2022, 659, A65.	5.1	7
27	Reversible hydrogenation restores defected graphene to graphene. <i>Science China Chemistry</i> , 2021, 64, 1047-1056.	8.2	6
28	Refractive Index and Extinction Coefficient of Vapor-deposited Water Ice in the UV-vis Range. <i>Astrophysical Journal</i> , 2022, 925, 179.	4.5	6
29	Radical Recombination during the Phase Transition of Interstellar CO Ice. <i>Astrophysical Journal Letters</i> , 2022, 931, L1.	8.3	5
30	Infrared Spectroscopic Study of Solid Methane: Nuclear Spin Conversion of Stable and Metastable Phases. <i>Journal of Physical Chemistry A</i> , 2020, 124, 552-559.	2.5	3
31	Infrared Spectroscopic Study of Methane Ice, Pure and in Mixtures with Polar (H ₂ O) and Nonpolar (N ₂) Molecules. <i>Journal of Physical Chemistry A</i> , 2022, 126, 1973-1979.	2.5	2
32	Hydrogen and water in the interstellar medium. , 2013, , .		1
33	Synthesis of solid-state complex organic molecules through accretion of simple species at low temperatures. <i>Proceedings of the International Astronomical Union</i> , 2019, 15, 46-50.	0.0	0