Jiao He

List of Publications by Year in descending order

33 papers	654 citations	516710 16 h-index	580821 25 g-index
34 all docs	34 docs citations	34 times ranked	536 citing authors

#	Article	IF	Citations
1	Refractive Index and Extinction Coefficient of Vapor-deposited Water Ice in the UVâ€“vis Range. Astrophysical Journal, 2022, 925, 179.	4.5	6
2	Methoxymethanol formation starting from CO hydrogenation. Astronomy and Astrophysics, 2022, 659, A65.	5.1	7
3	Infrared Spectroscopic Study of Methane Ice, Pure and in Mixtures with Polar (H₂O) and Nonpolar (N₂) Molecules. Journal of Physical Chemistry A, 2022, 126, 1973-1979.	2.5	2
4	Radical Recombination during the Phase Transition of Interstellar CO Ice. Astrophysical Journal Letters, 2022, 931, L1.	8.3	5
5	Reversible hydrogenation restores defected graphene to graphene. Science China Chemistry, 2021, 64, 1047-1056.	8.2	6
6	Astrochemical Pathways to Complex Organic and Prebiotic Molecules: Experimental Perspectives for In Situ Solid-State Studies. Life, 2021, 11, 568.	2.4	8
7	Phase Transition of Interstellar CO Ice. Astrophysical Journal Letters, 2021, 915, L23.	8.3	11
8	Infrared Spectroscopic Study of Solid Methane: Nuclear Spin Conversion of Stable and Metastable Phases. Journal of Physical Chemistry A, 2020, 124, 552-559.	2.5	3
9	An experimental study of the surface formation of methane in interstellar molecular clouds. Nature Astronomy, 2020, 4, 781-785.	10.1	50
10	The Effective Surface Area of Amorphous Solid Water Measured by the Infrared Absorption of Carbon Monoxide. Astrophysical Journal, 2019, 878, 94.	4.5	12
11	Extension of the HCOOH and CO₂ solid-state reaction network during the CO freeze-out stage: inclusion of H₂CO. Astronomy and Astrophysics, 2019, 626, A118.	5.1	14
12	Formation of interstellar propanal and 1-propanol ice: a pathway involving solid-state CO hydrogenation. Astronomy and Astrophysics, 2019, 627, A1.	5.1	29
13	Alcohols on the Rocks: Solid-State Formation in a H₃CCâ‰¡CH + OH Cocktail under Dark Cloud Conditions. ACS Earth and Space Chemistry, 2019, 3, 986-999.	2.7	13
14	The Refractive Index of Amorphous and Crystalline Water Ice in the UVâ€“vis. Astrophysical Journal, 2019, 875, 131.	4.5	20
15	Synthesis of solid-state complex organic molecules through accretion of simple species at low temperatures. Proceedings of the International Astronomical Union, 2019, 15, 46-50.	0.0	0
16	Characterization of thin film CO2 ice through the infrared Î½1Â+ÂÎ½3 combination mode. Monthly Notices of the Royal Astronomical Society, 2018, 473, 860-866.	4.4	13
17	The ¹²CO₂ and ¹³CO₂ Absorption Bands as Tracers of the Thermal History of Interstellar Icy Grain Mantles. Astrophysical Journal, 2018, 869, 41.	4.5	17
18	Measurements of Diffusion of Volatiles in Amorphous Solid Water: Application to Interstellar Medium Environments. Astrophysical Journal, 2018, 863, 156.	4.5	39

#	Article	IF	Citations
19	Diffusion and Clustering of Carbon Dioxide on Non-porous Amorphous Solid Water. Astrophysical Journal, 2017, 837, 65.	4.5	19
20	Mechanism of Atomic Hydrogen Addition Reactions on np-ASW. Astrophysical Journal, 2017, 851, 104.	4.5	13
21	BINDING ENERGY OF MOLECULES ON WATER ICE: LABORATORY MEASUREMENTS AND MODELING. Astrophysical Journal, 2016, 825, 89.	4.5	51
22	STICKING OF MOLECULES ON NONPOROUS AMORPHOUS WATER ICE. Astrophysical Journal, 2016, 823, 56.	4.5	48
23	A NEW DETERMINATION OF THE BINDING ENERGY OF ATOMIC OXYGEN ON DUST GRAIN SURFACES: EXPERIMENTAL RESULTS AND SIMULATIONS. Astrophysical Journal, 2015, 801, 120.	4.5	41
24	FORMATION OF HYDROXYLAMINE ON DUST GRAINS VIA AMMONIA OXIDATION. Astrophysical Journal, 2015, 799, 49.	4.5	29
25	EXPERIMENTS OF WATER FORMATION ON WARM SILICATES. Astrophysical Journal, 2014, 788, 50.	4.5	19
26	Application of a diffusionâ€“desorption rate equation model in astrochemistry. Faraday Discussions, 2014, 168, 517-532.	3.2	22
27	Atomic oxygen diffusion on and desorption from amorphous silicate surfaces. Physical Chemistry Chemical Physics, 2014, 16, 3493.	2.8	23
28	Sputtering Effects and Water Formation on an Amorphous Silicate Surface. Journal of Physical Chemistry A, 2013, 117, 3009-3016.	2.5	13
29	Hydrogen and water in the interstellar medium. , 2013, , .		1
30	FORMATION OF MOLECULAR OXYGEN AND OZONE ON AMORPHOUS SILICATES. Astrophysical Journal, 2012, 756, 98.	4.5	22
31	Interaction of hydrogen with surfaces of silicates: single crystal vs. amorphous. Physical Chemistry Chemical Physics, 2011, 13, 15803.	2.8	27
32	ON WATER FORMATION IN THE INTERSTELLAR MEDIUM: LABORATORY STUDY OF THE O+D REACTION ON SURFACES. Astrophysical Journal Letters, 2011, 741, L9.	8.3	47
33	FORMATION OF MOLECULAR HYDROGEN FROM METHANE ICE. Astrophysical Journal, 2010, 721, 1656-1662.	4.5	21