Ke Zhang

List of Publications by Year
in descending order

51 papers	2,562 citations	201674 27 h-index	197818 49 g-index
52 all docs	52 docs citations	52 times ranked	1218 citing authors

#	Article	IF	Citations
1	A Novel Way of Measuring the Gas Disk Mass of Protoplanetary Disks Using N₂H⁺ and C¹⁸O. Astrophysical Journal Letters, 2022, 926, L2.	8.3	12
2	Effect of MHD Wind-driven Disk Evolution on the Observed Sizes of Protoplanetary Disks. Astrophysical Journal, 2022, 926, 61.	4.5	12
3	New Constraints on Protoplanetary Disk Gas Masses in Lupus. Astrophysical Journal, 2022, 927, 229.	4.5	12
4	The TW Hya Rosetta Stone Project. III. Resolving the Gaseous Thermal Profile of the Disk. Astrophysical Journal, 2021, 908, 8.	4.5	35
5	Observing Carbon and Oxygen Carriers in Protoplanetary Disks at Mid-infrared Wavelengths. Astrophysical Journal, 2021, 909, 55.	4.5	19
6	Destruction of Refractory Carbon Grains Drives the Final Stage of Protoplanetary Disk Chemistry. Astrophysical Journal, 2021, 910, 3.	4.5	15
7	Molecules with ALMA at Planet-forming Scales (MAPS). VII. Substellar O/H and C/H and Superstellar C/O in Planet-feeding Gas. Astrophysical Journal, Supplement Series, 2021, 257, 7.	7.7	40
8	Molecules with ALMA at Planet-forming Scales (MAPS). X. Studying Deuteration at High Angular Resolution toward Protoplanetary Disks. Astrophysical Journal, Supplement Series, 2021, 257, 10.	7.7	15
9	Molecules with ALMA at Planet-forming Scales (MAPS). XVIII. Kinematic Substructures in the Disks of HD 163296 and MWC 480. Astrophysical Journal, Supplement Series, 2021, 257, 18.	7.7	51
10	Molecules with ALMA at Planet-forming Scales (MAPS). IX. Distribution and Properties of the Large Organic Molecules HC₃N, CH₃CN, and c-C₃H₂. Astrophysical Journal, Supplement Series, 2021, 257, 9.	7.7	30
11	Molecules with ALMA at Planet-forming Scales (MAPS). XIX. Spiral Arms, a Tail, and Diffuse Structures Traced by CO around the GM Aur Disk. Astrophysical Journal, Supplement Series, 2021, 257, 19.	7.7	33
12	Molecules with ALMA at Planet-forming Scales (MAPS). IV. Emission Surfaces and Vertical Distribution of Molecules. Astrophysical Journal, Supplement Series, 2021, 257, 4.	7.7	58
13	Molecules with ALMA at Planet-forming Scales (MAPS). XII. Inferring the C/O and S/H Ratios in Protoplanetary Disks with Sulfur Molecules. Astrophysical Journal, Supplement Series, 2021, 257, 12.	7.7	30
14	Molecules with ALMA at Planet-forming Scales (MAPS). XVII. Determining the 2D Thermal Structure of the HD 163296 Disk. Astrophysical Journal, Supplement Series, 2021, 257, 17.	7.7	19
15	Molecules with ALMA at Planet-forming Scales (MAPS). I. Program Overview and Highlights. Astrophysical Journal, Supplement Series, 2021, 257, 1.	7.7	117
16	Molecules with ALMA at Planet-forming Scales (MAPS). VI. Distribution of the Small Organics HCN, C₂H, and H₂CO. Astrophysical Journal, Supplement Series, 2021, 257, 6.	7.7	37
17	Molecules with ALMA at Planet-forming Scales (MAPS). XVI. Characterizing the Impact of the Molecular Wind on the Evolution of the HD 163296 System. Astrophysical Journal, Supplement Series, 2021, 257, 16.	7.7	20
18	Molecules with ALMA at Planet-forming Scales (MAPS). V. CO Gas Distributions. Astrophysical Journal, Supplement Series, 2021, 257, 5.	7.7	87

#	Article	IF	Citations
19	Molecules with ALMA at Planet-forming Scales (MAPS). III. Characteristics of Radial Chemical Substructures. Astrophysical Journal, Supplement Series, 2021, 257, 3.	7.7	57
20	Molecules with ALMA at Planet-forming Scales (MAPS). XV. Tracing Protoplanetary Disk Structure within 20 au. Astrophysical Journal, Supplement Series, 2021, 257, 15.	7.7	21
21	Molecules with ALMA at Planet-forming Scales (MAPS). VIII. CO Gap in AS 209â€"Gas Depletion or Chemical Processing?. Astrophysical Journal, Supplement Series, 2021, 257, 8.	7.7	22
22	Molecules with ALMA at Planet-forming Scales (MAPS). XIII. HCO⁺ and Disk Ionization Structure. Astrophysical Journal, Supplement Series, 2021, 257, 13.	7.7	24
23	Molecules with ALMA at Planet-forming Scales (MAPS). XIV. Revealing Disk Substructures in Multiwavelength Continuum Emission. Astrophysical Journal, Supplement Series, 2021, 257, 14.	7.7	56
24	Molecules with ALMA at Planet-forming Scales. XX. The Massive Disk around GM Aurigae. Astrophysical Journal, Supplement Series, 2021, 257, 20.	7.7	26
25	Molecules with ALMA at Planet-forming Scales (MAPS). II. CLEAN Strategies for Synthesizing Images of Molecular Line Emission in Protoplanetary Disks. Astrophysical Journal, Supplement Series, 2021, 257, 2.	7.7	58
26	Hints of a Population of Solar System Analog Planets from ALMA. Astrophysical Journal Letters, 2020, 895, L46.	8.3	10
27	CO Depletion in Protoplanetary Disks: A Unified Picture Combining Physical Sequestration and Chemical Processing. Astrophysical Journal, 2020, 899, 134.	4.5	87
28	Chemical Evolution in a Protoplanetary Disk within Planet Carved Gaps and Dust Rings. Astrophysical Journal, 2020, 905, 68.	4.5	21
29	Excess C/H in Protoplanetary Disk Gas from Icy Pebble Drift Across the CO Snowline. Astrophysical Journal Letters, 2020, 891, L16.	8.3	32
30	Rapid Evolution of Volatile CO from the Protostellar Disk Stage to the Protoplanetary Disk Stage. Astrophysical Journal Letters, 2020, 891, L17.	8.3	43
31	Systematic Variations of CO Gas Abundance with Radius in Gas-rich Protoplanetary Disks. Astrophysical Journal, 2019, 883, 98.	4.5	70
32	Probing the Gas Content of Late-stage Protoplanetary Disks with N₂H⁺. Astrophysical Journal, 2019, 881, 127.	4.5	20
33	Unlocking CO Depletion in Protoplanetary Disks. II. Primordial C/H Predictions inside the CO Snowline. Astrophysical Journal, 2019, 877, 131.	4.5	27
34	A High-resolution Mid-infrared Survey of Water Emission from Protoplanetary Disks. Astrophysical Journal, 2019, 874, 24.	4.5	22
35	Unlocking CO Depletion in Protoplanetary Disks. I. The Warm Molecular Layer. Astrophysical Journal, 2018, 856, 85.	4.5	82
36	Mass inventory of the giant-planet formation zone in a solar nebula analogue. Nature Astronomy, 2017, 1, .	10.1	100

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37	Unveiling the mid-plane temperature and mass distribution in the giant-planet formation zone. Proceedings of the International Astronomical Union, 2017, 13, 103-108.	0.0	0
38	MEASUREMENTS OF WATER SURFACE SNOW LINES IN CLASSICAL PROTOPLANETARY DISKS. Astrophysical Journal, 2016, 818, 22.	4.5	58
39	THE RADIAL DISTRIBUTION OF H₂ AND CO IN TW HYA AS REVEALED BY RESOLVED ALMA OBSERVATIONS OF CO ISOTOPOLOGUES. Astrophysical Journal, 2016, 823, 91.	4.5	163
40	ON THE COMMONALITY OF 10â€“30 AU SIZED AXISYMMETRIC DUST STRUCTURES IN PROTOPLANETARY DISKS. Astrophysical Journal Letters, 2016, 818, L16.	8.3	117
41	DETECTION OF WATER VAPOR IN THE TERRESTRIAL PLANET FORMING REGION OF A TRANSITION DISK. Astrophysical Journal Letters, 2015, 810, L24.	8.3	18
42	EVIDENCE OF FAST PEBBLE GROWTH NEAR CONDENSATION FRONTS IN THE HL TAU PROTOPLANETARY DISK. Astrophysical Journal Letters, 2015, 806, L7.	8.3	297
43	ALMA OBSERVATIONS OF THE T TAURI BINARY SYSTEM AS 205: EVIDENCE FOR MOLECULAR WINDS AND/OR BINARY INTERACTIONS. Astrophysical Journal, 2014, 792, 68.	4.5	41
44	COMPARISON OF THE DUST AND GAS RADIAL STRUCTURE IN THE TRANSITION DISK [PZ99] J160421.7-213028. Astrophysical Journal, 2014, 791, 42.	4.5	74
45	An old disk still capable of forming a planetary system. Nature, 2013, 493, 644-646.	27.8	285
46	The 21-Î¼m and 30-Î¼m circumstellar dust features in evolved C-rich objects. Earth, Planets and Space, 2010, 62, 105-110.	2.5	4
47	ON MAGNESIUM SULFIDE AS THE CARRIER OF THE 30 Î¼m EMISSION FEATURE IN EVOLVED STARS. Astrophysical Journal, 2009, 702, 680-685.	4.5	41
48	On the carriers of the 21â€ƒÎ¼m emission feature in post-asymptotic giant branch stars. Monthly Notices of the Royal Astronomical Society, 2009, 396, 1247-1256.	4.4	27
49	The infrared spectral features of circumstellar envelope of evolved low- and intermediate-mass stars. Science in China Series G: Physics, Mechanics and Astronomy, 2008, 51, 1187-1199.	0.2	4
50	On the inorganic carriers of the 21 micron emission feature in post-AGB stars. Proceedings of the International Astronomical Union, 2008, 4, 215-216.	0.0	0
51	On Silicon Carbide Grains as the Carrier of the 21 Î¼m Emission Feature in Post-Asymptotic Giant Branch Stars. Astrophysical Journal, 2005, 630, L77-L80.	4.5	13