Jane Huang

List of Publications by Year in descending order

63 papers	4,452 citations	117625 34 h-index	114465 63 g-index
65 all docs	65 docs citations	65 times ranked	1501 citing authors

#	Article	IF	Citations
1	The Disk Substructures at High Angular Resolution Project (DSHARP). I. Motivation, Sample, Calibration, and Overview. Astrophysical Journal Letters, 2018, 869, L41.	8.3	732
2	The Disk Substructures at High Angular Resolution Project (DSHARP). II. Characteristics of Annular Substructures. Astrophysical Journal Letters, 2018, 869, L42.	8.3	326
3	The Disk Substructures at High Angular Resolution Project (DSHARP). VII. The Planetâ€“Disk Interactions Interpretation. Astrophysical Journal Letters, 2018, 869, L47.	8.3	289
4	The Disk Substructures at High Angular Resolution Project (DSHARP). VI. Dust Trapping in Thin-ringed Protoplanetary Disks. Astrophysical Journal Letters, 2018, 869, L46.	8.3	250
5	The Disk Substructures at High Angular Resolution Project (DSHARP). V. Interpreting ALMA Maps of Protoplanetary Disks in Terms of a Dust Model. Astrophysical Journal Letters, 2018, 869, L45.	8.3	199
6	One Solution to the Mass Budget Problem for Planet Formation: Optically Thick Disks with Dust Scattering. Astrophysical Journal Letters, 2019, 877, L18.	8.3	150
7	THE COUPLED PHYSICAL STRUCTURE OF GAS AND DUST IN THE IM Lup PROTOPLANETARY DISK. Astrophysical Journal, 2016, 832, 110.	4.5	130
8	CO and Dust Properties in the TW Hya Disk from High-resolution ALMA Observations. Astrophysical Journal, 2018, 852, 122.	4.5	127
9	The Disk Substructures at High Angular Resolution Project (DSHARP). III. Spiral Structures in the Millimeter Continuum of the Elias 27, IM Lup, and WaOph 6 Disks. Astrophysical Journal Letters, 2018, 869, L43.	8.3	121
10	Molecules with ALMA at Planet-forming Scales (MAPS). I. Program Overview and Highlights. Astrophysical Journal, Supplement Series, 2021, 257, 1.	7.7	117
11	Nine Localized Deviations from Keplerian Rotation in the DSHARP Circumstellar Disks: Kinematic Evidence for Protoplanets Carving the Gaps. Astrophysical Journal Letters, 2020, 890, L9.	8.3	116
12	The Disk Substructures at High Angular Resolution Project (DSHARP). IX. A High-definition Study of the HD 163296 Planet-forming Disk. Astrophysical Journal Letters, 2018, 869, L49.	8.3	114
13	An ALMA Survey of DCN/H¹³CN and DCO⁺/H¹³CO⁺ in Protoplanetary Disks. Astrophysical Journal, 2017, 835, 231.	4.5	87
14	Molecules with ALMA at Planet-forming Scales (MAPS). V. CO Gas Distributions. Astrophysical Journal, Supplement Series, 2021, 257, 5.	7.7	87
15	The Disk Substructures at High Angular Resolution Project (DSHARP). IV. Characterizing Substructures and Interactions in Disks around Multiple Star Systems. Astrophysical Journal Letters, 2018, 869, L44.	8.3	86
16	The Disk Substructures at High Angular Resolution Project (DSHARP). X. Multiple Rings, a Misaligned Inner Disk, and a Bright Arc in the Disk around the T Tauri star HD 143006. Astrophysical Journal Letters, 2018, 869, L50.	8.3	69
17	Constraining Gas-phase Carbon, Oxygen, and Nitrogen in the IM Lup Protoplanetary Disk. Astrophysical Journal, 2018, 865, 155.	4.5	69
18	The Disk Substructures at High Angular Resolution Program (DSHARP). VIII. The Rich Ringed Substructures in the AS 209 Disk. Astrophysical Journal Letters, 2018, 869, L48.	8.3	58

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19	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
20	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
21	Molecules with ALMA at Planet-forming Scales (MAPS). III. Characteristics of Radial Chemical Substructures. Astrophysical Journal, Supplement Series, 2021, 257, 3.	7.7	57
22	Detecting Weak Spectral Lines in Interferometric Data through Matched Filtering. Astronomical Journal, 2018, 155, 182.	4.7	56
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	A Multifrequency ALMA Characterization of Substructures in the GM Aur Protoplanetary Disk. Astrophysical Journal, 2020, 891, 48.	4.5	54
25	Characterizing the dust content of disk substructures in TW Hydrae. Astronomy and Astrophysics, 2021, 648, A33.	5.1	53
26	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
27	EVIDENCE FOR A CO DESORPTION FRONT IN THE OUTER AS 209 DISK. Astrophysical Journal Letters, 2016, 823, L18.	8.3	48
28	An ALMA Survey of H₂CO in Protoplanetary Disks. Astrophysical Journal, 2020, 890, 142.	4.5	47
29	Spiral Structure in the Gas Disk of TW Hya. Astrophysical Journal Letters, 2019, 884, L56.	8.3	43
30	Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): Late Infall Causing Disk Misalignment and Dynamic Structures in SU Aur*. Astrophysical Journal Letters, 2021, 908, L25.	8.3	42
31	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
32	H₂CO Distribution and Formation in the TW HYA Disk. Astrophysical Journal, 2017, 839, 43.	4.5	38
33	An Unbiased ALMA Spectral Survey of the LkCa 15 and MWC 480 Protoplanetary Disks. Astrophysical Journal, 2020, 893, 101.	4.5	38
34	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
35	The TW Hya Rosetta Stone Project. III. Resolving the Gaseous Thermal Profile of the Disk. Astrophysical Journal, 2021, 908, 8.	4.5	35
36	An Evolutionary Study of Volatile Chemistry in Protoplanetary Disks. Astrophysical Journal, 2020, 898, 97.	4.5	34

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37	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
38	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
39	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
40	Molecules with ALMA at Planet-forming Scales. XX. The Massive Disk around GM Aurigae. Astrophysical Journal, Supplement Series, 2021, 257, 20.	7.7	26
41	Molecules with ALMA at Planet-forming Scales (MAPS). XI. CN and HCN as Tracers of Photochemistry in Disks. Astrophysical Journal, Supplement Series, 2021, 257, 11.	7.7	25
42	Molecules with ALMA at Planet-forming Scales (MAPS). XIII. HCO⁺ and Disk Ionization Structure. Astrophysical Journal, Supplement Series, 2021, 257, 13.	7.7	24
43	Large-scale CO Spiral Arms and Complex Kinematics Associated with the T Tauri Star RU Lup. Astrophysical Journal, 2020, 898, 140.	4.5	23
44	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
45	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
46	CO Line Emission Surfaces and Vertical Structure in Midinclination Protoplanetary Disks. Astrophysical Journal, 2022, 932, 114.	4.5	21
47	Probing the Gas Content of Late-stage Protoplanetary Disks with N₂H⁺. Astrophysical Journal, 2019, 881, 127.	4.5	20
48	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
49	The TW Hya Rosetta Stone Project. II. Spatially Resolved Emission of Formaldehyde Hints at Low-temperature Gas-phase Formation. Astrophysical Journal, 2021, 906, 111.	4.5	19
50	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
51	Limits on Millimeter Continuum Emission from Circumplanetary Material in the DSHARP Disks. Astrophysical Journal, 2021, 916, 51.	4.5	18
52	DETECTION OF N ₂ D ⁺ IN A PROTOPLANETARY DISK. Astrophysical Journal Letters, 2015, 809, L26.	8.3	17
53	The TW Hya Rosetta Stone Project. I. Radial and Vertical Distributions of DCN and DCO⁺. Astronomical Journal, 2021, 161, 38.	4.7	16
54	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

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55	Dynamical Masses and Stellar Evolutionary Model Predictions of M Stars. Astrophysical Journal, 2021, 908, 42.	4.5	14
56	A Search for Companions via Direct Imaging in the DSHARP Planet-forming Disks. Astronomical Journal, 2021, 161, 146.	4.7	14
57	The TW Hya Rosetta Stone Project IV: A Hydrocarbon-rich Disk Atmosphere. Astrophysical Journal, 2021, 911, 29.	4.5	10
58	A 3 mm Chemical Exploration of Small Organics in Class I YSOs. Astrophysical Journal, 2020, 898, 131.	4.5	10
59	disksurf: Extracting the 3D Structure of Protoplanetary Disks. Journal of Open Source Software, 2021, 6, 3827.	4.6	9
60	Hot Corino Chemistry in the Class I Binary Source Ser-emb 11. Astrophysical Journal, 2021, 923, 155.	4.5	8
61	Disk Evolution Study through Imaging of Nearby Young Stars (DESTINYS): A Panchromatic View of DO Tauâ€™s Complex Kilo-astronomical-unit Environment. Astrophysical Journal, 2022, 930, 171.	4.5	7
62	An Atacama Large Millimeter/submillimeter Array Survey of Chemistry in Disks around M4â€“M5 Stars. Astrophysical Journal, 2021, 911, 150.	4.5	6
63	Gas and Dust Shadows in the TW Hydrae Disk. Astrophysical Journal, 2022, 930, 144.	4.5	3