JANE HUANG

Assistant Professor
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CONTACT INFORMATION

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APPOINTMENTS

Assistant Professor
Columbia University Dept. of Astronomy — *July 2023-present*
NASA Hubble Fellowship Program Sagan Fellow
University of Michigan Dept. of Astronomy — *August 2020-June 2023*
Postdoctoral Researcher
Center for Astrophysics | Harvard & Smithsonian — *July 2020-August 2020*

EDUCATION

Harvard University, Cambridge, MA, United States
Ph.D., Astronomy and Astrophysics — *May 28, 2020*
Secondary Field: Computational Science and Engineering
M.A., Astronomy and Astrophysics — *May 26, 2016*
University of Chicago, Chicago, IL, United States
B.S., Chemistry (with honors) with a minor in physics — *June 14, 2014*

AWARDS, FELLOWSHIPS, AND SCHOLARSHIPS

NASA Hubble Fellowship Program Sagan Postdoctoral Fellowship — *2020-2023*
Astronomical Society of the Pacific Robert J. Trumpler Award (PhD thesis prize) — *2021*
International Astronomical Union PhD Prize, Division F (Planetary Systems and Bioastronomy) — *2021*
National Radio Astronomy Observatory R. L. Brown Outstanding Dissertation Award — *2021*
National Science Foundation Graduate Research Fellowship — *2015-2020*
Peirce Fellowship (Harvard University) — *2014-2017*
Goldwater Scholarship — *2013*
Chicago Public Schools Scholarship (University of Chicago) — *2010-2014*

GRANTS

Do protoplanetary disk substructures regulate water enrichment and pebble drift across different environments?, JWST-GO-07993, $138,684, 2026-2029, PI: Jane Huang

Unveiling diverse planet formation environments with millimeter imaging, National Science Foundation AAG #2307916, $449,288, 2023-2027, PI: Jane Huang

TELESCOPE TIME AWARDED AS PRINCIPAL INVESTIGATOR

Atacama Large Millimeter/Submillimeter Array (ALMA): 121 hours on the 12-m Array, 81 hours on the 7-m Array, 60 hours on the Total Power Array
James Webb Space Telescope (JWST): 24 hours
Northern Extended Millimeter Array (NOEMA): 51 hours
Submillimeter Array (SMA): 14 tracks
IRAM 30-m telescope: 21 hours
Green Bank Telescope: 11 hours

Hubble Space Telescope: 4 orbits
Magellan: 2 nights
Very Large Telescope: 2.5 hours

CONFERENCE AND WORKSHOP PRESENTATIONS

Invited talks

- "Probing the effects of late infall on protoplanetary disks," *Flatiron Workshop on Hydrodynamic and Dusty Turbulence in Protoplanetary Disks*, New York, NY, USA, 2026
- "Probing the effects of late infall on protoplanetary disks," *Dynamical Synthesis of Planetary Systems*, New Haven, CT, USA, 2026
- "Protoplanetary disk substructures across different environments," *International Conference on Exoplanets and Planet Formation*, Shanghai, China, 2025
- "Placing Protoplanetary Disks in the Environmental Context," *Astrochemistry in the Broadband Era: ngVLA and ALMA WSU*, Portland, ME, USA, 2025
- "The Multi-wavelength View of Late Infall and Streamers," *Setting the Stage for Planet Formation: The Importance of the Environment for the Evolution of Protoplanetary Discs* (symposium at the European Astronomical Society annual meeting), Cork, Ireland, 2025
- "Insights into Planet Formation from Long-Baseline ALMA Observations," *ALMA Data Reduction Workshop*, New York, NY, USA, 2024
- "An Astronomer's View of Molecules in Protoplanetary Disks," *Molecular Astrophysics: Linking interstellar molecules with the organic inventory of (exo)-Planets and the Solar System* (Focus session at the *American Physical Society March Meeting 2024*), Minneapolis, MN, USA, 2024
- "Insights into Planet Formation from Protoplanetary Disk Observations," *Exoplanets: Atmospheres to Architectures* (Ninth Annual Giant Magellan Telescope Community Science Meeting), Washington, DC, USA, 2023
- "Insights into Planet Formation from Molecular Mapping of Protoplanetary Disks," *The Astrochemistry Subdivision: A Decade of Progress and Prospects for the Next Decade*, Symposium at the *ACS Fall 2023 National Meeting*, San Francisco, CA, USA, 2023
- "Unveiling the Birth Sites of Planets: Recent Results and Future Prospects with ALMA," *ALMA Status and Plans for Increased Capability*, ALMA Special Session at the *241st Meeting of the American Astronomical Society*, Seattle, WA, United States, 2023
- "Inferring the Characteristics of Young Planets from High Resolution Protoplanetary Disk Imaging," *The Hidden Newly Born Planets* session at *Europlanet Science Congress 2022*, Granada, Spain, 2022
- "Observational Signatures of Planet-Disk Interactions," *Planet and Binary Formation in Gravitationally Unstable Protoplanetary Discs in the High-Resolution Era,* Leicester, United Kingdom, 2022
- "Rings and Spirals in Protoplanetary Disks: The ALMA View of Planet Formation," Division F meeting (Planetary Systems and Bioastronomy) at the International Astronomical Union General Assembly, Busan, South Korea, 2022
- "Millimeter Observations of Protoplanetary Disks," *The Dynamical and Chemical Connection,* Lorentz Center Workshop, Leiden, Netherlands, 2022
- "An Observational Overview of Substructures in Protoplanetary Disks," *Gaps, Rings, Spirals, and Vortices: Structure Formation in Planet-forming Disks* , Munich Institute for Astro- and Particle Physics workshop, Munich, Germany, 2021 (remote participant)
- "The Millimeter Perspective on Disk Substructures," *Planet-forming Disks: From Surveys to Answers*, Lorentz Center Workshop (virtual), 2021
- "Towards Resolving Terrestrial-Scale Planet Formation," *The Scientific Quest for High Angular Resolution*, ngVLA Special Session at the *235th Meeting of the American Astronomical Society*, Honolulu, HI, 2020
- "Insights into Disk Structures from High Angular Resolution ALMA Observations," *Great Barriers in Planet Formation*, Palm Cove, Australia, 2019
- "The Molecular View of Disk Substructures," *Ringberg Workshop: Turbulence and Structure Formation in Protoplanetary Disks 2019*, Kreuth, Germany, 2019

Contributed talks

- "High Resolution ALMA Observations of Disks in σ Orionis," *New Heights in Planet Formation*, Garching, Germany, 2024

- "Molecular Mapping of the Peculiar DR Tau System," *241st Meeting of the American Astronomical Society*, Seattle, United States, 2023
- "Molecular Mapping of the Peculiar DR Tau System," *NASA Hubble Fellows Symposium*, Baltimore, United States, 2022 (remote participant)
- "Contextualizing Planet Formation: Mapping the Complex Environments of Protoplanetary Disks," *NASA Hubble Fellows Symposium* (virtual), 2021
- "Spiral Structures Traced by CO Emission Around RU Lup and GM Aur," *Five Years After HL Tau* (virtual), 2020
- "Observing Spiral Structures in Protoplanetary Disks," *NASA Hubble Fellows Symposium*, (virtual), 2020
- "The ALMA View of Planet Formation in Disks Around Young Stars," Dissertation talk at the *235th Meeting of the American Astronomical Society*, Honolulu, HI, United States, 2020
- "An Introduction to the Disk Substructures at High Angular Resolution Project," *Planet-forming disks: A workshop to honor Antonella Natta*, Menaggio, Italy, 2019
- "Small-scale Substructures in Protoplanetary Disks," *Boston Area Exoplanets Science Meeting #5*, Boston, MA, United States, 2019
- "High Angular Resolution ALMA Observations of Protoplanetary Disks," *Astrochemistry 2018: Past, Present, and Future*, Pasadena, CA, United States, 2018
- "High Resolution ALMA Observations of Gas and Dust in Protoplanetary Disks," *Star and Planet Formation in the Southwest 2*, Oracle, AZ, United States, 2018
- "High Resolution ALMA Observations of Gas and Dust in Protoplanetary Disks," *Exoplanets and Planet Formation*, Shanghai, China, 2017
- "An ALMA Survey of Deuterium Chemistry in Protoplanetary Disks," *Protoplanetary Discussions*, Edinburgh, United Kingdom, 2016
- "Modeling Linear Molecules as Carriers of the λ5797 Å and λ6613 Å Diffuse Interstellar Bands," *69th International Symposium on Molecular Spectroscopy*, Urbana-Champaign, IL, United States, 2014

COLLOQUIA & SEMINARS

Five College Astronomy Department Colloquium, University of Massachusetts Amherst	*2026*
Chemical & Physical Sciences Colloquium, University of Toronto Mississauga	*2024*
TASTY Seminar, University of Toronto (St. George)	*2024*
Astronomy Colloquium, Pennsylvania State University	*2024*
Summer Science Seminar, Wesleyan University	*2024*
Colloquium, Carnegie Observatories	*2023*
Astrophysics Lunch Seminar, Jet Propulsion Laboratory	*2023*
Astronomy Seminar, Michigan State University	*2022*
Astrophysics Colloquium, Massachusetts Institute of Technology	*2022*
Astronomy Colloquium, Columbia University	*2022*
Astronomy Colloquium, University of California, Berkeley	*2022*
Astro Seminar, Queen's University (Canada) (online)	*2021*
Colloquium, National Radio Astronomy Observatory/University of Virginia	*2021*
Planetary Science Seminar, California Institute of Technology (online)	*2021*
DAO Astronomy Colloquium, NRC Herzberg (online)	*2021*
Astronomy Colloquium, Yale University (online)	*2021*
Astronomy Colloquium, University of California, Berkeley (online)	*2021*
Exoplanet Meeting, University of Cambridge (online)	*2021*
Astrophysics Seminar, University of Leicester (online)	*2020*
Astronomy Seminar, Rice University (online)	*2020*
Tuesday University of Virginia/National Radio Astronomy Observatory Astronomy Lunch Talk (online)	*2020*
Exoplanet Seminar, Yale University	*2020*
AstroCoffee, University of Hawai'i	*2019*
Exoplanets Tea, Massachusetts Institute of Technology	*2019*
Exoplanets Discussion Group, Princeton University	*2019*
CIERA Observational Astronomy Meeting, Northwestern University	*2019*
Center for Integrative Planetary Science Seminar, University of California, Berkeley	*2019*
Origins Seminar, University of Arizona	*2019*

Astro Seminar, Carnegie Earth and Planets Laboratory	*2019*
Astrochemistry Seminar, Leiden University	*2019*
Exoplanets and Disks Seminar, University of Amsterdam	*2019*
Star and Planet Formation Seminar, European Southern Observatory-Garching	*2019*
Astro Seminar, American Museum of Natural History	*2019*
ITC Luncheon, Center for Astrophysics | Harvard & Smithsonian	*2019*
Exoplanet Pizza Lunch, Center for Astrophysics | Harvard & Smithsonian	*2018*
Small-Scale Seminar, Center for Astrophysics | Harvard & Smithsonian	*2016*
AstroStatistics Seminar, Harvard University	*2015*

ADVISING AND MENTORING

Graduate students advised: Sally Jiang (Columbia Astronomy PhD student, 2023-present), Joseph Tang (Columbia Astronomy PhD student, 2025-present), Aware Deshmukh (Columbia Astronomy second-year PhD project, 2025-2026)

Postdocs advised: Shangjia Zhang (NHFP Sagan Fellow at Columbia, 2024-present), Bayron Portilla Revelo (2026-present)

Postbacs advised: Forrest Weintraub (2024-2025)

Undergraduates advised: Mariska Laky (Barnard College, 2026-present), Andrew Li (Columbia College, 2025-present), Tzewa Dingpontsawa (Barnard College, 2025), Catherine Harmon (Barnard College, 2023-2025), Shiqi (Bronco) Yang (Columbia Engineering, 2024-2025), Amelie Sharples (Columbia College, 2022-2023), Xinyue (Lúthien) Liu (University of Michigan, 2021-2023), Feilong Meng (University of Michigan, 2021)

High school students advised (as part of Columbia Engineering the Next Generation): Kailey Liou (2026), Alicia Oladipo (2026), Jeronimo Piqueras (2025), Salvatore Aversano (2025), Asher Johnson (2024)

Committees: Sreejita Das (Ludwig Maximilian University of Munich thesis advisory committee, 2025-present), Thomas Pfeil (Flatiron CCA Postdoc Mentoring Committee, 2024-present), Aware Deshmukh (Columbia Astronomy first-year PhD project committee, 2025), Ben Cassese (Columbia Astronomy second-year PhD project committee and thesis advisory committee, 2023-2025), Daniel Yahalomi (Columbia Astronomy thesis defense committee, 2025), Stephen Coffey (Columbia Astronomy first-year PhD project committee, 2024)

COURSES TAUGHT

ASTRG9003: Research Professional Development Seminar I	*Fall 2023, Fall 2026*
ASTRUN1453: Another Earth	*Spring 2026*
ASTRUN2001: Intro to Astrophysics I	*Fall 2024, Fall 2025*
ASTRUN3105: Exoplanets and Astrobiology	*Spring 2024, Spring 2025*

OUTREACH TALKS AND PANELS

- Guest lecturer, Westchester Amateur Astronomers, June 12, 2026
- Panelist, Columbia University Society for Women Engineers Engineering Exploration Experience, April 12, 2026
- Guest lecturer, ASTRUN2900 (Frontiers of Astrophysics), Columbia University, Nov. 10, 2023; Dec. 6, 2024; Nov. 21, 2025
- Guest lecturer (virtual), Hamptons Observatory, June 12, 2025
- Guest lecturer, Columbia Nevis Laboratories Science-on-Hudson Public Lecture Series, March 13, 2025
- Guest on SETI Live, January 23, 2025
- Guest lecturer (virtual), Amateur Astronomers Association, December 10, 2024
- Guest speaker, "'Tell Me More' with Suzan-Lori Parks," The Glade at Little Island, July 12, 2024
- Virtual Q&A for ASTR 19 (Habitable Planets), Dartmouth University, April 11, 2024
- Guest lecturer, Columbia University Society of Physics Students meeting, March 28, 2024
- Guest lecturer, Science Research Fellows Seminar, Columbia University, November 17, 2023
- "The Worlds Outside Our Solar System" online presentation, Oak Park School District Hoffman Planetarium, Nov. 17, 2021
- "Mapping the Birthplaces of Planets" online presentation, Project Exploration STEM Summer Camp, Aug. 4, 2021
- Guest lecturer, Astro 220 (New Discoveries in Astronomy), University of Michigan, March 11, 2021 and September 29, 2022

- Guest on Weekly Space Hangouts, October 14, 2020
- Astronomy Club online guest lecture, Thomas Jefferson High School for Science and Technology Oct. 7, 2020
- "Ask an Astronomer" online panel, Astronomy at the Beach, Sept. 26, 2020

PROFESSIONAL SERVICE ACTIVITIES

External Service:

National Radio Astronomy Observatory (NRAO) Users Committee	*2024-present*
SOC member, "Disks in Context" conference in Charlottesville, Virginia	*2026*
Textbook chapter reviewer for Cambridge University Press	*2026*
SOC member, "Planet Formation Across Various Environments and Epochs" at Munich Institute for Astro-, Particle and BioPhysics	*2026*
New York Area Exoplanets Meeting I, II, and III organizing committee	*2024-2026*
PRIMA Planet Formation and Exoplanets working group	*2025*
Referee for various journals (*The Astrophysical Journal*, *Astronomy & Astrophysics*, *Nature Astronomy*, *Monthly Notices of the Royal Astronomical Society*, *The Astrophysical Journal Letters*, *Science*)	*2017-present*
Chair of the NRAO Data Management and Software Panel of the Users Committee	*2024-2025*
James Webb Space Telescope Cycles 4 and 5 Telescope Allocation Committee external panelist	*2025-2026*
External assessor for Royal Astronomical Society Research Fellowship	*2025*
James Webb Space Telescope Cycle 3 Telescope Allocation Committee discussion panelist	*2024*
Hubble Space Telescope Cycle 31 Time Allocation Committee discussion panelist	*2023*
CASA Users Committee	*2022-2023*
Grant review panel chair on a NASA research and analysis program	*2022*
Subject-matter expert reviewer in a NASA peer review	*2022*
FONDECYT (Chile's National Fund for Scientific and Technological Development) grant reviewer	*2020*
Grant review panelist on a NASA research and analysis program	*2020*

Departmental/University Service:

Columbia Astronomy Graduate Curriculum Committee	*2025-present*
Columbia Astronomy Department Colloquium Committee (chair 2025-present)	*2024-present*
Provost's Early Career Faculty Advisory Committee	*2026*
Columbia Arts & Sciences Junior Faculty Advisory Board member	*2024-2026*
Columbia Astronomy Graduate Admissions Committee	*2024-2026*
Columbia Astronomy Department faculty search committee	*2023-2024*
University of Michigan Astronomy Department colloquium co-organizer	*2022-2023*

ALL PUBLICATIONS

Underlined names correspond to research group members advised

Manuscripts under review:

3) Viscardi, E., "The VLA Study at High Angular Resolution of Disc Substructures (V-SHARDS) II:. Characterizing the dust content in the rings of GM Aur," submitted to A&A

2) Zhang, S., Ma, X., **Huang, J.**, Zhu, Z. & Casassus, S., "Thermal Response of Dust and Gas to Shadows in Protoplanetary Disks I: A Beta-Cooling Framework," submitted to AAS Journals

1) Czekala, I. et al. (including **J. Huang**), "Million Points of Light (MPoL): a PyTorch library for radio interferometric imaging and inference," submitted to Journal of Open Source Software

Refereed publications as lead author or advisor:

16) Jiang, S. D., **Huang, J.** et al., 2026, "Physical and Chemical Characterization of GY 91's Multi-ringed Protostellar Disk with ALMA," ApJ, 1000, 35

15) **Huang, J.** et al. 2025, "Grand Design Spiral Arms in the Compact, Embedded Protoplanetary Disk of Haro 6-13," ApJ, 988, 106

14) **Huang, J.** et al. 2024, "High Resolution ALMA Observations of Richly Structured Protoplanetary Disks in σ Orionis," ApJ, 976, 132

13) **Huang, J.** et al. 2024, "Constraints on the gas-phase C/O ratio of DR Tau's outer disk from CS, SO, and C_2H observations," ApJ, 973, 135

12) **Huang, J.** et al. 2023, "Molecular Mapping of DR Tau's Protoplanetary Disk, Envelope, Outflow, and Large-Scale Spiral Arm," ApJ, 943, 107

11) **Huang, J.** et al. 2022, "Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): A Panchromatic View of DO Tau's Complex Kilo-astronomical-unit Environment," ApJ, 930, 171

10) **Huang, J.** et al. 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) XIX. Spiral arms, a tail, and diffuse structures traced by CO around the GM Aur disk," ApJS, 257, 19

9) **Huang, J.** et al. 2020, "Large-scale CO Spirals and Complex Kinematics Associated with the T Tauri Star RU Lup," ApJ, 898, 140

8) **Huang, J.** et al. 2020, "A Multi-Frequency ALMA Characterization of Substructures in the GM Aur Protoplanetary Disk," ApJ, 891, 48

7) **Huang, J.** et al. 2018, "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," ApJL, 869, L43

6) **Huang, J.** et al. 2018, "The Disk Substructures at High Angular Resolution Project (DSHARP). II. Characteristics of Annular Substructures," ApJL, 869, L42

5) **Huang, J.** et al. 2018, "CO and Dust Properties in the TW Hya Disk From High-Resolution ALMA Observations," ApJ, 852, 122

4) **Huang, J.** et al. 2017, "An ALMA Survey of DCN/$H^{13}CN$ and $DCO^+/H^{13}CO^+$ in Protoplanetary Disks," ApJ, 835, 231

3) **Huang, J.**, Öberg, K. I., and Andrews, S. M. 2016, "Evidence of a CO Desorption Front in the Outer AS 209 Disk," ApJL, 823, L18

2) **Huang, J.** and Oka, T., 2015, "Constraining the Size of the Carrier of the λ5797.1 Diffuse Interstellar Band," Mol. Phys., 113, 2159-2168

1) **Huang, J.** and Öberg, K. I., 2015, "Detection of N_2D^+ in a protoplanetary disk," ApJL, 809, 26

Refereed publications as major contributor:

12) Galloway-Sprietsma, M., Bae, J., Phillips, T., **Huang, J.**, Benisty, M., Porter, M., Ginski, C., and Winter, A., 2026, "A Streamer Driving Misalignment in the Circumtriple Disk of GW Ori," AJ, 172, 138

11) Loomis, R. A. et al. (including **J. Huang**), 2025, "exoALMA II: Data Calibration and Imaging Pipeline," ApJL, 984, 7

10) Zhang, Y., Ginski, C., **Huang, J.** et al. 2023, "Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): Diverse outcomes of binary-disk interactions," A&A, 672, 145

9) Teague, R., Law, C. J., **Huang, J.**, & Meng, F., 2021, "disksurf: Extracting the 3D Structure of Protoplanetary Disks," Journal of Open Source Software, 6(67), 3827

8) Czekala, I. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) II. CLEAN Strategies for Synthesizing Images of Molecular Line Emission in Protoplanetary Disks," ApJS, 257, 2

7) Ginski, C., Facchini, S., **Huang, J.** et al. 2021, "Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): Late Infall Causing Disk Misalignment and Dynamic Structures in SU Aur," ApJL, 908, 25

6) Isella, A., **Huang, J.** et al. 2018, "The Disk Substructures at High Angular Resolution Project (DSHARP). IX. A high definition study of the HD 163296 planet forming disk," ApJL, 869, L49

5) Guzmán, V. V., **Huang, J.**, et al. 2018, "The Disk Substructures at High Angular Resolution Project (DSHARP). VIII. The Rich Ringed Substructures in the AS 209 Disk," ApJL, 869, L48

4) Zhang, S., Zhaohuan, Z., **Huang, J.** et al. 2018, "The Disk Substructures at High Angular Resolution Project (DSHARP). VII. The Planet-Disk Interactions Interpretation," ApJL, 869, L47

3) Dullemond, C. P., Birnstiel, T., **Huang, J.** et al. 2018, "The Disk Substructures at High Angular Resolution Project (DSHARP). VI. Dust trapping in thin-ringed protoplanetary disks," ApJL, 869, L46

2) Andrews, S. M., **Huang, J.** et al. 2018, "The Disk Substructures at High Angular Resolution Project (DSHARP). I. Motivation, Sample, Calibration, and Overview," ApJL, 869, L41

1) Guzmán, V. V., Öberg, K. I., **Huang, J.** et al. 2017, "Nitrogen Fractionation in Protoplanetary Disks from the $H^{13}CN/HC^{15}N$ Ratio," ApJ, 836, 30

Additional refereed publications as contributing author:

104) Long, D. et al. (including **J. Huang**), 2026,"Mapping Molecular Ion Distributions in a Diverse Sample of Protoplanetary Disks," ApJ, 1010, 171

103) Cugno, G. et al (including **J. Huang**), 2026, "JWST/MIRI Imaging Search for Kinematically Detected Protoplanetary Candidates," AJ, 172, 259

102) Zhang, K. et al. (including **J. Huang**), 2026, "The JDISC Survey: Inner Disk Chemistry of Class I/FS Disks and Tentative Evidence for Early Pebble Drift," AJ, 172, 156

101) Narang, M. et al. (including **J. Huang**), 2026, "Characterizing the Extended Molecular Hydrogen Winds in Protoplanetary Disks from the JWST Disk Infrared Spectroscopic Chemistry Survey (JDISCS)," ApJ, 1004, 188

100) Garufi, A. et al. (including **J. Huang**), 2026, "Planet-forming disks and their environment across regions and time from the full NIR census," A&A, 709, A269

99) Yamato, Y. et al. (including **J. Huang**), 2026, "Compact Hydrogen Sulfide Emission Indicates Sulfur-bearing Ice Sublimation in the Inner Disk of HD 163296," ApJ, 1003, 64

98) Fukagawa, M. et al. (including **J. Huang**), 2026, "exoALMA XXII: A Two-dimensional Atlas of Deviations from Keplerian Disks," ApJL, 1000, 15

97) Benisty, M. et al. (including **J. Huang**), 2026, "exoALMA XXI: The Morphology and Dynamics of Vertical Flows," ApJL, 1000, 14

96) Izquierdo, A. et al. (including **J. Huang**), 2026, "exoALMA XX: Tomographic Detection of Embedded Planets in Protoplanetary Disks," ApJL, 1000, 13

95) De, K. et al. (including **J. Huang**), 2026, "Fading into darkness: A weak mass ejection and low-efficiency fallback accompanying black hole formation in M31-2014-DS1," ApJL, 999, 25

94) Armitage, T. et al. (including **J. Huang**), 2026, "Tracing Pebble Drift History in Two Protoplanetary Disks with CO Enhancement," ApJ, 998, 308

93) Mallaney, P. J. et al. (including **J. Huang**), 2026, "Protoplanetary disk cavities with JWST-MIRI: a dichotomy in molecular emission," ApJ, 998, 255

92) Hardiman, C. et al. (including **J. Huang**), 2026, "exoALMA XIX: Confirmation of non-thermal line broadening in the DM Tau protoplanetary disk," ApJL, 997, L47

91) Cugno, G. et al. (including **J. Huang**), 2025, "Direct Measurement of Extinction in a Planet-Hosting Gap," AJ, 170, 317

90) Romero-Mirza, C. et al. (including **J. Huang**), 2025, "JWST-MIRI Observations of the Irradiated Chemistry in the Inner Disk Cavity of GM Aur," ApJ, 991, 128

89) Krijt, S. et al. (including **J. Huang**), "Cosmic cascades: How disk substructure regulates the flow of water to inner planetary systems," ApJL, 990, 72

88) Zagaria, F. et al. (including **J. Huang**), 2025, "SO emission in the dynamically perturbed protoplanetary disks around CQ Tau and MWC 758," ApJ, 989, 30

87) Fadul, A. et al. (including **J. Huang**), 2025, "A Deep Search for Ethylene Glycol and Glycolonitrile in the V883 Ori Protoplanetary Disk," ApJL, 988, L44

86) Ginski, C. et al. (including **J. Huang**), 2025, "Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): Evidence for planet-disk interaction in the MASSJ16120668-3010270 system?," A&A, 699, A237

85) Arulanantham, N. et al. (including **J. Huang**), 2025, "The JDISC Survey: Linking the physics and chemistry of inner & outer protoplanetary disk zones," AJ, 170, 67

84) Fadul, A. et al. (including **J. Huang**), 2025, "A deep search for complex organic molecules toward the protoplanetary disk of V883 Ori," AJ, 169, 307

83) Uyama, T. et al. (including **J. Huang**), 2025, "JWST/NIRCam Coronagraphic Search for Hidden Planets in the HD 163296 Protoplanetary Disk," AJ, 169, 287

82) Wölfer, L. et al. (including **J. Huang**), 2025, "exoALMA XVII: Characterizing the Gas Dynamics Around Dust Asymmetries," ApJL, 984, L22

81) Barazza-Alfaro, M. et al. (including **J. Huang**), 2025, "exoALMA XVI: Predicting signatures of large-scale turbulence in protoplanetary disks," ApJL, 984, L21

80) Rosotti, G. et al. (including **J. Huang**), 2025, " exoALMA XV: Interpreting the height of CO emission layer," ApJL, 984, L20

79) Yoshida, T. et al. (including **J. Huang**), "exoALMA XIV. Gas Surface Densities in the RX J1604.3-2130 A Disk from Pressure-broadened CO Line Wings," ApJL, 984, L19

78) Trapman, L. et al. (including **J. Huang**), 2025, "exoALMA XIII: gas masses from N_2H^+ and $C^{18}O$: a comparison of protoplanetary gas disk mass measurement techniques," ApJL, 984, L18

77) Longarini, C. et al. (including **J. Huang**), 2025, "exoALMA XII: Weighing and sizing exoALMA disks with rotation curve modelling," ApJL, 984, L17

76) Gardner, C. et al. (including **J. Huang**), 2025, "exoALMA XI: ALMA Observations and Hydrodynamic Models of LkCa 15: Implications for Planetary Mass Companions in the Dust Continuum Cavity," ApJL, 984, L16

75) Pinte, C., Ilee, J. D., **Huang, J.** et al. 2025, "exoALMA X: channel maps reveal complex ^{12}CO abundance distributions and a variety of kinematic structures with evidence for embedded planets," ApJL, 984, L15

74) Zawadzki, B. et al. (including **J. Huang**), 2025, "exoALMA IX: Regularized Maximum Likelihood Imaging of Non-Keplerian Features," ApJL, 984, L14

73) Hilder, T. et al. (including **J. Huang**), 2025, "exoALMA VIII: Probabilistic super-resolution moment maps and data products using non-parametric linear models," ApJL, 984, L13

72) Bae, J. et al. (including **J. Huang**), 2025, "exoALMA VII. Benchmarking Hydrodynamics and Radiative Transfer Codes," ApJL, 984, L12

71) Stadler, J. et al. (including **J. Huang**), 2025, "exoALMA VI: Rotating under Pressure: Rotation curves, azimuthal velocity substructures and pressure variations," ApJL, 984, L11

70) Galloway-Sprietsma, M. et al. (including **J. Huang**), 2025, "exoALMA V: Emission Surfaces and Temperature Structures," ApJL, 984, L10

69) Curone, P. et al. (including **J. Huang**), 2025, "exoALMA IV: Substructures, Asymmetries, and the Faint Outer Disk in Continuum Emission,", ApJL, 984, L9

68) Izquierdo, A. et al. (including **J. Huang**), 2025, " exoALMA III: Line-intensity modelling and radial profile extraction from protoplanetary discs," ApJL, 984, L8

67) Teague, R. et al. (including **J. Huang**), 2025, "exoALMA I: Science Goals, Project Design and Data Products", ApJL, 984, L6

66) Yamato, Y. et al. (including **J. Huang**), 2024, "Detection of Dimethyl Ether in the MWC 480 Protoplanetary Disk," ApJ, 974, 83

65) Long, D. et al. (including **J. Huang**), 2024, "Exploring the Complex Ionization Environment of the Turbulent DM Tau Disk," ApJ, 972, 88

64) Carvalho, A. S. et al. (including **J. Huang**), 2024, "A Dust-Trapping Ring in the Planet-Hosting Disk of Elias 2-24," ApJ, 971, 129

63) Derkink, A. et al. (including **J. Huang**), 2024, "Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): PDS 111, an old T Tauri star with a young-looking disk," A&A, 688, 149

62) Andrews, S. M. et al. (including **J. Huang**), 2024, "On Kinematic Measurements of Self-Gravity in Protoplanetary Disks," ApJ, 970, 153

61) Tanious, M. et al. (including **J. Huang**), 2024, "Anatomy of the Class I protostar L1489 IRS with NOEMA: disk, streamers, outflow(s) and bubbles at 3mm," A&A, 687, 92

60) Valegård, Per-Gunnar (including **J. Huang**), 2024, "The SPHERE view of the Orion star-forming region,", A&A, 685, 54

59) Garufi, A. et al. (including **J. Huang**), 2024, "The SPHERE View of the Taurus Star-Forming Region,", A&A, 685, 53

58) Ginski, C. et al. (including **J. Huang**), 2024, "The SPHERE view of the Chamaeleon I star-forming region,", A&A, 685, 52

57) Muñoz-Romero, C. et al. (including **J. Huang**), 2024, "JWST-MIRI Spectroscopy of Warm Molecular Emission and Variability in the AS 209 Disk," ApJ, 964, 36

56) Miley, J. et al. (including **J. Huang**), 2024, "High-resolution ALMA observations of compact discs in the wide-binary system Sz 65 and Sz 66," A&A, 682, A55

55) Galloway-Sprietsma, M. et al. (including **J. Huang**), 2023, "Molecules with ALMA at Planet-forming Scales (MAPS). Complex Kinematics in the AS 209 Disk Induced by a Forming Planet and Disk Winds," ApJ, 950, 147

54) Law, C. J. et al. (including **J. Huang**), 2023, "Mapping Protoplanetary Disk Vertical Structure with CO Isotopologue Line Emission," ApJ, 948, 60

53) Pegues, J. et al. (including **J. Huang**), 2023, "An SMA Survey of Chemistry in Disks around Herbig AeBe Stars," ApJ, 948, 57

52) Muñoz-Romero, C. et al. (including **J. Huang**), 2023, "Cold Deuterium Fractionation in the Nearest Planet-Forming Disk," ApJ, 943, 35

51) Calahan, J. et al. (including **J. Huang**), 2023, "UV-driven Chemistry as a Signpost for Late-Stage Planet Formation," Nature Astronomy, 7, 49

50) Pinilla, P. et al. (including **J. Huang**), 2022, "The Distributions of Gas, Small-, and Large-grains in the LkHα 330 Disk Trace a Young Planetary System," A&A, 665, 128

49) Long, F. et al. (including **J. Huang**), 2022, "ALMA Detection of Dust Trapping around Lagrangian Points in the LkCa 15 Disk," ApJL, 937, 1

48) Teague, R. et al. (including **J. Huang**), 2022, "Mapping the Complex Kinematic Substructure in the TW Hya Disk," ApJ, 936, 163

47) Bae, J. et al, (including **J. Huang**), 2022, "Molecules with ALMA at Planet-forming Scales (MAPS). XXI. A Circumplanetary Disk Candidate in Molecular Line Emission in the AS 209 Disk," ApJL, 934, L20

46) Law, C. J. et al. (including **J. Huang**), 2022, "CO Line Emission Surfaces and Vertical Structure in Mid-Inclination Protoplanetary Disks,", ApJ, 932, 114

45) Teague, R. et al. (including **J. Huang**), 2022, "Gas and Dust Shadows in the TW Hydrae Disk," ApJ, 930, 144

44) Martín-Domenéch, R. et al. (including **J. Huang**), 2021, "Hot corino chemistry in the Class I binary source Ser-emb 11," ApJ, 923, 155

43) Schwarz, K. R. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) XX. The Massive Disk Around GM Aurigae," ApJS, 257, 20

42) Teague, R. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) XVIII. Kinematic Substructure in the Disks of HD 163296 and MWC 480," ApJS, 257, 18

41) Calahan, J. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) XVII. Determining the 2D Thermal Structure of HD 163296," ApJS, 257, 17

40) Booth, A. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) XVI. Characterising the Impact of the Molecular Wind on the Evolution of the HD 163296 System," ApJS, 257, 16

39) Bosman, A. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) XV. Tracing Proto-planetary Disk Structure within 20 au," ApJS, 257, 15

38) Sierra, A. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) XIV. Revealing Disk Substructures in Multi-wavelength Continuum Emission," ApJS, 257, 14

37) Aikawa, Y. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) XIII. HCO^+ and Disk Ionization," ApJS, 257, 13

36) Le Gal, R. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) XII. Inferring the C/O and S/H Ratios in Protoplanetary Disks with Sulfur Molecules," ApJS, 257, 12

35) Bergner, J. B. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) XI. CN and HCN as Tracers of Photochemistry in Disks," ApJS, 257, 11

34) Cataldi., G. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) X. Distributions of Deuterated Molecules," ApJS, 257, 10

33) Ilee, J. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) IX. Distribution and Properties of the Large Organic Molecules HC_3N, CH_3CN, and *c*-C3H2," ApJS, 257, 9

32) Alarcón, F. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) VIII. Gap Chemistry in AS 209 : Gas Depletion or Chemical processing?," ApJS, 257, 8

31) Bosman, A. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) VII. Sub-stellar O/H and C/H and super-stellar C/O in Planet Feeding Gas," ApJS, 257, 7

30) Guzmán, V. V. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) VI. Distribution of the Small Organics HCN, C_2H, and H_2CO," ApJS, 257, 6

29) Zhang, K. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) V. CO Gas Distributions," ApJS, 257, 5

28) Law, C. J. et al.(including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) IV. Emission Surfaces and Vertical Distribution of Molecules," ApJS, 257, 4

27) Law, C. J. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) III. Characteristics of Radial Chemical Substructures," ApJS, 257, 3

26) Öberg, K. I. et al. (including **J. Huang**), 2021, "Molecules with ALMA at Planet-forming Scales (MAPS) I. Program Overview and Highlights," ApJS, 257, 1

25) Andrews, S. M. et al. (including **J. Huang**), 2021, "Limits on Millimeter Continuum Emission from Circumplanetary Material in the DSHARP Disks," ApJ, 916, 51

24) Pegues, J. et al. (including **J. Huang**), 2021, "An ALMA Survey of Chemistry in Disks around Low-Mass M-Stars," ApJ, 911, 150

23) Cleeves, L. I. et al. (including **J. Huang**), 2021, "The TW Hya Rosetta Stone Project IV: A Hydrocarbon Rich Disk Atmosphere," ApJ, 911, 29

22) Macías, E. et al. (including **J. Huang**), 2021, "Characterizing the dust content of disk substructures in TW Hya," A&A, 648, A33

21) Jorquera, S. et al. (including **J. Huang**), 2021, "A search for companions via direct imaging in the DSHARP planet-forming disks," AJ, 161, 146

20) Pegues, J. et al. (including **J. Huang**), 2021, "Dynamical Masses and Stellar Evolutionary Model Predictions of M-Stars," ApJ, 908, 42

19) Calahan, J. et al. (including **J. Huang**), 2021, "The TW Hya Rosetta Stone Project III: Resolving the Gaseous Thermal Profile of the Disk," ApJ, 908, 8

18) Terwisscha van Scheltinga, J. (including **J. Huang**), 2021, "The TW Hya Rosetta Stone Project II: Spatially Resolved Emission of Formaldehyde Hints at Low-temperature Gas-phase Formation," ApJ, 906, 111

17) Öberg, K. I. et al. (including **J. Huang**), 2021, "The TW Hya Rosetta Stone Project I: Radial and Vertical Distributions of DCN and DCO^+," AJ, 161, 38

16) Ginski, C. et al. (including **J. Huang**), 2020, "Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): A Close Low Mass Companion to ET Cha?," A&A, 642, A119

15) Le Gal, R., Öberg, K. I., **Huang, J**. et al. 2020, "A 3 mm Chemical Exploration of Small Organics in Class I YSOs," ApJ, 898, 131

14) Bergner, J. B. et al. (including **J. Huang**), 2020, "An Evolutionary Study of Volatile Chemistry in Protoplanetary Disks," ApJ, 898, 97

13) Loomis, R. A. et al. (including **J. Huang**), 2020, "An Unbiased ALMA Spectral Survey of the LkCa 15 and MWC 480 Protoplanetary Disks," ApJ, 893, 101

12) Pegues, J. et al. (including **J. Huang**), 2020, "An ALMA Survey of H_2CO in Protoplanetary Disks," ApJ, 890, 142

11) Pinte, C. et al. (including **J. Huang**), 2020, "Nine Localized Deviations from Keplerian Rotation in the DSHARP circumstellar disks: Kinematic Evidence for Protoplanets Carving the Gaps," ApJL, 890, L9

10) Teague, R., Bae, J., **Huang, J.**, & Bergin, E. A., 2019, "Spiral Structure in the Gas Disk of TW Hya," ApJL, 884, L56

9) Anderson, D. E. et al. (including **J. Huang**), 2019, "Probing the Gas Content of Late-Stage Protoplanetary Disks with N_2H^+," ApJ, 881, 127

8) Zhu, Z. et al. (including **J. Huang**), 2019, "One Solution to the Mass Budget Problem for Planet Formation: Optically Thick Disks with Dust Scattering," ApJL, 877, L18

7) Pérez, L. M. et al. (including **J. Huang**), 2018, "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 HD143006," ApJL, 869, L50

6) Birnstiel, T. et al. (including **J. Huang**), 2018, "The Disk Substructures at High Angular Resolution Project (DSHARP). V. Interpreting ALMA maps of protoplanetary disks in terms of a dust model," ApJL, 869, L45

5) Kurtovic, N. T. et al. (including **J. Huang**), 2018, "The Disk Substructures at High Angular Resolution Project (DSHARP). IV. Characterizing substructures and interactions in disks around multiple star systems," ApJL, 869, L44

4) Cleeves, L. I. et al. (including **J. Huang**), 2018, "Constraining Gas-phase Carbon, Oxygen, and Nitrogen in the IM Lup Protoplanetary Disk," ApJ, 865, 155

3) Loomis, R. A. et al. (including **J. Huang**), 2018, "Detecting Weak Spectral Lines in Interferometric Data Through Matched Filtering," AJ, 155, 182

2) Öberg, K. I. et al. (including **J. Huang**), 2017, "H_2CO Distribution and Formation in the TW Hya Disk," ApJ, 839, 43

1) Cleeves, L. I. et al. (including **J. Huang**), 2016, "The Coupled Physical Structure of Gas and Dust in the IM Lup Protoplanetary Disk," ApJ, 823, 110

Non-refereed publications:

5) Tabone, B. et al. (including **J. Huang**), 2025, "The PRIMA View on Hydrocarbons in Planet-Forming Disks," *PRIMA GO Science Book Vol. 2*, 95

4) Ballering, N. et al. (including **J. Huang**), 2025, "Protoplanetary Disk Ices," *PRIMA GO Science Book Vol. 2*, 60

3) Ballering, N. et al. (including **J. Huang**), 2025, "Dust Mineralogy in Protoplanetary and Debris Disks," *PRIMA GO Science Book Vol. 2*, 59

2) Abrams, N. et al. (including **J. Huang**), 2020, "Measured Light Curves and Rotational Periods of 3122 Florence, 3830 Trelleborg and (131077) 2000 YH105," *The Minor Planet Bulletin*, 47, 3

1) Cleeves, L. I. et al. (including **J. Huang**), 2019, "Realizing the Unique Potential of ALMA to Probe the Gas Reservoir of Planet Formation," Astro2020: Decadal Survey on Astronomy and Astrophysics, science white papers; Bulletin of the American Astronomical Society, 51, 81