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## RESEARCH INTERESTS

Revealing how feedback propagates across scales to shape the cosmic baryon cycle.

*Keywords:* Galaxy formation & evolution; Reionization; Intergalactic medium (IGM); Quasars; AI×JWST

## EDUCATION

- Mar. 2024 **Ph.D. in Physics**; University of California, Riverside  
*Constraining the IGM during the Later Stages of Reionization using QSO Spectra*  
Advisor: Prof. George Becker
- Dec. 2019 M.Sc. in Physics; University of California, Riverside
- Jun. 2018 B.Sc. in Astronomy; University of Science and Technology of China  
*Testing Gravity Theories on Galactic Scales.* Advisor: Prof. Xiao-Bo Dong

## RESEARCH POSITIONS

- **JASPER Scholar**, University of Arizona 2025–  
Mentors: Prof. Eiichi Egami & Prof. Xiaohui Fan  
Leading NIRCam/WFSS analysis in JWST SAPPHIRES quasar fields; investigating gas–galaxy interactions across scales using JWST and machine learning.
- **Postdoctoral Research Associate**, University of Arizona 2024–  
Mentors: Prof. Marcia Rieke & Prof. George Rieke  
Member of JWST NIRCam Science Team and MIRI U.S. Team.  
Led the first systematic search for galaxies with extended line emission and outflow candidates using deep NIRCam medium-band imaging and machine learning.  
Leading SMILES (JWST-GTO-1207) NIRSpec public data release and multi-band NIRCam photometry analysis of galaxies.  
Leading reduction and analysis of a large JWST/NIRSpec MSA dataset targeting cosmic-noon galaxies and obscured AGN.
- **Graduate Student Researcher**, UC Riverside 2019–2024  
Mentor: Prof. George Becker  
Led Keck and ALMA observations of the IGM via high- $z$  quasars; modeled the Ly $\alpha$  and Ly $\beta$  forest using cosmological simulations.  
Provided robust evidence that reionization ended significantly later than previously assumed.

- **Peer Reviewer:** *The Astrophysical Journal*, *ApJ Letters*, *JCAP*, *Open Research Europe*; ALMA and Gemini telescope proposals
- **Major Collaborations:** JWST (JADES, SAPPHIRES, COSMOS-3D, EREBUS), Roman Science Collaboration, XQR-30

## OBSERVING EXPERIENCE & PROPOSAL INVOLVEMENT

\*PI/lead<sup>†</sup>

### Selected recent projects (PI or lead):

- \*MMT-6.5m/Binospec IFU – 2025B: *Spatially Resolved Ly $\alpha$  Spectroscopy of a  $z = 5.5$  Quasar with Strong Cold Outflows*
- \*ALMA – Cycle 11: *Galaxy Over/Underdensities Around IGM Transmission at  $z = 5.7$ : A Robust Constraint on Reionization*
- \*MMT-6.5m/Binospec IFU – 2024B: *Ionization and Enrichment in the Reionization Epoch: A Pilot Study with Binospec IFU*
- \*ALMA – Cycle 9: *The Mean Free Path of Ionizing Photons at  $z = 5.6$ : A Robust Constraint on Reionization*
- JWST/NIRCam WFSS – Cycle 2: *How Does Reionization End? A Search for [O III] Emitters in the Most Transparent Regions of the IGM Near Redshift Six* (PI: Becker) **Zhu**, et al. 2025, arXiv:2510.09568
- <sup>†</sup>Keck/ESI [2021B\_U036, 2022A\_U035, 2022B\_U042, 2023B\_U049, 2024A\_U281]: *The Mean Free Path at  $z = 5.6$ : Insights into Ultra-Late Reionization*

### Selected earlier allocations:

- Keck/ESI [2019A\_U014, 2020A\_U121, 2021A\_U039]: *Giant Ly $\alpha$  Troughs at  $z < 6$ : A Signature of Very Late Reionization?* **Zhu**, et al. 2021, ApJ, 923, 223; **Zhu**, et al. 2022, ApJ, 932, 76
- Keck/LRIS [2019A\_U147, 2019B\_U147]: *The Mean Free Path at  $z = 5$ : A Key Constraint on Reionization Models* Becker et al. 2021; **Zhu**, et al. 2023, ApJ, 955, 115

Other allocations include:

Keck/ESI [2021A, 2021B], Keck/DEIMOS [2020A], Keck/LRIS [2023B], Subaru/HSC [2020B, 2021A, 2021B, 2023B]

<sup>†</sup> UC students cannot serve as Keck PIs; proposals were written and led by the author.

### Additional JWST Programs as Co-I:

- **8544** – Rest-Frame Optical Nebular Emission Lines at Cosmic Dawn (MIRI/LRS Follow-Up for JADES-GS-z14-0)

- **8060** – JWST Multi-Cycle Deep Transient Survey in GOODS-S
- **8018** – DIVER: Deep Insights into UV Spectroscopy at the Epoch of Reionization
- **7935** – Measuring the Emergence Rate of AGN in Legacy Deep Fields
- **7436** – The Last Neutral Islands at the End of Reionization? (Dark Gaps in IGM Transmission at  $z \sim 5.3$ )
- **7390** – Pair-Instability Supernovae and the Triply-Lensed MACS0647-JD at  $z = 10.17$
- **7345** – Dragon Survey: Early Stellar Luminosity Function via Microlensing at  $z = 0.73$
- **7336** – NIRCcam/WFSS R~2500 IFU Commissioning (Hubble Ultra Deep Field)
- **7335** – Ionized Bubble Around a Normal Galaxy at  $z = 6$ : “Forever Blowing Bubbles”

## SELECTED GRANTS & AWARDS

- NSF Astronomy and Astrophysics Postdoctoral Fellowship, under review 2025
- NSF / NRAO Student Observing Support Award (\$40,000) 2023
- UCR Dissertation Year Award (HEERF Program; \$7,200) 2022
- Benjamin C. Shen Memorial Award for Outstanding First-Year Graduate Researcher, UCR 2019
- Dean’s Distinguished Fellowship, UC Riverside 2018
- Xingquan Fund Scholarship, University of Science and Technology of China (USTC) 2017
- Outstanding Student Scholarship, USTC 2015, 2017
- **Student PI**, CAS Undergraduate Research Award:  
*“Properties of Barred Galaxies in Numerical Simulations”* (1 yr, CNY 10,000) 2017
- First Prize, China Undergraduate Physics Tournament (USTC Region) 2016
- **Student PI**, National Undergraduate Research Awards: 2015–2017
  - NSFC Talented Students in Basic Sciences Program (2 yr, CNY 20,000)
  - CAS Innovation Training Program (1 yr, CNY 10,000)  
*“Testing Gravity Theories on Galactic Scales”*

## SELECTED INVITED TALKS & CONFERENCE PRESENTATIONS \* invited

- \* Star-Forming Galaxies in the Reionization Epoch, Japan upcoming
- Galaxy Origins in the JWST Era, Toledo May 2025
- JWST NIRCcam Science Meeting, Biosphere 2 March 2025

- \* NOIRLab Joint Colloquium, **University of Arizona** February 2025
- \* Cosmology Seminar, **Arizona State University** February 2025
- Lyman-alpha Forest Workshop, **Ohio State University** October 2024
- JWST MIRI Science Meeting, Biosphere 2 October 2024
- The First Gigayear(s), Hilo, Hawai'i September 2024
- JADES Collaboration Meeting, **University of Copenhagen** April 2024
- \* Galaxy Group Talk, **University of Arizona** March 2024
- \* Galaxy Seminar, **University of Michigan** November 2023
- Galaxy Formation and Evolution in Southern California September 2023
- \* Kashiwa-Mitaka Meeting (KMM) Seminar, **University of Tokyo** August 2023
- \* Lightning Talk, First Light Conference, **MIT** June 2023
- Reionisation in the Summer Conference, **MPIA**, Heidelberg June 2023
- \* Galaxy Formation Group, **Northwestern University (CIERA)** December 2022
- \* FLASH Seminar, **UC Santa Cruz** November 2022
- \* Astronomy Lunch Talk, **UC Los Angeles** October 2022
- \* Astro Lunch Talk, **UC Santa Barbara** September 2022
- Reionization on a Blackboard Workshop, **CCA** September 2022
- \* Special arXiv Coffee, **UC Davis** May 2022
- \* Physics & Astronomy Seminar, **UC Riverside** April 2022
- \* High-z Group Talk, **Tsinghua University** April 2022
- Reionization and Cosmic Dawn, **UC Berkeley** March 2022
- European Astronomical Society Annual Meeting (EAS 2021) July 2021
- Summer All Zoom Epoch of Reionization Conference June 2021
- \* EURECA Seminar, **University of Arizona** February 2021

## MENTORING & TEACHING

- **Teaching Assistant**, UC Riverside 2018–2019, 2023  
Taught intensive PhD summer review course (Comprehensive Exam prep).  
*Topics: Classical Mechanics, E&M, Thermo & Stat Mech*  
Led undergraduate general physics labs.
- **Teaching Assistant**, USTC 2016  
Taught introductory programming in C/C++, including data structures and algorithms.

- **Graduate Students (Research Mentor)** 2025–  
Ms. Zheng Ma, Mr. Junyu Zhang (University of Arizona)
- **Undergraduate Students (Research Mentor)**
  - Mr. Suprabhas Narisetty (University of Arizona) 2025–  
Project: NIRSpec observations of cosmic-noon galaxies
  - Ms. G. Hernandez (UC Riverside) 2021  
Project: Evolution of IGM effective optical depth
- **Graduate Peer Mentoring**
  - Mr. Seyedazim Hashemi (PhD student, UC Riverside)  
Project: Lyman-alpha visibility during reionization
- **UCR International Students & Scholars Office** 2021–2023  
Mentored 14 international graduate students (career and academic guidance)
- **UCR Graduate Student Mentorship Program (GSMP)** 2020  
Mentored two junior PhD students across STEM fields:  
Dr. N. Ahvazi (Dark matter & galaxies); Dr. Q. Wu (2D materials)

## SERVICE & OUTREACH

- Session Chair, AAS 247 January, 2026
- Chambliss Judge for student poster competition, AAS 247 January, 2026
- Instructor, *Galactic Adventures*, Flandrau Science Center & Planetarium June 2025
- Stargazing outreach event, Home Gardens Library (Corona, CA) October 2023
- Co-organizer, UCR Physics & Astronomy Student Seminar 2022–2023
- Instructor, UCR Camp Highlander Summer 2022
- Designed and taught outreach courses for K–12 students 2022
  - *Multiwavelength Universe, Gravity Simulator*
- Virtual Stargazing (UCR & Riverside Astronomical Society): monthly live public outreach on YouTube 2020–2021
- Science fair judge, Riverside County Science and Engineering Fair 2021–2023
- UCR Astronomy Public Outreach: Mercury Transit November 2019

## OPEN SCIENCE & COMMUNITY RESOURCES

- **SMILES NIRSpec HLSP (JWST-GTO-1207)**: Lead developer of the public high-level data release including 1D/2D spectra and derived galaxy catalogs.  
GitHub: [github.com/ydzhuastro/smiles\\_dr2](https://github.com/ydzhuastro/smiles_dr2) & MAST HLSP doi:10.17909/et3f-zd57

- **Tutorial: Galaxy Morphology × Machine Learning** February 2025  
Introducing morphology classification and neural network tools for students.  
[EURECA Tutorial PDF](#)

## SELECTED MEDIA COVERAGE

- “Astronomers Discover a Unique Quasi-Stellar Object-Dusty Star-Forming Galaxy System,” **Phys.org**
- “The End of the Cosmic Dawn: Settling a Two-Decade Debate,” **SciTechDaily**
- “Can You Explain These Long, Dark Gaps in Your Cosmological Resume?” **AAS Nova**
- “Intergalactic Impacts of Quasars During the Epoch of Reionization” **AAS Nova**

## YONGDA ZHU - PUBLICATION LIST

ORCID: [0000-0003-3307-7525](https://orcid.org/0000-0003-3307-7525)

ADS link: <https://ui.adsabs.harvard.edu/search/q=orcid%3A0000-0003-3307-7525>

Google Scholar: <https://scholar.google.com/citations?user=wDrSZWYAAAAJ>

**Citation Metrics** (as of Jan 2026):

Total citations: 2800+ | First-author citations: 360+ | h-index: 31 | First-author papers: 13

First-author:

13. **Zhu, Y.**, Rieke, M. J., Ji, Z., Bunker, A. J., Carreira, C., Danhaive, A. L., Duan, Q., Egami, E., Eisenstein, D. J., Hainline, K., Johnson, B. D., Ma, Z., Puskás, D., Rieke, G. H., Rinaldi, P., Robertson, B., Tacchella, S., Übler, H., Villanueva, N. C., Williams, C. C., Willmer, C. N. A., Wu, Z., and Zhang, J., **2026**. *Clump-like Structures in High-Redshift Galaxies: Mass Scaling and Radial Trends from JADES*, arXiv e-prints, arXiv:2601.15965.
12. **Zhu, Y.**, Becker, G. D., D’Aloisio, A., Endsley, R., Gangolli, N., Cain, C., Mason, C. A., Hashemi, S., and Hong, H., **2025**. *Galaxy Underdensities Host the Clearest IGM Ly $\alpha$  Transmission and Indicate Anisotropic Reionization*, arXiv e-prints, arXiv:2510.09568.
11. **Zhu, Y.**, Egami, E., Fan, X., Sun, F., Becker, G. D., Cain, C., Chen, H., Eilers, A.-C., Fudamoto, Y., Helton, J. M., Jin, X., Pudoka, M., Bunker, A. J., Cai, Z., Champagne, J. B., Ji, Z., Lin, X., Liu, W., Ma, H.-X., Ma, Z., Maiolino, R., Rieke, G. H., Rieke, M. J., Rinaldi, P., Sun, Y., Tee, W. L., Wang, F., Yang, J., Yue, M., and Zhang, J., **2025**. *Quasar Radiative Feedback May Suppress Galaxy Growth on Intergalactic Scales at  $z = 6.3$* , arXiv:2509.00153, The Astrophysical Journal Letters, in press
10. **Zhu, Y.**, Bonaventura, N., Sun, Y., Rieke, G. H., Alberts, S., Lyu, J., Morrison, J. E., Ji, Z., Egami, E., Helton, J. M., Rieke, M. J., Rinaldi, P., Sun, F., and Willmer, C. N. A., **2025**. *SMILES Data Release II: Probing Galaxy Evolution during*

*Cosmic Noon and Beyond with NIRSpec Medium-Resolution Spectra*, arXiv e-prints, arXiv:2508.12599. ApJ, in press

9. **Zhu, Y.**, Rieke, M. J., Ji, Z., Simmonds, C., Sun, F., Sun, Y., Alberts, S., Bhatawdekar, R., Bunker, A. J., Cargile, P. A., Carniani, S., de Graaff, A., Hainline, K., Helton, J. M., Jones, G. C., Lyu, J., Rieke, G. H., Rinaldi, P., Robertson, B., Scholtz, J., Übler, H., Williams, C. C., and Willmer, C. N. A., **2025**. *A Systematic Search for Galaxies with Extended Emission Lines and Potential Outflows in JADES Medium-band Images*, The Astrophysical Journal, 986, 162.
8. **Zhu, Y.**, Alberts, S., Lyu, J., Morrison, J., Rieke, G. H., Sun, Y., Helton, J. M., Ji, Z., Bhatawdekar, R., Bonaventura, N., Bunker, A. J., Lin, X., Rieke, M. J., Rinaldi, P., Shivaee, I., Willmer, C. N. A., and Zhang, J., **2025**. *SMILES: Potentially Higher Ionizing Photon Production Efficiency in Overdense Regions*, The Astrophysical Journal, 986, 18.
7. **Zhu, Y.**, Rieke, M. J., Ho, L. C., Sun, Y., Rieke, G. H., Yuan, F., Bakx, T. J. L. C., Becker, G. D., Yang, J., Bañados, E., Bischetti, M., Cain, C., Fan, X., Fudamoto, Y., Hashemi, S., Ikeda, R., Ji, Z., Jin, X., Liu, W., Liu, Y., Lyu, J., Ma, H.-X., Takeuchi, T. T., Umehata, H., Wang, F., and Tee, W. L., **2025**. *Nuclear Winds Drive Cold Gas Outflows on Kiloparsec Scales in Reionization-Era Quasars*, arXiv e-prints, arXiv:2504.02305.
6. **Zhu, Y.**, Bakx, T. J. L. C., Ikeda, R., Umehata, H., Becker, G. D., Cain, C., Champagne, J. B., Fan, X., Fudamoto, Y., Jin, X., Ma, H.-X., Sun, Y., Takeuchi, T. T., and Tee, W. L., **2024**. *Discovery of a Unique Close Quasar–DSFG Pair Linked by a [C II] Bridge at  $z = 5.63$* , Research Notes of the American Astronomical Society, 8, 284.
5. **Zhu, Y.**, Becker, G. D., Bosman, S. E. I., Cain, C., Keating, L. C., Nasir, F., D’Odorico, V., Bañados, E., Bian, F., Bischetti, M., Bolton, J. S., Chen, H., D’Aloisio, A., Davies, F. B., Davies, R. L., Eilers, A.-C., Fan, X., Gaikwad, P., Greig, B., Haehnelt, M. G., Kulkarni, G., Lai, S., Puchwein, E., Qin, Y., Ryan-Weber, E. V., Satyavolu, S., Spina, B., Walter, F., Wang, F., Wolfson, M., and Yang, J., **2024**. *Damping wing-like features in the stacked Ly  $\alpha$  forest: Potential neutral hydrogen islands at  $z < 6$* , Monthly Notices of the Royal Astronomical Society, 533, L49.
4. **Zhu, Y.**, Becker, G. D., Christenson, H. M., D’Aloisio, A., Bosman, S. E. I., Bakx, T., D’Odorico, V., Bischetti, M., Cain, C., Davies, F. B., Davies, R. L., Eilers, A.-C., Fan, X., Gaikwad, P., Haehnelt, M. G., Keating, L. C., Kulkarni, G., Lai, S., Ma, H.-X., Mesinger, A., Qin, Y., Satyavolu, S., Takeuchi, T. T., Umehata, H., and Yang, J., **2023**. *Probing Ultralate Reionization: Direct Measurements of the Mean Free Path over  $5 < z < 6$* , The Astrophysical Journal, 955, 115.
3. **Zhu, Y.**, Ma, H.-X., Dong, X.-B., Huang, Y., Mistele, T., Peng, B., Long, Q., Wang, T., Chang, L., and Jin, X., **2023**. *How close dark matter haloes and MOND are to each other: three-dimensional tests based on Gaia DR2*, Monthly Notices of the Royal Astronomical Society, 519, 4479.
2. **Zhu, Y.**, Becker, G. D., Bosman, S. E. I., Keating, L. C., D’Odorico, V., Davies, R.

L., Christenson, H. M., Bañados, E., Bian, F., Bischetti, M., Chen, H., Davies, F. B., Eilers, A.-C., Fan, X., Gaikwad, P., Greig, B., Haehnelt, M. G., Kulkarni, G., Lai, S., Pallottini, A., Qin, Y., Ryan-Weber, E. V., Walter, F., Wang, F., and Yang, J., **2022**. *Long Dark Gaps in the Ly $\beta$  Forest at  $z < 6$ : Evidence of Ultra-late Reionization from XQR-30 Spectra*, The Astrophysical Journal, 932, 76.

1. **Zhu, Y.**, Becker, G. D., Bosman, S. E. I., Keating, L. C., Christenson, H. M., Bañados, E., Bian, F., Davies, F. B., D’Odorico, V., Eilers, A.-C., Fan, X., Haehnelt, M. G., Kulkarni, G., Pallottini, A., Qin, Y., Wang, F., and Yang, J., **2021**. *Chasing the Tail of Cosmic Reionization with Dark Gap Statistics in the Ly $\alpha$  Forest over  $5 < z < 6$* , The Astrophysical Journal, 923, 223.

Student-led papers:

2. Ma, Z. (UofA grad student), Egami, E., **Zhu, Y.**, Sun, F., Lyu, J., Zhang, J., Willmer, C. N. A., Bunker, A. J., Carniani, S., Curtis-Lake, E., Hausen, R., Ji, X., Ji, Z., Juodžbalis, I., Maiolino, R., Rieke, G. H., Rinaldi, P., Sun, Y., Tacchella, S., Übler, H., and Williams, C. C., **2026**. *Undermassive Hosts of  $z = 4 - 6$  AGN from JWST/NIRCam Image Decomposition with CONGRESS, FRESCO, and JADES*, arXiv e-prints, arXiv:2601.15962.
1. Narisetty, S. (UofA undergraduate), **Zhu, Y.**, & Egami, E, **2025**. *Strong Balmer Breaks Mark Gradually Quenching Galaxies Below the Star Forming Main Sequence at  $1 < z < 4$  with JWST/NIRSpec*, for ApJ submission. DOI: 10.5281/zenodo.17772416

Co-author:

80. Rowlands, S., Davies, R. L., Ryan-Weber, E., Keating, L. C., Sebastian, A. M., Becker, G. D., Bischetti, M., Bosman, S. E. I., Chen, H., Davies, F. B., D’Odorico, V., Gaikwad, P., Gallerani, S., Haehnelt, M. G., Kulkarni, G., Meyer, R. A., Welsh, L., and **Zhu, Y.**, **2026**. *E-XQR-30: Evidence for an Increase in the Ionization State of Metal Absorbers from  $z \sim 6$  to  $z \sim 2$* , Monthly Notices of the Royal Astronomical Society,.
79. Davies, F. B., Bosman, S. E. I., D’Odorico, V., Campo, S., Mesinger, A., Qin, Y., Becker, G. D., Bañados, E., Chen, H., Cristiani, S., Fan, X., Gallerani, S., Haehnelt, M. G., Keating, L. C., Lai, S., Ryan-Weber, E., Wang, F., Yang, J., and **Zhu, Y.**, **2026**. *Updated dark pixel fraction constraints on reionization’s end from the Lyman-series forests of XQR-30*, Monthly Notices of the Royal Astronomical Society, 545, staf1862.
78. Jin, X., Wang, F., Yang, J., Fan, X., Bian, F., Li, J.-T., Liu, W., Liu, Y., Lyu, J., Pudoka, M., Tee, W. L., Wu, Y., Zhang, H., and **Zhu, Y.**, **2026**. *A Deep Chandra X-Ray Survey of a Luminous Quasar Sample at  $z \sim 7$* , The Astrophysical Journal, 997, 83.
77. Lin, X., Fan, X., Sun, F., Zhang, J., Egami, E., Helton, J. M., Wang, F., Zhang, H., Bunker, A. J., Cai, Z., Ji, Z., Jin, X., Maiolino, R., Pudoka, M. A., Rinaldi, P., Robertson, B., Tacchella, S., Tee, W. L., Sun, Y., Willmer, C. N. A., Willott, C., and

- Zhu, Y., 2026.** *The Large-scale Environments of Low-luminosity AGNs at  $3.9 \leq z \leq 6$  and Implications for Their Host Dark Matter Halos from a Complete NIRCam Grism Redshift Survey*, The Astrophysical Journal, 997, 61.
76. Liu, W., Fan, X., Li, H., Green, R., Champagne, J. B., Jin, X., Lyu, J., Pudoka, M., Tee, W. L., Wang, F., Yang, J., **Zhu, Y.**, and Abdessalam, N., **2025.** *A JWST/NIRSpec Integral Field Unit Survey of Luminous Quasars at  $z \sim 5-6$  (Q-IFU): Rest-frame Optical Nuclear Properties and Extended Nebulae*, arXiv e-prints, arXiv:2511.06085.
  75. Rinaldi, P., Pérez-González, P. G., Rieke, G. H., Lyu, J., D'Eugenio, F., Wu, Z., Carniani, S., Looser, T. J., Shivaee, I., Boogaard, L. A., Diaz-Santos, T., Colina, L., Östlin, G., Alberts, S., Álvarez-Márquez, J., Annuziatella, M., Aravena, M., Bhatawdekar, R., Bunker, A. J., Caputi, K. I., Charlot, S., Crespo Gómez, A., Curti, M., Eckart, A., Gillman, S., Hainline, K., Kumari, N., Hjorth, J., Iani, E., Inami, H., Ji, Z., Johnson, B. D., Jones, G. C., Labiano, Á., Maiolino, R., Melinder, J., Moutard, T., Peissker, F., Rieke, M., Robertson, B., Scholtz, J., Tacchella, S., van der Werf, P. P., Walter, F., Williams, C. C., Willott, C., Witstok, J., Übler, H., and **Zhu, Y.**, **2025.** *Deciphering the Nature of Virgil: An Obscured Active Galactic Nucleus Lurking within an Apparently Normal Ly $\alpha$  Emitter during Cosmic Reionization*, The Astrophysical Journal, 994, 86.
  74. Rieke, G. H., Sun, Y., Lyu, J., Willmer, C. N. A., **Zhu, Y.**, Rinaldi, P., Stone, M. A., Hainline, K. N., and Pérez-González, P. G., **2025.** *Confirming Near- to Mid-infrared Photometrically Identified Obscured AGNs in the JWST Era*, The Astrophysical Journal, 994, 35.
  73. Stone, M. A., Rieke, G. H., Lyu, J., Florian, M. K., Hainline, K. N., Sun, Y., and **Zhu, Y.**, **2025.** *The  $z = 7.08$  Quasar ULAS J1120+0641 May Never Reach a "Normal" Black Hole to Stellar Mass Ratio*, The Astrophysical Journal, 993, 168.
  72. Welsh, L., D'Odorico, V., Fontanot, F., Davies, R., Bosman, S. E. I., Cupani, G., Becker, G., Keating, L., Ryan-Weber, E., Bischetti, M., Haehnelt, M., Chen, H., **Zhu, Y.**, Lai, S., Hirschmann, M., Xie, L., and Qin, Y., **2025.** *The clustering of C IV and Si IV at the end of reionization: A perspective from the E-XQR-30 survey*, Astronomy and Astrophysics, 703, A274.
  71. Danhaive, A. L., Tacchella, S., Bunker, A. J., Curtis-Lake, E., de Graaff, A., D'Eugenio, F., Duan, Q., Egami, E., Eisenstein, D. J., Johnson, B. D., Maiolino, R., McClymont, W., Rieke, M., Robertson, B., Sun, F., Willmer, C. N. A., Wu, Z., and **Zhu, Y.**, **2025.** *The dark side of early galaxies: geko uncovers dark-matter fractions at  $z \sim 4-6$* , arXiv e-prints, arXiv:2510.14779.
  70. Fudamoto, Y., Nakazato, Y., Ceverino, D., Colina, L., Hashimoto, T., Inoue, A. K., Tamura, Y., Yoshida, N., **Zhu, Y.**, Sugahara, Y., Arribas, S., Álvarez-Márquez, J., Bakx, T., Blanco Prieto, C., Costantin, L., Crespo Gómez, A., Hagimoto, M., Hashigaya, T., Matsuo, H., Marques-Chaves, R., Mawatari, K., Mitsuhashi, I., Osone, W., Pereira-Santaella, M., Umehata, H., Witten, C., and Ren, Y. W., **2025.** *Early massive galaxy formation in the core of a galaxy protocluster 650 million years after*

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