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OVERVIEW

Postdoctoral Research Associate, LPL, University of Arizona, Characterize Exoplanet Atmosphere and Interior.

EMPLOYMENT

Postdoctoral Research Associate

2019-

University of Arizona

- Characterize exoplanet upper atmosphere using its atomic absorption features.

Postdoctoral Scholar

2017-2019

University of Nevada, Las Vegas

- Model the interior structure of terrestrial super-earth planets.

EDUCATION

Ph.D. in Astronomy

2011-2017

University of Virginia, Charlottesville, VA

[“Spectral Line Formation in Hot Jupiter Atmospheres and in Interacting Supernovae”](#)

Thesis advisor: Arras, Philip / Chevalier, Roger

B.S. in Physics

2007-2011

Peking University, Beijing, China

PEER-REVIEWED JOURNAL PAPERS [\[ADS publication list\]](#)

5. Oza, A. V., Johnson, R., [and 13 others, including Huang, C.], [“Sodium and Potassium Signatures of Volcanic Satellites Orbiting Close-in Gas Giant Exoplanets”](#), *ApJ* **855**, 168 (2019).
4. ★ Huang, C. and Chevalier, R. A., [“Electron Scattering Wings on Lines in Interacting Supernovae”](#), *MNRAS* **475**, 1261 (2018).
3. ★ Huang, C., Arras, P., Christie, D. and Li, Z.-Y., [“A Model of the H \$\alpha\$ and Na Transmission Spectrum of HD 189733b”](#), *ApJ* **851**, 150 (2017).
2. Borish, H. J., Huang, C., Chevalier, R. A., et al., [“Near-infrared Spectroscopy of the Type II In SN 2010jl: Evidence for High Velocity Ejecta”](#), *ApJ* **801**, 7 (2015).
1. Liao, J., Zhou, Y., Huang, C., Wang, Y., Peng, L., [“Fabrication, Transfer, and Transport Properties of Monolayered Freestanding Nanoparticle Sheets”](#), *Small* **7**, 583 (2011).

SUBMITTED

- Grande, Z., Smith, D., [and six others, including Huang, C.], [“Pressure driven bond strengthening in dense H \$_2\$ O”](#), Submitted to PRL.
- Huang, C., Grande, Z., et al., [“The water equation of state and its implications for water-rich planets”](#), Submitted to MNRAS.

IN PREPARATION

- [Huang, C., Arras, P.](#), “A Model for the Na D Transit of Hot Jupiters”.
- [Huang, C., Rice, D. and Steffen, J. H.](#), “MAGRATHEA: an open-source spherical symmetric planet interior structure code”.

TALKS

- “*Model of the interior structure of terrestrial planets*”
Steward Symposium, UofA, Tucson, AZ November 2019
- “*A Model of the H α and Na Transmission Spectrum of HD 189733b*”
UW Madison, Madison, WI September 2019
- “*Revisiting the mass-radius relation of super Earth with new ice EOS measurement*”
Fifth Kepler Science Conference, Glendale, CA March 2019
- “*Electron Scattering Wings on Lines in Interacting Supernovae*”
Peking University, Beijing, China July 2018
- “*Revisiting the Mass-Radius Relation of Super-Earth with New Ice VII/X Equation of State Measurement*”
ERES IV, PSU, State College, PA June 2018
- “*A Model of the H α and Na Transmission Spectrum of HD 189733b*”
49th DPS meeting, Provo, UT October 2017
- “*Probing the Temperature of the Exoplanet Upper Atmosphere with Radius Spectrum*”
Bob Rood Symposium, Charlottesville, VA March 2017
- “*A Model of the H α Transmission Spectrum of HD 189733b*”
229th AAS meeting, Grapevine, TX January 2017
- “*A Model of the H α Transmission Spectrum of HD 189733b*”
83rd SESAPS meeting, Charlottesville, VA November 2016
- “*A Study of Extrasolar Planet*”
Huskey graduate research exhibition, Charlottesville, VA March 2016
- “*Introduction to the Study of Exoplanet Atmospheres*”
Theoretical Physics Division, IHEP, CAS, Beijing, China February 2016
- “*Modeling of Hot Jupiter HD 189733b H α Transmission Spectral Line*”
Peking University, Beijing, China February 2016
- “*Modeling of the H α Transmission Spectrum of HD 189733b*”
227th AAS meeting, Kissimmee, FL. January 2016
- “*Modeling of Hot Jupiter Transmission Spectral Line*”
Bob Rood Symposium, Charlottesville, VA October 2015
- “*Electron Scattering Wings on Emission Lines in SN II n* ”
Bob Rood Symposium, Charlottesville, VA September 2013

HONORS

- Freshman Fellowship September 2007
- President’s Fellowship August 2011
- “President’s Fund” for outstanding undergraduate research project May 2011