**JUNJIE “JJ” DONG**

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**EDUCATION**

2017–present: Harvard University, Ph.D. in Earth and Planetary Sciences

2014–2017: University of Michigan, B.S. in Earth and Environmental Sciences, with honors

**POSITIONS HELD**

2017–present Graduate research assistant, Harvard University, Laboratory for Mineral Physics with Prof. Rebecca A. Fischer

2015–2017 Undergraduate research assistant, University of Michigan, Mineral Physics Research Group with Prof. Jie Li

**HONORS AND AWARDS**

2019: Goldschmidt Planetary Science Grant, *Geochemical Society/NASA*

2018: Best Student Presentation Award, *Consortium for Materials Properties Research in Earth Sciences (COMPRES) 2018 Annual Meeting*

2017–2019: Peirce Fellowship, *Harvard University Graduate School of Arts and Sciences (GSAS)*

2017: Undergraduate Academic Excellence Award, *University of Michigan Department of Earth and Environmental Sciences*

2017: Best Poster Award, *"Origin and Evolution of Deep Primordial Reservoirs” Winter School at Kusatsu*, Japan

2016: Turner Undergraduate Award, *University of Michigan Department of Earth and Environmental Sciences*

2015–2016: Angell Scholar, *University of Michigan*

**PUBLICATIONS**

**J. Dong**, R. A. Fischer, L. P. Stixrude, C. Lithgow-Bertelloni, *AGU Adv.*, 2020: The volume of Earth's early oceans constrained by temperature-dependent mantle water storage capacity. (OA)

K. Daviau, R. A. Fischer, M. C. Brennan, **J. Dong**, T.-A. Suer, S. Couper, Y. Meng, V. B. Prakapenka, *J. Geophys. Res. Solid Earth*, 2020: [Equation of state of TiN at high pressures and temperatures: A possible host for nitrogen in planetary mantles](https://doi.org/10.1029/2020JB020074).

J. Li, F. Zhu, J. Liu, **J. Dong**, *Carbon in Earth's Interior* (AGU Geophysical Monograph 249, Ch. 15), 2020: [Reactive preservation of carbonate in Earth's mantle transition zone](https://doi.org/10.1002/9781119508229.ch15). (OA)

D. Zhou, **J. Dong**, Y. Si, F. Zhu, J. Li, *Minerals*, 2020: [Melting curve of potassium chloride from *in* *situ* ionic conduction measurements](https://doi.org/10.3390/min10030250). (OA)

F. Zhu, J. Li, J. Liu, **J. Dong**, Z. Liu, *PNAS*, 2019: [Metallic iron limits silicate hydration of Earth's transition zone](https://doi.org/10.1073/pnas.1908716116).

**J. Dong**, J. Li, F. Zhu, *Front. Earth Sci.*, 2019: [Wetting behavior of iron-carbon melt in silicates at mid-mantle pressures with implications for the Earth's deep carbon cycle](https://doi.org/10.3389/feart.2019.00268). (OA)

**J. Dong**, J. Li, F. Zhu, Z. Li, R. Farawi, *Am. Min.*, 2019: [Melting curve minimum of barium carbonate BaCO3 near 5 GPa](https://doi.org/10.2138/am-2019-6891).

**CONTRIBUTED CONFERENCE PRESENTATIONS ([T]alk; [P]oster)**

Dec 2020: “Subsolidus phase relations for Mg2SiO4 at mantle transition zone conditions”, *American Geophysical Union (AGU) Fall Meeting 2020*, Online Everywhere. [P]

Aug 2020: “Phase equilibria and water storage capacities of Martian mantle materials”, *COMPRES 2020 Virtual Annual Meeting*, Online Everywhere. [T]

Dec 2019: “Water storage in the Martian mantle”, *AGU Fall Meeting 2019*, San Francisco. [P]

Aug 2019: “Water storage in the Martian mantle”, *Goldschmidt Conference 2018*, Barcelona, Spain. [T]

Aug 2019: “Subsolidus phase transitions in (Mg,Fe)2SiO4 at transition zone conditions”, *COMPRES 2019 Annual Meeting*, Big Sky. [P]

Dec 2018: “The volume of Archean oceans constrained by temperature-dependent mantle water storage capacity”, *AGU Fall Meeting 2018*, Washington D.C. [T]

Aug 2018: “Water Storage Capacity of Earth’s Mantle and Its Temporal Evolution”, *Goldschmidt Conference 2018*, Boston. [T]

Aug 2018: “Water Storage Capacity of Earth’s Mantle and Its Temporal Evolution”, *COMPRES 2018 Annual Meeting*, Albuquerque. [T]&[P]

Dec 2017: “Melting curve of compressed barium carbonate from in situ ionic conductivity measurements: Implications for the melting behavior of alkaline earth carbonates in Earth's deep carbon cycle”, *AGU Fall Meeting 2017*, New Orleans. [P]

Nov 2017: “Melting curve of compressed barium carbonate from in situ ionic conductivity measurements: Implications for the melting behavior of alkaline earth carbonates in Earth's deep carbon cycle”, *Deep Carbon Observatory (DCO) Extreme Physics and Chemistry (EPC) Workshop 2017*, Tempe. [T]

Jan 2017: Is the Earth's core still growing? Assessing the fate of molten iron-carbon alloy by investigating its wetting of mantle silicates”, *"Origin and Evolution of Deep Primordial Reservoirs” Winter School*, Kusatsu, Japan. [P]

Dec 2016: Is the Earth's core still growing? Assessing the fate of molten iron-carbon alloy by investigating its wetting of mantle silicates”, *DCO EPC Workshop 2016* at Stanford University, Palo Alto. [P]

June 2016: “Is the Earth's core still growing? Assessing the fate of molten iron-carbon alloy by investigating its wetting of mantle silicates”, *COMPRES 2016 Annual Meeting*, Albuquerque. [T]

**TEACHING**

January Term 2021: Programming coach for Earth and Planetary Sciences 101 (EPS 101): Global Warming Science, with Prof. Eli Tziperman at Harvard University Department of Earth and Planetary Sciences.

Spring 2019: Teaching Fellow for Science of the Physical Universe 30 (SPU 30): Life as a Planetary Phenomenon, with Prof. Dimitar D. Sasselov at Harvard University Department of Astronomy.

**SCIENTIFIC AND UNIVERSITY SERVICE**

**Journal reviewer:** Astronomy & Astrophysics, Nature

2020:Session organizer (student mentee), “DI023 - A Multidisciplinary Approach to Understanding Volatiles in Earth's Mantle”, *AGU 2020 Fall Meeting*

2020: Session organizer and chair, Contributed Talks Session: “Advances in High-Pressure Techniques”, *COMPRES 2020 Virtual Annual Meeting*

2020: Session organizer and chair, Contributed Talks Session: “Water, Water Everywhere”, *COMPRES 2020 Virtual Annual Meeting*

2020: Session organizer and chair, Student/Postdoc Breakout Session: “Conducting Research and Managing Your Career in the Time of a Pandemic”, *COMPRES 2020 Virtual Annual Meeting*

2020: Student Representative, Meeting Planning Committee, *COMPRES 2020 Virtual Annual Meeting*.

2019–2020: Chair, Student and Postdoc Committee, *COMPRES*

2018–2019: Member, Student and Postdoc Committee, *COMPRES*

2018–2019: Organizer, Solid Earth Graduate Student Lunch Seminar, *Harvard University Department of Earth and Planetary Science*

**OUTREACH**

2020: Interviewed for #AGU20 Scientific Roll Call (<https://youtu.be/bQxVCHEvSlg?t=1394>), *AGU 2020 Fall Meeting*

2019: Speaker, EPS Day Talk, *Harvard University Department of Earth and Planetary Science*

2019: Volunteer educator, I Heart Science Festival, *Harvard Museum of Natural History*