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

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 (in revision).

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.

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.

D. Zhou, **J. Dong**, Y. Si, F. Zhu, J. Li, *Minerals*, 2020: Melting curve of potassium chloride from *in situ* ionic conduction measurements.

F. Zhu, J. Li, J. Liu, **J. Dong**, Z. Liu, *PNAS*, 2019: Metallic iron limits silicate hydration of Earth's transition zone.

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.

J. Dong, J. Li, F. Zhu, Z. Li, R. Farawi, *Am. Min.*, 2019: Melting curve minimum of barium carbonate $BaCO_3$ near 5 GPa.

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

Dec 2020: "Subsolidus phase relations for Mg_2SiO_4 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 $(Mg,Fe)_2SiO_4$ 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
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.

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*