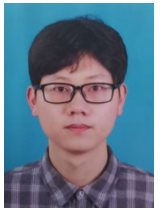


CV of Dong Wang

University of Science and Technology of China, Hefei, China
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EDUCATION

Li-siguang Geophysics Training Program, Jilin University, Changchun, China.

B.Sc. in Geophysics

September 2017 – June 2021

School of Earth and Space Sciences, University of Science and Technology of China (USTC), Hefei, China.

Ph.D. in Geophysics (Supervisor: Prof. Zhongqing Wu)

September 2021 – June 2026

Institut de physique du globe de Paris (IPGP), Université Paris Cité, Paris, France.

Jointing Ph.D. Student in Geophysics (Supervisor: Prof. Razvan Caracas)

March 2025 – March 2026

RESEARCH INTERESTS

- **Ab initio calculations and machine learning-based molecular dynamics simulations**
- **Evolution of the early Earth**
- **Structure and dynamics of the deep Earth**

RESEARCH EXPERIENCE

Thermal Conductivity of Minerals

- Calculated the lattice thermal conductivity of mantle minerals by machine learning potential (MLP).

Transport Properties of Hydrous Diopside Melts at Low Temperatures

- Trained the MLP for diopside melts by enhanced sampling and investigated the transport properties at low temperatures.

Elastic Properties of the Upper Continental Crust (UCC)

- Investigated the thermal elastic properties of Liebermannite and K-hollandite II and the seismic signature of the UCC.

Water-Induced Mantle Overturn and Paleomagnetic field

- Explored the effect of mantle overturn on the geomagnetic field by modeling the Archean magnetic field intensity.

Sulfur Degassing from the Magma

- Investigated the degassing behavior of sulfur under varying redox conditions using Ab initio calculations.

PUBLICATIONS

- [1] **Dong Wang**, Zhongqing Wu, Xin, Deng. (2022). Thermal Conductivity of Hydrous Wadsleyite Determined by Non-Equilibrium Molecular Dynamics Based on Machine Learning. *Geophysical Research Letters*, 49(22), e2022GL100337.
- [2] **Dong Wang**, Zhongqing Wu, & Xin, Deng. (2023). Thermal conductivity of Fe-bearing bridgmanite and post-perovskite: Implications for the heat flux from the core. *Earth and Planetary Science Letters*, 621, 118368.
- [3] **Dong Wang**, Longyu Duan, Xin Deng, Wenzhong Wang, Zhongqing Wu (2025). Seismic Signature of the Upper Continental Crust: Implications from the thermoelastic properties of Liebermannite and K-hollandite II. *American Mineralogist*.
- [4] **Dong Wang**, Zhongqing Wu. (2025). Water-Induced Mantle Overturn Provides a Unifying Explanation for Paleomagnetic Records and Formation of Archean Continents. *National Science Review*. (Under review).
- [5] Feiyang Xu, **Dong Wang**, et al. (2024) Large-scale simulation of thermal conductivity in CaSiO₃ perovskite with neuroevolution potential. *Appl. Phys. Lett.*, 125 (3): 034104.

INVITED TALKS

Early Career Scientists Seminar, European Geosciences Union

2025

HONORS AND AWARDS

National Scholarship for Undergraduate Student

2019

Outstanding Graduate

2021

Outstanding Student Presentation Award, CGU Fall General Assembly

2022

National Scholarship for Graduate Student

2023

Best Poster Award, IPACES General Assembly

2023

Outstanding Achievement Award of Deep Space Exploration Lab

2024

Outstanding Student and PhD candidate Presentation (OSPP) Award, EGU General Assembly

2024