Fei Wu

Address: 1800 E PAUL DIRAC DR OFC B303, TALLAHASSEE, FL 32310-3706, United

States

Mobile Phone: +1(571)376-1134 Email: fwu@fsu.edu and feyxuan@gmail.com

Research Interests

I am interested in the development and application of metal stable isotope to solve important cosmochemical, geochemical, and geological issues. Currently, I mainly focused on geochemical application of V isotope, including:

1. Developing high precise analytical methods for V isotopes.

- 2. Understanding the fractionation mechanism of V isotope at high temperature and low temperature processes by experiments and theoretical calculations.
- 3. Applying such novel tool to investigate crust-mantle and paleoenvironment evolution.

Education

2012 – 2016 University of Science and Technology of China, China

Ph.D. of **Geochemistry**

Thesis: "Vanadium isotope geochemistry: analytical method, variations

in terrestrial materials, and fractionation mechanism."

Advisor: Fang Huang

2010 – 2012 University of Science and Technology of China, China

M.S. of **Geochemistry**

Thesis title: "Geochronology and geochemistry studies of felsic xenoliths in lamprophyre dikes from the southeastern margin of the

North China Craton."

Advisor: Yilin Xiao

2006 – 2010 University of Science and Technology of China, China

B.S. of **Geochemistry**

Bachelor's project title: "The study of zircon and fluid inclusions in

xenoliths and granite from Jingshan granite, Bengbu uplift—the

discussion of sources and fluid evolution."

Advisor: Yilin Xiao

Professional Experience

2016 – present Postdoctoral Researcher at Department of Earth, Ocean and

Atmospheric Science & National High Magnetic Field Laboratory,

Florida State University, FL, USA

Honors and Awards

Jun. 2016	Goldschmidt Travel Grant, Goldschmidt Conference, Yokohama, Japan.	
Jan. 2016	Dean's Award for Outstanding Students	
Oct. 2015	National Scholarship for graduate students	
Aug. 2015	Goldschmidt Travel Grant, Goldschmidt Conference, Prague, CZ.	
Jul. 2015	First prize in 5th Academic Presentation of CAS Key Laboratory of	
	Crust-Mantle Materials and Environments	
Jun. 2014	Goldschmidt Travel Grant, Goldschmidt Conference, Sacramento, CA.	
Jul. 2013	Third prize in 3th Academic Presentation of CAS Key Laboratory of	
	Crust-Mantle Materials and Environments	
Nov. 2009	Outstanding in the Undergraduate Research Projects of USTC	
Nov. 2008	Outstanding Student Scholarship (Grade 2) of 2007-2008	
Oct. 2008	Second prize of China Undergraduate Mathematical Contest in Modeling in	
	Anhui division	
Nov. 2007	Guanghua Education Scholarship of 2006-2007	
Sep. 2006	Special Freshman Scholarship (Grade 3) of 2006	

Research Skills

- 1. Metal stable isotope analysis (V, Fe, Mg, Cu, Zn, Ba): clean lab/column chemistry and MC-ICP-MS
- 2. Trace elements analysis: LA-ICP-MS and solution ICP-MS
- 3. Zircon U-Pb dating: LA-ICP-MS
- 4. Fluid inclusion Micro-thermometry (Lingkam THMS600G)

Papers published and in preparation (*corresponding author)

Published/in press

- Tian Qin, <u>Fei Wu</u>, Zhongqing Wu*, Fang Huang*, First-principles calculations of equilibrium fractionation of O- and Si-isotopes in quartz, albite, anorthite, and zircon. Accepted by *Contributions to Mineralogy and Petrology* (co-first author).
- <u>Fei Wu</u>, Yuhan Qi, Huimin Yu, Shengyu Tian, Zhenhui Hou, Fang Huang*, 2016, Vanadium isotope measurement by MC-ICP-MS. <u>Chemical Geology</u>, 421, 17-25.
- Jin-Ting Kang, Hong-Li Zhu, Yu-Fei Liu, Fang Liu, <u>Fei Wu</u>, Yan-Tao Hao, Xia-Chen Zhi, Zhao-Feng Zhang*, and Fang Huang*, 2015. Calcium isotopic composition of mantle xenoliths and minerals from Eastern China, <u>Geochimica et Cosmochimica Acta</u>, 174, 335-344.
- Xiaoyun Nan, **Fei Wu**, Zhaofeng Zhang, Zhenhui Hou, Fang Huang, Huimin Yu*, 2015, High-precision barium isotope measurement by MC-ICP-MS. *Journal of Analytical Atomic Spectrometry*, 30, 2307-2315.
- <u>Fei Wu*</u>, Tian Qin*, Xuefang Li, Yun Liu, Jen-How Huang, Zhongqin Wu, Fang Huang, 2015. First-principles investigation of vanadium isotope fractionation in solution and during adsorption. *Earth and Planetary Science Letters*, 426, 216-224.

- Fang Huang*, **Fei Wu**, 2015. A review of vanadium isotope geochemistry. *Earth Science Frontiers*, 22(5), 1-8 (in Chinese with English abstract).
- **Fei Wu**, Yilin Xiao*, Lijuan Xu, Santosh, M., Shuguang Li, Jian Huang, Zhenhui Hou, Fang Huang, 2015. Geochronology and geochemistry of felsic xenoliths in lamprophyre dikes from the southeastern margin of the North China Craton: implications for the interleaving of the Dabie–Sulu orogenic crust. *International Geology Review*, 57, 1305-1325.
- Yajun An, <u>Fei Wu</u>, Yuanxin Xiang, Xiaoyun Nan, Xun Yu, Jinhui Yang, Huimin Yu, Liewen Xie*, Fang Huang*, 2014. High-precision Mg isotope analyses of low-Mg rocks by MC-ICP-MS. *Chemical Geology*, 390, 9-21.
- Fang Huang*, Zhongqing Wu*, Shichun Huang, <u>Fei Wu</u>, 2014. First-principles calculations of equilibrium silicon isotope fractionation among mantle minerals. <u>Geochimica et Cosmochimica Acta</u>, Volume 140, 509-520.
- Lijuan Xu, Yilin Xiao*, <u>Fei Wu</u>, Shuguang Li, Simon. K., Wörner. G., 2013. Anatomy of garnets in a Jurassic granite from the south-eastern margin of the North China Craton: Magma sources and tectonic implications. <u>Journal of Asian Earth Sciences</u>. Volume 78, 198–221.

Conference Abstracts

- <u>Fei Wu</u>, Yuhan Qi, Feifei Zhang, Thomas J. Algeo, Huimin Yu, Fang Huang, 2016. Vanadium isotope fractionation in low-temperature environments. Goldschmidt Conference, Yokohama, Japan. (Oral presentation).
- Fang Huang, ShengYu Tian, <u>Fei Wu</u>, 2016. Fractionation of V isotopes during magma differentiation. Goldschmidt Conference, Yokohama, Japan. (Oral presentation by Huang).
- <u>Fei Wu</u>, Tian Qin, Zhongqing Wu, Fang Huang, 2015. First-Principles Investigation of Equilibrium Fractionation of O and Si Isotopes among Crustal Minerals. Goldschmidt Conference, Prague, CZ. (Oral presentation).
- Xiaoyun Nan, <u>Fei Wu</u>, Huimin Yu, Fang Huang, 2015. High-Precision Ba Isotope Analysis Method by MC-ICP-MS. Goldschmidt Conference, Prague, CZ. (Oral presentation by Nan).
- Jingting Kang, Hongli Zhu, Yufei Liu, <u>Fei Wu</u>, Yantao Hao, Fang Huang, Zhaofeng Zhang, 2015. Calcium Isotopic Fractionation between Clinopyroxene and Orthopyroxene in Mantle Xenoliths from Eastern China. Goldschmidt Conference, Prague, CZ. (Poster presentation by Kang).
- **Fei Wu**, Huimin Yu, Shengyu Tian, Yuhan Qi, Fang Huang, 2015. High-precision vanadium isotope measurement by MC-ICP-MS. 15th National Conference of Chinese Society for Mineralogy, Petrology, and Geochemistry, Changchun. (Oral presentation).
- **Fei Wu**, Tian Qin, Xuefang Li, Yun Liu, Zhongqing Wu, Fang Huang, 2014. First-Principles Investigation of Equilibrium V Isotope Fractionation in Solution and during Adsorption. Goldschmidt Conference, Sacramento, CA. (Poster presentation).
- **Fei Wu**, Yilin Xiao, 2012. Geochronology and geochemistry studies of felsic xenoliths in

lamprophyre dikes from the southeastern margin of the North China Craton. National Symposium on Petrology and Geodynamics, Lanzhou. (Oral presentation).

Field Experience

From 2009	Several times of field research of the Jingshan granite intrusion, Anhui
Oct. 2011	Field Research of the Yangtze Block, Anhui, and Zhejiang
May 2009	Field trip of Petrology in Dabie, Anhui
Jul. 2008	Field trip of Structural Geology in Zhoukoudian, Beijing
May 2007	Field trip of Physical Geology in Chaohu area, Anhui

Volunteer Work

Sep. 2007-Jun.2008	Two terms of Left-behind Children Development Project
2006 - 2008	Volunteer work for the 50th anniversary of USTC