

77 Prof. Junfeng Zhang



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Education

B.A. Geology, China University of Geosciences, Wuhan, China, 1997

M.A. Tectonics, China University of Geosciences, Wuhan, China, 2000

Ph.D. Tectonics, China University of Geosciences, Wuhan, China, 2003

Ph.D. Tectonics, China University of California, Riverside, Riverside, USA, 2005

Work Experience

Professor, University of Science and Technology of China, 2008-present

Research Interests

Crust-mantle rock rheology, experiment of high temperature and high pressure, rock and mineral physics experiment

Committee Responsibilities and Professional Activities

Deputy director of the international lithosphere program working group 4, Earth Science deputy editor, deputy director of professional committee members of the 7th experiment of China mineral rock geochemical society mineral rock geochemistry

Major Publications

Shi, F., Zhang, J. F., Xia, G., Jin, Z., Green, H. W. 2015. Rheology of Mg₂GeO₄ spinel: implications for viscosity of Earth's mantle transition zone. *Geophysical Research Letter*, in press.

Xu, H. J., Zhang, J. F., Zong, K. Q., Liu, L., 2015. Quartz exsolution topotaxy in clinopyroxene from the UHP eclogite of Weihai, China. *Lithos*, in press.

Liu, P. L., Wu, Y., Chen, Y., Zhang, J. F., Jin, Z. M., 2015. UHP impure marbles from the Dabie Mountains: Metamorphic evolution and carbon cycling in continental subduction zones. *Lithos* 212-215, 280-297.

Zhao, Z., Wang, E. F., Yang, H. P., Kono, Y., Wen, B., Bai, L., Shi, F., Zhang, J., Kenney-Benson, C., Park, C., Wang, Y., Shen, G., 2015. Nanoarchitected materials composed of fullerene-like spheroids and disordered grapheme layers with tunable mechanical properties. *Nature Communications*, 6, doi:10.1038/ncomms7212.

Xu, H. J., Ma, C. Q., Zhao, J. H., Zhang, J. F., 2014. Magma mixing generated Triassic I-type granites in South China. *Journal of Geology*, 122, 329-351.

Xu, H. J., Zhang, J. F., Yu, T., River, M., Wang, Y. B., Zhao, S. R., 2014. Crystallographic evidence for simultaneous growth in graphic granite. *Gondwana Research*, DOI: 10.1016/j.gr.2014.01.013.

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- granodiorite: implications for Triassic crust-mantle interaction, South China. *International Geology Review* 56(3), 332-350.
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- Song, Y. R., Xu, H. J., Zhang, J. F., Wang, D. Y., Liu, E. D., 2014. Effects of melt fractional crystallization on Sr-Nd and Lu-Hf isotope systems: a case study of Triassic migmatite in the Sulu UHP terrane. *International Geology Review* 56(7), 783-800.
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- Zhang J. F., Shi, F., Xu, H. J., Wang, L., Feng, S. Y., Liu, W. L., Wang, Y. F., Green H. W., 2013. Petrofabric and strength of SiO₂ near the quartz-coesite phase boundary. *Journal of Metamorphic Geology*, 31: 83-92.
- Liu, Q., Hermann, J., Zhang, J. F., 2013. Sub-solidus dehydration and melting in the Shuanghe UHP paragneiss: evidence from polyphase inclusions in clinozoisite and garnet. *Lithos*, 177: 91-109.
- Xu, H. J., Ye, K., Song, Y. R., Chen, Y., Zhang, J. F., Liu, Q., Guo, S. 2013. Prograde metamorphism, decompressional partial melting and subsequent melt fractional crystallization in the Weihai migmatitic gneisses, Sulu UHP terrane, eastern China. *Chemical Geology*, 341: 16-37.
- Wang, Y., Zhang, J. F., Shi, F., 2013. The origin and geophysical implications of a weak C-type olivine fabric in the Xugou ultra-high pressure garnet peridotite. *Earth and Planetary Science Letters*, 376: 63-73.
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- Xu, H., Ma, C. Q., Song, Y., Zhang, J., Ye, K., 2012. Early Cretaceous intermediate-mafic dykes in the Dabie orogen, eastern China: petrogenesis and implications for crust-mantle interaction. *Lithos*, 154: 83-99.
- Xu, H., Song, Y., Ye, K., Zhang, J., Wang, H., 2012. Petrogenesis of mafic dykes and high-Mg adakitic enclaves in the Late Mesozoic Fangshan low-Mg adakitic pluton, North China Craton. *Journal of Asian Earth Sciences*, 54-55: 143-161.
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