

35 Prof. Yongsheng Liu



Name: Yongsheng Liu

Organization: China University of Geosciences, Wuhan, China

E-mail: yshliu@cug.edu.cn

Education

Ph.D. Geochemistry, China University of Geosciences, Wuhan, China, 1999

Work Experience

Lecturer, University of Science and Technology of China, 1999

Professor, University of Science and Technology of China, 2007-present

Research Interests

LA-ICP-MS analysis technology and its application;

Elements and isotopic chemical geodynamics tracer;

Change of trace element and structure in Orogenic belt metamorphic minerals.

Major Publications

- Chen, L., Liu, Y. S., Hu, Z. C., Gao, S., Zong, K. Q., Chen, H. H., 2011. Accurate determinations of fifty-four major and trace elements in carbonate by LA-ICP-MS using normalization strategy of bulk components as 100%. *Chem. Geol.* (in press)
- Liu, Y. S., Gao, S., Hu, Z. C., Gao, C. G., Zong, K. Q., Wang, D. B., 2010. Continental and oceanic crust recycling-induced melt-peridotite interactions in the Trans-North China Orogen: U-Pb dating, Hf isotopes and trace elements in zircons from mantle xenoliths. *Journal of Petrology*, 51(1-2): 537-571, doi:10.1093/petrology/egp082.
- Liu, Y. S., Hu, Z. C., Zong, K. Q., Gao, C. G., Shan Gao, Juan Xu, Haihong Chen, 2010. Reappraisal and refinement of zircon U-Pb isotope and trace element analyses by LA-ICP-MS. *Chinese Sci. Bull.*55(15): 1535-1546.
- Liu, Y. S., Gao, S., Gao, C. G., Zong, K. Q., Hu, Z. C., Lin, W. L., 2010. Garnet-rich granulite xenoliths from the Hannuoba basalts, North China: Petrogenesis and implications for the Mesozoic crust-mantle interaction. *Journal of Earth Science*, 21(5): 669-691.
- Zong, K. Q., Liu, Y. S., Gao, C. G., Hu, Z. C., Gao, S., Gong, H. J., 2010. In situ U-Pb dating and trace element analysis of zircons in thin sections of eclogite: Refining constraints on the ultra-high pressure metamorphism of the Sulu terrane, China. *Chemical Geology*, 269: 237-251, DOI: 10.1016/j.chemgeo.2009.09.021.
- Zong, K. Q., Liu, Y. S., Gao, S., Wang, D. B., Gao, C. G., 2010. Gneiss melting-induced fluid flow during exhumation of the Sulu ultrahigh-pressure terrane. *Lithos*, doi:10.1016/j.lithos.2010.09.013.
- Zong, K. Q., Liu, Y. S., Gao, C. G., Hu, Z. C., Gao, S., 2010. Garnet-spinel-corundum-quartz-bearing titanohematite vein in eclogite from the Sulu ultrahigh-pressure terrane: Imprint of a short-lived high-temperature metamorphic stage.

- Journal of Asian Earth Sciences, doi:10.1016/j.jseaes.2010.08.003.
- Gao, C. G., Liu, Y. S., Zong, K. Q., Hu, Z. C., Gao, S., 2010, Microgeochemistry of rutile and zircon in eclogites from the CCSD main hole: Implications for the fluid activity and thermo-history of the UHP metamorphism. *Lithos*, 115: 51-64, DOI: 10.1016/j.lithos.2009.11.007.
- Liu, Y. S., Hu, Z. C., Gao, S., Günther, D., Xu, K. J., Gao, C. G., Chen, H. H., 2008. In situ analysis of major and trace elements of anhydrous minerals by LA-ICP-MS without applying an internal standard. *Chemical Geology*, 257: 34-43. doi:10.1016/j.chemgeo.2008.08.004.
- Liu, Y. S., Gao, S., Kelemen, P. B., Xu, W. L., 2008. Recycled lower continental crust controls contrasting source compositions of Mesozoic and Cenozoic basalts in Eastern China. *Geochim. Cosmochim. Acta*. 72: 2349-2376.
- Liu, Y. S., Zong, K. Q., Kelemen, P. B., Gao, S., 2008. Geochemistry and magmatic history of eclogites and ultramafic rocks from the Chinese continental scientific drill hole: subduction and ultrahigh-pressure metamorphism of lower crustal cumulates. *Chemical Geology*, 247: 133-153.
- Liu, Y. S., Hu, Z. C., Yuan, H. L., Hu, S. H., Cheng, H. H., 2007. Volume-optional and low-memory (VOLM) chamber for laser ablation-ICP-MS: application to the analyses of fiber. *J. Anal. At. Spectrom.* DOI:10.1039/b701718a.
- Liu, Y. S., Gao, S., Lee, C. T. A., Hu, S. H., Liu, X. M., Yuan, H. L., 2005. Melt-peridotite interactions: Links between garnet pyroxenite and high-Mg# signature of continental crust. *Earth Planet. Sci. Lett.* 234(1-2): 39-57.
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- Liu, Y. S., Gao, S., Liu, X. M., Chen, X. M., Zhang, W. L., Wang, X. C., 2003. Thermodynamic evolution of lithosphere of the North China Craton: Records from lower crust and upper mantle xenoliths from Hannuoba. *Chinese Sci. Bull.* 48(21): 2371-2377.
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- Hu, Z. C., Liu, Y. S., Gao, S., Hu, S. H., Dietiker, R., Günther, D. A Local Aerosol Extraction Strategy for the Determination of the Aerosol Composition in Laser Ablation Inductively Coupled Plasma Mass Spectrometry, *Journal of Analytical Atomic Spectrometry*, 2008, DOI: 10.1039/b803934h, Advanced article, First published on the web 27th May 2008.
- Jiang, N., Liu, Y., Zhou, W., Yang, J., Zhang, S., Derivation of Mesozoic adakitic magmas from ancient lower crust in the North China craton, *Geochimica et Cosmochimica Acta*(2007), doi:

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