



Tadashi Usuki Postdoctoral Fellow (2003-2015/7/31)

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Specialty: metamorphic petrology, geochemistry, geochronology

[Education]

- Ph.D., 1997, Geology and Mineralogy, Hokkaido University
- M.S., 1993, Geology and Mineralogy, Hokkaido University
- B.S., 1991, Geology and Mineralogy, Hokkaido University

[Experiences]

- 2003 – 2015/7 : Post doctoral fellow, Inst. Earth Sciences, Academia Sinica
- 2003 : Visiting research fellow, Graduate School of Frontier Sciences, University of Tokyo
- 2001 - 2003 : research fellow, National Institute of Polar Research, COE (Center of Excellence)
- 2000 - 2001 : Research visitor, Chiba University
- 1999 - 2000 : Research follow, University Museum, University of Tokyo
- 1998 - 1999 : Research visitor, University of Tokyo

[Publications]

1. Imayama, T. *, Ueda, H., **Usuki, T.**, Minami, M., Asahara, Y., Nagahashi, T. Pre-Cenozoic high-pressure metamorphic rocks of the basement in the Ohmachi Seamount, Izu-Bonin-Mariana arc. (Under review)
2. Tran Trong Hoa, Lan, C.Y., **Usuki, T.** *, Shellnutt, J.G., Pham Thi Dung, Tran Tuan Anh, Pham Ngoc Can, Ngo Thi Phuong, Izokh, A.E., Borisenko, A.S. (2015) Petrogenesis of Late Permian silicic rocks of Tu Le basin and Phan Si Pan uplift (NW Vietnam) and their association with the Emeishan large igneous province. **Journal of Asian Earth Sciences****109**, 1-19.
3. Shellnutt, J.G. *, **Usuki, T.**, Kennedy, A.K., Chiu, H.Y. (2015) A lower crust origin for some flood basalts of the Emeishan large igneous province, SW China. **Journal of Asian Earth Sciences** **109**, 74-85.
4. **Usuki, T.** *, Lan, C.Y., Tran Trong Hoa, Pham Thi Dung, Wang, K.L., Shellnutt, J.G., Chung S.L. (2015) Zircon U-Pb ages and Hf isotopic compositions of alkaline silicic magmatic rocks in the Phan Si Pan-Tu Le region, northern Vietnam: Identification of a displaced western extension of the Emeishan Large Igneous Province. **Journal of Asian Earth Sciences**, **97**, 102-124.
5. Ma, G. S.K. *, K.L. Wang, J. Malpas, Y. Iizuka, C. Xenophontos, A.A. Turkmani, G. H.N. Chan, **T. Usuki** and Q. H.S. Chan (2015) Melt pockets and spongy clinopyroxenes in mantle xenoliths from the Plio-Quaternary Al Ghab volcanic field, NW Syria: implications for the metasomatic evolution of the lithosphere. In: A. Khan and F. Deschamps Eds. **The Earth's Heterogeneous Mantle**, Springer Geophysics, DOI 10.1007/978-3-319-15627-9_7.
6. Yui, T.F. *, **Usuki, T.**, Chen, C.Y., Ishida, A., Sano Y., Suga, K., Iizuka, Y., Chen C.T. (2014) Dating thin zircon rims by NanoSIMS: the Fengtien Nephrite (Taiwan) is the youngest jade on Earth. **International Geology Review**, doi:10.1080/00206814.2014.972994
7. Jahn, B.M.* , Usuki, M., **Usuki, T.**, Chung, S.L. (2014) Generation of Cenozoic granitoids in Hokkaido (Japan): Constraints from zircon geochronology, Sr-Nd-Hf isotopic and geochemical analyses, and implications for crustal growth. **American Journal of Science**, **314**, 704-750.
8. Shellnutt, J.G. *, Lan, C.Y. Trinh Van Long, **Usuki, T.**, Yang, H.J., Mertzman, S.A., Iizuka, Y., Chung, S.L., Wang, K. L. (2013) Formation of Cretaceous Cordilleran and post-orogenic granites

and their microgranular enclaves from the Dalat zone, southern Vietnam: Tectonic implications for the evolution of Southeast Asia. **Lithos**, **182-183**, 229-241.

9. Nakamura, D. *, Shimobayashi, N., **Usuki, T.**, Hirajima, T., Scojtko, M. Short-lived Nove Dvory UHP-UHT eclogite inferred from variability of chemical zoning pattern of garnet (Submitted)
10. Hara, H. *, Kon, Y., **Usuki, T.**, Lan, C.Y., Kamata, Y., Hisada, K., Ueno, K., Charoentitirat, T., Charusiri, P. (2013) U–Pb ages of sandstone-hosted detrital zircons within the Inthanon Zone of the Paleo-Tethyan subduction zone, northern Thailand: New constraints on accretionary age and arc activity. **Journal of Asian Earth Sciences**, **74**, 50-61.
11. **Usuki, T.** *, Lan, C.Y., Wang, K.L., Chiu, H.Y. (2013) Linking the Indochina block and Gondwana during the Early Paleozoic. Evidence from U-Pb ages and Hf isotopes of detrital zircons, **Tectonophysics** **586**, 145-159.
12. Pham Thi Dung*, Tran Trong Hoa, Tran Tuan Anh, Tran Van Hieu, Vu Hoang Ly, Lan, C.Y., **Usuki, T.** (2012) New data of Ye Yen Sun granite complex in Phan Si Pan uplift. **Vietnam Journal of Earth Sciences** **34**, 193-204.(in Vietnamese with English abstract)
13. Yui, T.F. *, Maki, K., Wang, K.L., Lan, C.Y., **Usuki, T.**, Iizuka, Y., Wu, C.M., Wu, T.W., Nishiyama, T., Martens, U., Liou, J. G. and Grove, M. (2011) Hf isotope and REE composition of zircons from jadeitite (Tone, Japan and north of the Motagua fault, Guatemala). implications on jadeitite genesis and possible geochemical characteristics of protoliths, **Eur. J. Mineral.** **24**, 263-275.
14. Ueda, H. *, Niida, K., **Usuki, T.**, Hirauchi, K., Meschede, M., Miura, R., Ogawa, Y., Yuasa, M., Sakamoto, I., Chiba, T., Ijimoto, T., Kuramoto, Y., Azuma, T., Takeshita, T., Imayama, T., Miyajima, Y., and Saito, T. (2011) Seafloor geology of a serpentinite-eclogite complex in the Ohmachi Seamount (Izu-Bonin arc) as an exhumed subduction zone within the Philippine Sea. In: Ogawa, Y., Anma, R., and Yildirim, D. Eds. **Accretionary Prisms and Convergent Margin Tectonics in the Northwest Pacific Basin. Modern Approaches in Solid Earth Sciences, Vol. 8**, Springer. (<http://link.springer.com/book/10.1007/978-90-481-8885-7>)
15. Yui, T.F. *, Maki, K., **Usuki, T.**, Lan, C.Y., Martens, U., Wu, C.M., Wu, T.W. and Liou, J.G. (2010) Genesis of Guatemala jadeitite and related fluid characteristics: Insight from zircon. **Chemical Geology**, **270**, 45-55.
16. Lan, C.Y. *, **Usuki, T.**, Wang, K.L., Yui, T.F., Okamoto, K., Lee, Y.H., Hirata, T, Kon, Y., Orihashi, Y., Liou, J.G., Lee, C.S. (2009) Detrital zircon evidence for the antiquity of Taiwan. **Geosciences Journal** **13**, 233-243.
17. **Usuki, T.** *, Lan, C.Y., Yui, T.F., Iizuka, Y., Van Tich Vu, Tuan Anh Tran, Okamoto, K., Wooden, J. L., Liou, J. G. (2009) Early Paleozoic medium-pressure metamorphism in central Vietnam: evidence from SHRIMP U-Pb zircon ages. **Geosciences Journal** **13**, 245-256.
18. Yui, T.F. *, Okamoto, K., **Usuki, T.**, Lan, C.Y., Chu, H.T., Liou, J.G. (2009) Late Triassic-Late Cretaceous accretion/subduction in Taiwan region along the eastern margin of South China – evidence from zircon SHRIMP dating. **International Geology Review**, **51**, 304-328.
19. **Usuki, T.** *, Kaiden, H., Misawa, K. and Shiraishi, K. (2006) Sensitive high-resolution ion microprobe U-Pb ages of the Latest Oligocene-Early Miocene rift-related Hidaka high-temperature metamorphism in Hokkaido, northern Japan. **Island Arc** **15**, 508-516.
20. Ueda, H. * **Usuki, T.** and Kuramoto, Y. (2004) Intra-oceanic unroofing of eclogite facies rocks in the Omachi Seamount, Izu-Bonin frontal arc. **Geology**, **32**, 849-852.
21. **Usuki, T.** * (2002) Anisotropic Fe-Mg diffusion in biotite. **American Mineralogist**, **87**, 1014-1017.
22. **Usuki, T.** * (1999) Staurolite occurrences in the Shizunai river area in the Hidaka metamorphic belt, Hokkaido, Japan. **J. Mineral. Petrol. Econ. Geol.** **94**, 267-278 (in Japanese with English abstract).
23. Kawakami, G. *, Yoshida, K. and **Usuki, T.** (1999) Preliminary study for the Middle Miocene Kawabata Formation, Hobetsu district, central Hokkaido, Japan; special reference to the sedimentary system and the provenance. **J. Geol. Soc. Japan**, **105**, 673-686 (in Japanese with English abstract).

24. **Usuki, T.** * and Watanabe, T. (1998) Metamorphic zonation and formation of granulite in the Shizunai area, the Hidaka Metamorphic belt, Hokkaido, Japan. **Mem. Natl. Inst. Polar Res., Spec. Issue, 53, 177-191.**

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