

## Publication list

### Refereed papers

1. 寺崎英紀、柴崎裕樹、高温高圧下におけるFeSiおよびFeS合金の水素化、高圧力の科学と技術、印刷中, 2011.
2. Sakai, T., E. Ohtani, H. Terasaki, S. Kamada, N. Hirao, Y. Ohishi, N. Sata, Phase stability and compression study of  $(\text{Fe}_{0.89}, \text{Ni}_{0.11})_3\text{S}$  up to pressure of the Earth's core, *American Mineralogist*, in press, 2011.
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4. Sakamaki, T., E. Ohtani, S. Urakawa, H. Terasaki, Y. Katayama, Density of carbonated peridotite magma at high pressure using an X-ray absorption method, *American Mineralogist*, **96**, 553-557, 2011.
5. Nishida, K., E. Ohtani, S. Urakawa, A. Suzuki, T. Sakamaki, H. Terasaki, Y. Katayama, Density measurement of liquid FeS at high pressures using synchrotron X-ray absorption, *American Mineralogist*, **96**, 864-868, 2011.
6. Shibazaki, Y., E. Ohtani, H. Terasaki, R. Tateyama, T. Sakamaki, K. Funakoshi, Effect of hydrogen on melting temperature of FeS at high pressure: Implications for core of Ganymede, *Earth and Planetary Science Letters*, **301**, 153-158, 2011.
7. Terasaki, H., Y. Shibazaki, T. Sakamaki, R. Tateyama, E. Ohtani, K. Funakoshi, Y. Higo, Hydrogenation of FeSi under high pressure, *American Mineralogist*, **96**, 93-99, 2011.
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10. Suzuki, A., E. Ohtani, H. Terasaki, K. Nishida, H. Hayashi, T. Sakamaki, Y. Shibazaki, K. Funakoshi, T. Kikegawa, Pressure and temperature dependence of the viscosity of a  $\text{NaAlSi}_2\text{O}_6$  melt, *Physics and Chemistry of Minerals*, doi 10.1007/s00269-010-0381-4, 2010.
11. Ju J., K. Huynh, J. Tang, Z.F. Li, M. Watahiki, K. Sato, H. Terasaki, E. Ohtani, H. Takizawa, K. Tanigaki, Superconducting properties of  $\text{SmFeAsO}_{1-x}$  prepared under

- high-pressure condition. *Journal of Physics and Chemistry of Solids*, **71**, 4, 491-494, 2010.
12. Kamada, S., H. Terasaki, E. Ohtani, T. Sakai, H. Asanuma, T. Kikegawa, Y. Ohishi, N. Hirao, N. Sata, Phase relationships of the Fe-FeS system in conditions up to the core, *Earth and Planetary Science Letters*, **294**, 94-100, 2010.
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## Non-refereed papers

1. Ohtani, E., Tateyama, R., Nishida, K., Terasaki, H., Urakawa, S., Nakatsuka, A., Katayama, Y., Density measurement of Fe-S and Fe-Si liquids and precise determination of their bulk moduli using X-ray absorption method, SPring-8 User Experimental Report, 2010A.
2. Terasaki, H., Shibasaki, Y., Sakamaki, T., Tateyama, R., Ohtani, E., Funakoshi, K., Higo, Y., Hydrogen dissolution to Fe-C alloy under high pressure and temperature: Investigation of hydrogen incorporation mechanism to iron-light element alloys, SPring-8 User Experimental Report, 2009B.
3. Urakawa, S., Terasaki, H., Funakoshi, K., Uesugi, K., Establishment of X-ray tomography under high pressure and high temperature, SPring-8 User Experimental Report, 2009B.
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5. Ohtani, E., S., Sakai, T., Terasaki, H., Kamada, S., Murakami, M., Hirao, N., Sata, N., Ohishi, Y., Study of high pressure phases of FeNiSi-alloy under the core conditions, and crystal structure of the inner core, SPring-8 User Experimental Report, 2009A.
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