



北京大学高温高压实验室

High Pressure High Temperature Lab of PKU



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论文发表-2010年

英文SCI	中文SCI	NON-SCI
<p>已出版:</p> <p>33. Zhai, S., Kanzaki, M., Katsura, T., and Ito, E. (2010) Synthesis and characterization of strontium-calcium $\text{Y}-\text{Ca}_3-\text{xSr}_x(\text{PO}_4)_2$ ($0 < \text{x} < 2$). <i>Materials Chemistry and Physics</i>, 120, 348-350.</p> <p>34. Fleet, M. E., and Liu, X. (2010) X-ray absorption spectroscopy of ultramarine pigments: A new analytical method for the polysulfide radical anion S_3- chromophore. <i>Spectrochimica Acta Part B: Atomic Spectroscopy</i>, 65, 75-79.</p> <p>35. Fleet, M. E., Liu, X., and Shieh, S. R. (2010) Structural change in lead fluorapatite at high pressure. <i>Physics and Chemistry of Minerals</i>, 37, 1-9.</p> <p>36. Wu, X., Zhang, B., Xu, J., Katsura, T., Zhai, S., Yoshino, T., Manthilake, G., and Shatskiy, A. (2010) Electrical conductivity measurements of periclase under high pressure and high temperature. <i>Physica B</i>, 405, 53-56.</p> <p>37. Zhai, S., and Wu, X. (2010) X-ray diffraction study of β-$\text{Ca}_3(\text{PO}_4)_2$ at high pressure. <i>Solid State Communications</i>, 150, 443-445.</p> <p>38. Huang, T., Shieh, S.R., Akhmetov, A., Liu, X., Lin, C.M., and Lee, J.S. (2010) Pressure-induced phase transition in BaCrO_4. <i>Physical Review B</i>, 81, 214117.</p> <p>39. Ito, E., Yamazaki, D., Yoshino, T., Fukui, H., Zhai, S., Shatzkiy, A., Katsura, T., Tange, Y., Funakoshi, K. (2010) Pressure generation and investigation of the post-perovskite transformation in MgGeO_3 by squeezing the Kawai-cell equipped with sintered diamond anvils. <i>Earth and Planetary Science Letters</i>, 293, 84-89.</p> <p>40. Wu, J., and Zheng, H. (2010) Quantitative measurement of the concentration of sodium carbonate in the system of $\text{Na}_2\text{CO}_3-\text{H}_2\text{O}$ by Raman spectroscopy. <i>Chemical Geology</i>, 273, 267-271.</p> <p>41. Liu, Y., Qin, S., Jiang, J., Takumi, K., and Shi, G. (2010) High pressure X-ray diffraction study of CaMnO_3 perovskite. <i>Chinese Physics C</i>, 34, 1025-1028.</p> <p>42. Sun, Q. (2010) The single donator-single acceptor hydrogen bonding structure in water probed by Raman spectroscopy. <i>Journal of Chemical Physics</i>, 132, 054507.</p> <p>43. Sun, Q., Zhao, L., Li, N., and Liu, J. (2010) Raman spectroscopic</p>	<p>已出版:</p> <p>13. 刘曦, 胡张翼, 邓力维, (2010) 长石在高温高压条件下的物理化学行为. <i>岩石学报</i>, 26, 3641-3650.</p> <p>14. 郭宁, 郑海飞, (2010) 石英拉曼峰进行压力标定的误差研究. <i>光谱学与光谱分析</i>, 30, 2161-2163.</p> <p>15. 田锋, 郑海飞, (2010) 高压下正戊醇的拉曼光谱原位研究. <i>光谱学与光谱分析</i>, 30, 953-957.</p> <p>16. 刘锦, 孙楷, (2010) 硅油作为压力计的拉曼光谱研究. <i>光谱学与光谱分析</i>, 30, 2390-2392.</p>	<p>已出版:</p> <p>13. Liu, X., He, Q., Wang, H., Fleet, M. E., and Hu, X. (2010) Thermal expansion of kyanite at ambient pressure: an X-ray powder diffraction study up to 1000oC. <i>Geoscience Frontiers</i>, 1, 91-97.</p>

study for the determination of Cl⁻ concentration (molarity scale) in aqueous solutions: Application to fluid inclusions. *Chemical Geology*, 272, 55–61.

44. Liu, Q., Liu, W., Whitaker, M.L., Wang, L., and Li, B. (2010) In situ ultrasonic velocity measurements across the olivine–spinel transformation in Fe₂SiO₄. *American Mineralogist*, 95, 1000–1005.

45. Wu, X., Steinle-Neumann, G., Narygina, O., McCammon, C., and Dubrovinsky, L. (2010) In situ high-pressure study of LiNbO₃-type FeTiO₃: X-ray diffraction and Mossbauer spectroscopy. *High Pressure Research*, 30, 395– 405.

46. McCammon, C., Dubrovinsky, L., Narygina, O., Kantor, I., Wu, X., Glazyrin, K., Sergueev, I., Chumakov, A.I. (2010) Low-Spin Fe²⁺ in silicate perovskite and a possible layer at the base of the lower mantle. *Physics of the Earth and Planetary Interiors*, 180, 215–221.

47. Wu, X., Holbig, E., and Steinle-Neumann, G. (2010) Structural stability of TiO₂ at high pressure in density-functional theory based calculations. *Journal of Physics: Condensed Matter*, 22, 295501.

48. Ovsyannikov, S.V., Wu, X., Shchennikov, V.V., Karkin, A.E., Dubrovinsky, N., Garbarino, G., and Dubrovinsky, L. (2010) Structural stability of a golden semiconducting orthorhombic polymorph of Ti₂O₃ under high pressures and high temperatures. *Journal of Physics: Condensed Matter*, 22, 375402.

49. Deng, L., Liu, X., Liu, H., and Dong, J. (2010) High-pressure phase relations in the composition of albite NaAlSi₃O₈ constrained by an ab initio and quasi-harmonic Debye model, and their implications. *Earth and Planetary Science Letters*, 298, 427–433.

50. Wang, H., He, D., Tan, N., Wang, W., Wang, J., Dong, H., Ma, H., Kou, Z., Peng, F., Liu, X., and Li, S. (2010) Note: an anvil-preformed gasket system to extend pressure range for large volume cubic press. *Review of Scientific Instruments*, 81, 116101.

51. Zhai, S., Wu, X., and Ito, E. (2010) High-pressure Raman spectra of tuite, V-Ca₃(PO₄)₂. *Journal of Raman Spectroscopy*, 41, 1011–1013.

52. Wu, X., Qin, S., Dubrovinsky, L. (2010) Structural characterization of the FeTiO₃-MnTiO₃ solid solution. *Journal of Solid State Chemistry*, 183, 2483–2489.

53. Wang, Z., Zhao, Y., and Kohlstedt, D. L. (2010) Dislocation Creep Accommodated by Grain Boundary Sliding in Dunite. *Journal of Earth Science*, 21, 541–554.