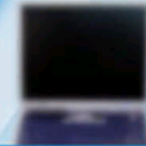




北京大学高温高压实验室

High Pressure High Temperature Lab of PKU

[简介](#)[人员组成](#)[仪器设备](#)[研究方向](#)[论文发表](#)[规章制度](#)[招生招聘](#)[友情链接](#)[新闻动态](#)

论文发表-2011年

英文SCI

已出版:

54. Liu, X., Shieh, S. R., Fleet, M.E., Zhang, L., and He, Q. (2011) Equation of state of carbonated hydroxylapatite at ambient temperature: Significance of carbonate. American Mineralogist, 96, 74-80.
55. Yamazaki, D., Ito, E., Katsura, T., Yoshino, T., Zhai, S., Fukui, H., Shatzkiy, A., Guo, X., Shan, S., Okuchi, T., Tange, Y., Higo, Y., Funakoshi, K. (2011) Phase boundary between perovskite and post-perovskite structures in MnGeO₃ determined by in situ X-ray diffraction measurements using sintered diamond anvils. American Mineralogist, 96, 89-92.
56. Zhai, S., Liu, A., Xue, W., Song, Y. (2011) Raman spectroscopic studies of orthophosphates Ba₃(P₀₄)₂ and Sr₃(P₀₄)₂ under high pressure. Solid State Communications, 151, 276-279.
57. Gu, T., Wu, X., Qin, S., and Dubrovinsky, L. (2011) In situ high-pressure study of FeP: Implications for planetary cores. Physics of Earth and Planetary Interiors, 184, 154-159.
58. Liu, X., Liu, W., He, Q., Deng, L., Wang, H., He, D., and Li, B. (2011) Isotropic thermal expansivity and anisotropic compressibility of ReB₂. Chinese Physics Letters, 28, 036401.
59. Zhai, S., Xue, W., Yamazaki, D., Shan, S., Ito, E., Tomioka, N., Shimojuku, A., and Funakoshi, K. (2011) Compressibility of strontium orthophosphate Sr₃(P₀₄)₂ at high pressure. Physics and Chemistry of Minerals, 38, 357-361.
60. Liu, X., Fleet, M.E., Shieh, S.R., and He, Q. (2011) Synthetic lead bromapatite: X-ray structure at ambient pressure and compressibility up to about 20 GPa. Physics and Chemistry of Minerals, 38, 397-406.
61. Liu, W., Whitaker, M. L., Liu, Q., Wang, L., Nishiyama, N., Wang, Y., Kubo, A., Duffy, T.S., and Li, B. (2011) Thermal equation of state of CaIrO₃ post-perovskite. Physics and Chemistry of Minerals, 38, 407-417.
62. Deng, L., Liu, X., Liu, H., and Zhang, Y. (2011) A first-principles study of the phase transition from Holl-I to Holl-II in the composition KAlSi₃O₈. American Mineralogist, 96, 974-982.

中文SCI

已出版:

17. 付培歌, 郑海飞, (2011) 常温0.1~2GPa压力下文石的拉曼光谱研究. 光谱学与光谱分析, 31, 127-130.
18. 刘锦, 孙樯, (2011) 金刚石压腔蛇纹石原位拉曼光谱研究. 光谱学与光谱分析, 31, 398-401.
19. 王世霞, 郑海飞, (2011) 金刚石压腔结合拉曼光谱技术进行氢同位素分馏的实验研究. 光谱学与光谱分析, 31, 691-695.
20. 赵永红, 白峻天, 李小凡, 贾科, 陈辉, (2011) 活动断裂带附近地下水中的氢同位素变化与地震关系研究. 岩石学报, 27, 1909-1915.
21. 陈晓利, 李杨, 洪启宇, 赵永红, (2011) 地震作用下边坡动力响应的数值模拟研究. 岩石学报, 27, 1899-1908.
22. 刘川江, 郑海飞, (2011) 常温0~1 GPa压力下重晶石的拉曼光谱研究. 光谱学与光谱分析, 31, 1529-1532.
23. 王世霞, 郑海飞, (2011) 方解石高压相变的拉曼光谱研究. 光谱学与光谱分析, 31, 2117-2119.

NON-SCI

已出版:

14. Zhai, S., and Ito, E. (2011) Recent advances of high-pressure generation in the multianvil apparatus using sintered diamond anvils. Geoscience Frontiers, 2, 101-106.
15. Wu, X., Qin, S., and Dubrovinsky, L. (2011) Investigation into high-pressure behaviour of MnTiO₃: X-ray diffraction and Raman spectroscopy with diamond anvil cells, Geoscience Frontiers, 2, 107-114.
16. 杨晶, 巫翔, 秦善, (2011) (Fe_{0.03}Ni_{0.97})₈(Si_{0.79}P_{0.21})₃的等温状态方程研究. 高压物理学报, 25, 275-281.
17. Zheng, H., Qiao, E., Yang, Y., and Duan, T. (2011) Determination of inner pressure for fluid inclusions by Raman spectroscopy and its application. Geoscience Frontiers, 2, 403-407.
18. 杨晶, 顾婷婷, 朱峰, 巫翔, 秦善, 刘景, 李晓东, (2011) 冰晶石(Na₃AlF₆)的高压研究:同步辐射X射线衍射和第一性原理计算. 核技术, 6, 406-410.
19. 赵永红, 李小凡, 邓凯, 方晨, (2011) 三峡树坪滑坡动力学的有限元模拟. 中国力学大会-2011暨钱学森诞辰100周年纪念大会, 2011年8月, 哈尔滨.

63. Hu, X., Liu, X., He, Q., Wang, H., Qin, S., Ren, L., Wu, C., and Chang, L. (2011) Thermal expansion of andalusite and sillimanite at ambient pressure: a powder X-ray diffraction study up to 1000°C. Mineralogical Magazine, 75, 363-374.
64. Mookherjee, M., Nakajima, Y., Steinle-Neumann, G., Wu, X. (2011) High pressure behavior of iron carbide (Fe₇C₃) at inner core conditions. Journal of Geophysical Research, 116, B04201.
65. Fleet, M.E., Liu, X., and Liu, X. (2011) Orientation of channel carbonate ions in apatite: effect of pressure and composition. American Mineralogist, 96, 1148-1157.
66. Zhai, S., Xue, W., Lin, C., Wu, X., Ito, E. (2011) Raman spectra and X-ray diffraction of tuite at various temperatures. Physics and Chemistry of Minerals, 38, 639-646.
67. Liu, X., He, Q., Deng, L., Zhai, S., Hu, X., Li, B., Zhang, L., Chen, Z., Liu, Q. (2011) Equation of state of CAS phase to pressure of the uppermost lower mantle at ambient temperature. Science China D: Earth Sciences, 54, 1394-1399.
68. Wu, X., Qin, S., Gu, T., Yang, J., and Manthilake, G. (2011) Structural and elastic properties of CaGeO₃ perovskite at high pressures. Physics of Earth and Planetary Interiors, 189, 151-156.
69. Zhang, Q., Wu, X., and Qin, S. (2011) In situ high-pressure X-ray diffraction experiments and ab initio calculations of Co₂P. Chinese Physics B, 20, 066101.
70. Sun, Q., and Qin, C. (2011) Raman OH stretching band of water as an internal standard to determine carbonate concentrations. Chemical Geology, 283, 274-278.
71. Wang, X., Chou, I., Hu, W., Burruss, R., Sun, Q., and Song, Y. (2011) Raman spectroscopic measurements of CO₂ density: Experimental calibration with high-pressure optical cell (HPOC) and fused silica capillary capsule (FSCC) with application to fluid inclusion observations. Geochimica et Cosmochimica Acta, 75, 4080-4093.
72. He, Q., Liu, X., Hu, X., Li, S., and Wang, H. (2011) Solid solution between lead fluorapatite and lead fluorvanadate apatite: mixing behavior, Raman feature and thermal expansivity. Physics and Chemistry of Minerals, 38, 741-752.
73. Huang, H., Fei, Y., Cai, L., Jing, F., Hu, X., Xie, H., Zhang, L., and Gong, Z. (2011) Evidence for an oxygen-depleted liquid outer core of the Earth. Nature, 479, 513-516.
74. Zhang, Q., Yang, J., Wu, X., and Qin, S. (2011) Phase stability and elasticity of Sc₂O₃ at high pressure. The European Physical Journal, B84, 11-16.
75. Wu, X., Mookherjee, M., Gu, T., and Qin, S. (2011) Elasticity and anisotropy of iron-nickel phosphides at high pressures. Geophysical Research Letters, 38, L20301.