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个人主页:	



个人简历

教育背景:

1988年长春地质学院获硕士学位, 导师: 叶挺松 教授
2001年中国地质科学院获得博士学位, 导师: 肖序常 研究员 (院士)

工作经历:

1988?1998, 地质矿产部西安地质矿产研究所.
2002- 2004, 北京大学地质系博士后.
2004至今, 北京大学地球与空间科学学院
2006-2007, 英国皇家学会客座研究员, Durham大学访问学者

荣誉、获奖情况:

国家杰出青年基金获得者 (2008)
国家自然科学基金创新群体骨干成员
地质矿产部科技进步三等奖 (1996)
北京大学优秀博士后奖 (2004)
全国优秀博士论文奖 (2005)
英国皇家学会国际基金 (2006)
国际SCI期刊“Lithos” 2003-2007最多引用论文奖 (2007)
北京大学教学优秀奖 (2008)
北京市教育教学成果 (高等教育) 二等奖 (2009)
北京大学教学成果一等奖 (2009)

学术或社会职务:

孙贤鉢基金委员会委员
国际岩石圈计划Task-?IV成员:
国际期刊 <Island Arc> 编委 (2006-2008);
国际期刊 <Lithos> 专辑特邀编辑 (2007).
国际期刊 <Journal of Asian Earth Science> 专辑特邀编辑 (2009).
中国地球化学学会 化学地球动力学专业委员会副主任委员 (2009-2014)

工作情况及研究方向

教学与主讲课程:

《普通岩石学—变质岩》, 本科生专业基础课
《岩石学前缘理论和研究方法》, 本科生专业选修课
《薄片岩石学》, 研究生专业选修课
《高等岩石学》, 研究生专业基础课
《野外地质实习》, 本科生专业课

所在专业与主要研究方向:

变质岩、火成岩岩石学和大地构造, 高压超高压变质岩及其地球化学过程, 造山带构造演化

主持的主要科研课题:

- 岩石学 (40825007), 国家自然科学基金杰出青年基金, 2009.1-2012.12, 进行中

- 柴北缘超高压变质带榴辉岩向高压麻粒岩转变过程的深熔和岩浆作用研究 (40773012), 国家自然科学基金, 2008.1–2010.12, 进行中
- 祁连山典型造山带洋陆俯冲过程及其动力学机制, 教育部全国优秀论文作者基金, 已结题
- 柴北缘超高压带石榴橄榄岩的形成和演化过程及其对大陆深俯冲作用的制约 (40372031), 国家自然科学基金, 已结题

科研成果与主要论著

SCI检索论文

1. Song S.G., Niu Y.L., Wei C.J., Ji J.Q., Su L., Metamorphism, anatexis, zircon ages and tectonic evolution of the Gongshan block in the northern Indochina continent, Southwest China. *Lithos*, in press.
2. Song S. G., Niu Y. L., Zhang L. F. and Bucher K. The Luliangshan garnet peridotite massif of the North Qaidam UHPM belt, NW China - a review of its origin and metamorphic evolution. *J Metamorphic Geology*, 2009, 27, 621-638.
3. Song S.G., ? Su L., ? Niu Y., ? Lai Y., ? Zhang L.F., 2009. CH4 inclusions in orogenic harzburgite: Evidence for reduced slab fluids and implication for redox melting in mantle wedge. *Geochimica et Cosmochimica Acta*, 73, 1737-1754.
4. Song S.G., Zhang G.B., Su L., Niu Y., Zhang L.F., Two types of peridotite in North Qaidam UHPM belt and their tectonic implications for oceanic and continental subduction: a review. *Journal of Asian Earth Science*, 35 (2009) 285– 297.
5. Song, S G, Niu, Y., Zhang, L.F., Wei, C.J., Liou, J.G., Su, L. Tectonic evolution of Early Paleozoic HP metamorphic rocks in the North Qilian Mountains, NW China: New perspectives. *Journal of Asian Earth Science*, 2009, 35: 334-353.
6. Song, SG; Su, L; Niu, YL, Generation of adakite: Melting of eclogite during exhumation of UHPM terrane. *Geochimica et Cosmochimica Acta*, 73 Pages: A1252-A1252 Year: JUN 2009
7. Song S.G., Zhang L.F. Niu Y., Wei C.J., Liou J. G., Shu G.M., 2007. Eclogite and carpholite-bearing meta-pelite in the North Qilian suture zone, NW China: implications for Paleozoic cold oceanic subduction and water transport into mantle. *Journal of Metamorphic Geology*, 25, 547-563.
8. Song S.G., Su L., Niu Y., Zhang L.F., 2007. Petrological and Geochemical Constraints on the Origin of Garnet Peridotite in the North Qaidam Ultrahigh-pressure Metamorphic Belt, Northwestern China. *Lithos*, 96, 243-265.
9. Song S.G., Zhang L.F., Niu Y., Su L., Song B. and Liu D. Y., 2006. Evolution from oceanic subduction to continental collision: A case study of the Northern Tibetan Plateau based on geochemical and geochronological data. *Journal of Petrology*, 47, 435-455.
10. Song S.G., Zhang L.F., Niu Y., Su L., Jian P. and Liu D. Y. 2005. Geochronology of diamond-bearing zircons from garnet-peridotite in the North Qaidam UHPM belt, North Tibetan Plateau: A record of complex histories associated with continental collision. *Earth and Planetary Science Letters*, 234, 99-118.
11. Song, S.G., Zhang, L.F., Chen, J., Liou, J.G., Niu, Y., 2005. Sodid amphibole exsolutions in garnet from garnet-peridotite, North Qaidam UHPM belt, NW China: implications for ultradeep-origin and hydroxyl defects in mantle garnets, *American Mineralogist*, 90, 814-820.
12. Song S.G., Zhang L.F. and Niu Y.L., 2004. Ultra-deep origin of garnet peridotite from the North Qaidam ultrahigh-pressure belt, Northern Tibetan Plateau, NW China. *American Mineralogist*, 89, 1330– 1336.
13. Song S G, Yang J S, Xu Z Q, Liou J G, Wu C L and Shi R D, 2003. Metamorphic evolution of coesite-bearing UHP terrane in the North Qaidam, northern Tibet, NW China. *Journal of Metamorphic Geology*, 21, 631--644.
14. Song S G, Yang J S, Liou J G, Wu C L, Shi R D, and Xu Z. Q., 2003. Petrology, Geochemistry and isotopic ages of eclogites in the Dulan UHPM terrane, the North Qaidam, NW China. *Lithos*, 70 (3-4), 195-211.
15. 宋述光, 牛耀龄, 张立飞, 张贵宾. 2009. 大陆造山运动: 从大洋俯冲到大陆俯冲、碰撞、折返的时限—以北祁连山、柴北缘为例. *岩石学报*, 25, 2067-77.
16. 曹毅, 宋述光. 2009. 北祁连山高压变质带的变形和变质特征及其对俯冲带折返的意义. *岩石学报*, 25, 2235-2246.
17. Song S.G., Ji J.Q., Wei C.J., Su L., Zheng Y.D., Song B., Zhang L.F., Early Paleozoic granite in Nujiang River of northwest Yunnan in SW China and its tectonic implications. *Chinese Science Bulletin*, 2007, 52 (17), 2402-2406.
18. 张贵宾, 宋述光*, 张立飞, 牛耀龄, 舒桂明. 2005. 柴北缘超高压变质带沙柳河蛇绿岩型地幔橄辉岩及其意义. *岩石学报*, 21, 1049-1058.
19. Su L., Song S.G. and Zhou D.W., 2005. Petrogenesis of Songshugou dunite body in the Qinling Orogenic Belt, Central China: Constraints from geochemistry and melt inclusions. *Science in China (Series D)*, 48, 1146-1157.
20. Song S.G., Zhang L.F., Niu Y.L., Song B., Zhang G.B. and Wang Q.J.. 2004. Zircon U-Pb SHRIMP ages of eclogites from the North Qilian Mountains, NW China and their tectonic implication. *Chinese Science Bulletin*, vol. 49 (7), 848-852.
21. Su L., Song S. G., Song B., Zhou D. W. and Hao J.R. 2004. SHRIMP zircon U– Pb ages of garnet pyroxenite and Fushui gabbroic complex in Songshugou region and constraints on tectonic evolution of Qinling Orogenic Belt. *Chinese Science Bulletin*, 49: 1307-1310.
22. Song S.G. and Su L. 1998. Rheological properties of mantle peridotites at Yushigou in the North Qilian Mountains and their implications for plate dynamics. *Acta Geologica Sinica (English edition)*, 72 (2): 131-141.
23. Wei CJ, Wang W, Clarke GL, Zhang LF, Song SG. Metamorphism of High/ultrahigh-pressure Pelitic-Felsic Schist in the South Tianshan Orogen, NW China: Phase Equilibria and P-T Path. *JOURNAL OF PETROLOGY*, 50 (10): 1973-1991, 2009
24. Liou J.G., Ernst W.G., Song S.G., Jahn B.M., Tectonics and HP– UHP metamorphism of northern Tibet – Preface. *Journal of Asian Earth Sciences* 35 (2009) 191– 198.
25. Zhang Lifei, Wang Qianjie and Song Shuguang, 2009, Lawsonite blueschist in Northern Qilian, NW China: PT pseudosections and petrologic implications, *Journal of Asian Earth Sciences*. doi: 10.1016/j.jseaes. 2008.11.007

26. Zhang G.B., Zhang L.F., Song S.G., Niu Y.L., 2009. UHP evolution and SHRIMP dating of meta-ophiolitic gabbro in the North Qaidam, NWChina, *Journal of Asian Earth Sciences*. doi: 10.1016/j.jseas.2008.11.013.
27. Zhang G.B., Song S.G., Zhang L.F., Niu Y., 2008. Oceanic crust affinities within continental-type UHP metamorphic belt in the North Qaidam, NW China: evidence from petrology, geochemistry and geochronology. *Lithos*, 104, 99-108.
28. Wei C. J. and Song S. G., 2008. Chloritoid–glaucophane schist in the north Qilian orogen, NW China: phase equilibria and *P–T* path from garnet zonation. *Journal of Metamorphic Geology*, 26 (3): 301-316.
29. Zhang L.F., Lü Z., Zhang G.B. & Song S.G., 2008, The geological characteristics of oceanic-type UHP metamorphic belts and their tectonic implications: Case studies from Southwest Tianshan and North Qaidam in NW China, *Chinese Science Bulletin*, 53, 3120-3130
30. Zhang LF, Ai YL, Song SG, Liou J, Wei CJ. A brief review of UHP meta-ophiolitic rocks, southwestern Tianshan, western China. *International Geology Review* 49 (9): 811-823, 2007
31. Niu, Y.L. & Song S.G., (2007) The origin, evolution and present state of continental lithosphere (Preface), *Lithos*, 96 (1-2): IX-X.
32. Zhang LF, Ai YL, Li XP, Rubatto D, Song B, Williams S, Song SG, Ellis D, Liou JG. Triassic collision of western Tianshan orogenic belt, China: Evidence from SHRIMP U-Pb dating of zircon from HP/UHP eclogitic rocks. *Lithos* 96 (1-2): 266-280, 2007.
33. Xu ZQ, Yang JS, Wu CL, Li HB, Zhang JX, Qi XX, Song SG, Qiu HJ, 2006. Timing and mechanism of formation and exhumation of the Northern Qaidam ultrahigh-pressure metamorphic belt. *Journal of Asian Earth Sciences*, 28 (2-3): 160-173.
34. Zhang L.F., Song S.G., Ai, Y.L., and Liou J.G.. 2005. Relict coesite exsolution in omphacite from western tianshan eclogites, China. *American Mineralogist*, 90, 181-186.
35. Xiao XC, Wang J, Su L, Ji WH, Song SG, 2005. An early aged ophiolite in the western Kunlun Mts., NW Tibetan Plateau and its tectonic implications. *Acta Geologica Sinica-English Edition* 79 (6): 778-786.
36. Yang, J S; Xu, Z Q; Zhang, J X; Song, S G; Wu, C L; Shi, R D; Li, H B; Brunel, M, 2002. Early Palaeozoic North Qaidam UHP metamorphic belt on the north-eastern Tibetan plateau and a paired subduction model. *Terra Nova*, 14 (5): 397-404.
37. Yang, J S, Xu, Z Q, Song, S G, Zhang, J X, Wu, C L, Shi, R D, Li, H B, Brunel, M & Tapponnier, P, 2002. Subduction of continental crust in the early Paleozoic North Qaidam ultrahigh-pressure metamorphism belt, NW China: Evidence from the discovery of coesite in the belt. *Acta Geologica Sinica*, 76, 63-68.
38. Chen, WM; Huang, YC; Iizuka, Y; Lo, CH; Wu, HQ; Song, SG; Yang, JS; Xu, ZQ; Yang, HY. 2002. Integrated P-T paths of the high-pressure rocks and their tectonic implications for the mountain-building of the North Qilian, China. *Acta Geologica Sinica-English Edition*, 76 (1): 44-62.
39. Yang J, Xu Z., Song S., Zhang J., Wu C., Shi R., Li H., Brunel M., 2001. Discovery of coesite in the North Qaidam Early Palaeozoic ultrahigh pressure (UHP) metamorphic belt, NW China, *C. R. Acad. Sci. Paris*, 333, 719-724.
40. Su L, Song S G and Wang Z H, 1999. CH₄-rich fluid inclusions in the Yushigou mantle peridotite and their implications, North Qilian Mountains, China. *Chinese Science Bulletin*, 44 (21), 1992-1995.
41. Wu H Q, Feng Y M and Song S G, 1993. Metamorphism and deformation of blueschist belts and their tectonic implications, North Qilian Mountains, China. *Journal of Metamorphic Geology*, 11: 523-536.

核心期刊论文:

1. 曹毅, 宋述光. 2008. 俯冲带榴辉岩变形作用及其俯冲和折返的意义. *地质通报*, 27(10), 1646-1653.
2. 宋述光, 张立飞, Yaoling Niu 等. 2004. 北祁连山高压变质带榴辉岩的锆石SHRIMP定年及其构造意义. *科学通报*, 49卷, 6期, 592-595.
3. 宋述光 Yaoling Niu 张立飞, 2007. 榴辉岩的两种变质演化轨迹和俯冲大陆地壳的差异折返——以柴北缘都兰超高压地体为例. *高校地质学报*, 13 (3), 515-525.
4. 宋述光, 张立飞, Yaoling Niu, 张贵宾. 2007. 大陆碰撞造山带的两类橄榄岩——以柴北缘超高压变质带为例. *地学前缘*, 14 (2), 129-138.
5. 王乾杰, 张立飞, 宋述光, 2007. 北祁连山硬柱石蓝片岩p-T条件相平衡计算及其岩石学意义. *地学前缘*, 14(1), 158-171.
6. 宋述光, 季建清, 魏春景, 苏犁, 郑亚东, 宋彪, 张立飞. 滇西怒江早古生代片麻状花岗岩的确定及其构造意义. *科学通报*, 2007, 52 (8), 927-929.
7. 苏犁, 宋述光*, 周鼎武. 2005. 秦岭造山带松树沟纯橄岩体成因: 岩石学、地球化学和岩浆包裹体的制约. *中国科学 (D)*, 35 (1), 38-47.
8. 苏犁, 宋述光*, 宋彪, 周鼎武, 郝建荣. 2004. 松树沟地区石榴辉石岩和富水杂岩SHRIMP锆石U-Pb年龄及其对秦岭造山带构造演化的制约. *科学通报*, 49: 1209-1211.
9. 宋述光, 张立飞, Y. Niu, 宋彪, 刘墩一, 2004. 青藏高原北缘早古生代板块构造演化和大陆深俯冲. *地质通报*, 23, 918-925.
10. 肖序常. 王军. 苏犁. 宋述光. 2003, 再论西昆仑地蛇绿岩及其构造意义, *地质通报*, 22, 745-750.
11. 张建新. 杨经绥. 许志琴. 孟繁聪. 宋述光. 等. 2002. 阿尔金榴辉岩中超高压变质作用证据. *科学通报*, 47 (3), 231-234. (SCI)
12. 李海兵. 杨经绥. 吴才来. 宋述光. 等. 2002. 阿尔金断裂剪切过程中定向生长锆石的发现及其意义——来自于显微构造和锆石内部矿物包裹体的证据. *地质通报*, 21(6期), 298-303.
13. 宋述光, 杨经绥. 2001. 柴北缘都兰地区榴辉岩中透长石+石英包裹体: 超高压变质作用的证据. *地质学报*, 75 (2): 180-185.
14. 杨经绥, 宋述光, 许志琴, 等. 2001. 柴北缘早古生代高压-超高压变质带中发现典型超高压矿物—柯石英. *地质学报*, 75 (2): 175-179.
15. Yang J.S., Song S.G., Wu C.L., Shi R.D., Jalivet, M. 2000. North Qaidam ultrahigh pressure metamorphic (UHPM) belt on the northeastern Qinghai-Tibet plateau and its eastward extension. *Earth Science Frontiers*, 7 (Suppl.): 241-242.
16. 杨经绥, 许志琴, 宋述光, 等. 2000. 青海都兰榴辉岩的发现: 试论我国中央造山带中的高压-超高压变质带的分布及构造意义. *地质学报*, 74 (2): 156-168.

17. 宋述光, 苏犁, 杨合群, 王懿圣. 1998. 陕西南松松树沟岩体的岩石成因和侵位机制. 岩石学报, 14 (2): 212-221.
 18. 苏犁, 宋述光, 王志海, 北祁连山玉石沟地幔橄辉岩中CH4流体包裹体的发现及其意义. 科学通报, 1999. 44 (8), 855-858.
 19. 宋述光. 1997. 北祁连山俯冲杂岩带的构造演化. 地球科学进展, 12 (4): 151-165.
 20. Song S G, 1996. Metamorphic Geology of Blueschists, Eclogites and Ophiolites in the North Qilian Mountains. 30th IGC Field Trip Guide T392, Beijing: Geological Publishing House, 40p.
 21. Song S G and Feng Y M, 1996. Subduction complex belts and their tectonic implications, North Qilian Mountains. Acta Geoscientia Sinica, Special Issue, 6-9.
 22. 宋述光, 吴汉泉. 1992. 北祁连山俯冲杂岩带的韧性剪切作用. 西北地质科学, 13 (2): 47-60.
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1. 吴汉泉, 宋述光. 1992. 北祁连山两种类型蓝片岩及其构造意义. 现代地质研究文集 [Vol. I] (李清波主编) 南京大学出版社, p. 74-80.
 2. 吴汉泉, 田白, 宋述光 等, 1992. 极低级变质作用的问题及进展, 西北地质科学., 13, 161-177.
 3. 秦克令, 宋述光, 何世平, 1992. 陕西摩天岭地区鱼洞子花岗岩体地质特征及其含金性. 西北地质科学, 13, 65-74.
 4. 秦克令, 何世平, 宋述光, 1992. 碧口地体的同位素年龄及其意义, 西北地质科学, 13, 97-110.
 5. 宋述光. 1990. 冀东太平寨一带基性和超基性岩脉群. 长春地质学院学报, 20 (4): 421-428.
 6. 宋述光. 1990. 冀东太平寨一带卵形构造及其演化历史. 西安地质矿产研究所所刊, No. 30, 115-123.
 7. 秦克令, 邹湘华, 何世平, 宋述光. 1990. 西秦岭鱼洞子群的建立和时代归属, 秦岭—大巴山地质论文集, (一)变质地质 北京科学技术出版社.

主编的专辑

1. Niu, Y. & Song S. (edited), <<The origin, evolution and present state of continental lithosphere>>, *Lithos*, 96, Issue 1-2, Pages 1-324, June 2007.
2. Liou, J.G., Song S.G., Ernst, G. & Jahn, B-M., (edited) <<Tectonics and HP-UHP metamorphism of the North Tibet>> *Journal of Asian Earth Science*, 35, issue 2009.

国际会议摘要

- Song S G, Yang J S, Katayama I, Liu F L and Maruyama S, 2001, Zircons and their inclusions from various rocks in the Dulan UHP metamorphic terrane, the North Qaidam, NW China. In: Fluid/Slab/Mantle Interactions and Ultrahigh-P minerals, UHPM workshop 2001, pp. 116-120, Waseda University.
- Song S. G., 2002. Multi-phase metamorphism of a coesite-bearing UHP terrane in the North Qaidam, Northern Tibet. International Workshop on Geophysics & Structure Geology of UHPM terranes, Institute of Geology and Geophysics (CAS), Beijing, pp. 71.
- Song S.G., Zhang L.F. and Niu Y.L., 2003. Microdiamond and exsolved structures in garnet-peridotite in the North Qaidam, Northern Tibet: implications for ultra-deep origination (> 200 km). West Norway Eclogite Field Symposium 2003, Selje.
- Song S.G., Zhang L.F. and Niu Y.L., 2003. Amphibole and associated exsolutions in garnet and clinopyroxene in garnet peridotite from the North Qaidam UHP belt, NW China: implications for large quantity of hydroxyl defects in mantle wedge. GSA 2003 Annual Meeting, Seattle, Washington, Paper No. 260-9.
- Song S.G., Zhang L.F. and Niu Y.L., 2004. Petrological and geochronological constraints on deep-originated garnet peridotites from the North Qaidam UHPM belt, NW China. 32th International Geological Congress, Florence, Italy.

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