



彭新建,王金平. 层间氧化带砂岩型铀矿床的铁物相特征及其地球化学意义——以伊犁盆地511铀矿床和吐哈盆地十红滩铀矿床为例. *地质学报*, 2003, 77(1): 120-125

层间氧化带砂岩型铀矿床的铁物相特征及其地球化学意义——以伊犁盆地511铀矿床和吐哈盆地十红滩铀矿床为例
[彭新建](#) [王金平](#)

[1]南京大学地球科学系, 210093 [2]核工业西北203研究所, 陕西咸阳712000

基金项目: 核工业铀矿地质科研项目, 国家自然科学基金, 科技部科研项目, HD2001-36, 40173031, 2001BA600D01:

摘要点击次数: 144

全文下载次数: 105

摘要:

层间氧化带砂岩型铀矿床在空间上与层间氧化带各亚型的分布具有严格的对应关系。铁元素的物相特征是反映地球环境变化的重要指标, $FeFe_{2O_3}/Total\ Fe$, $Fe(FeCO_3+FeS_2)/Total\ Fe$, $FeFe_{2O_3}/Fe(FeCO_3+FeS_2)$ 等比值是反映地球环境变化的重要指标, 应用上述比值对层间氧化带进行亚带的划分, 这对指导铀矿勘查具有重要理论和实践意义, 过渡带中菱铁矿 ($FeCO_3$) 和境敏感的矿物的富集, 指示了有利于铀成矿的中性-弱酸性, 还原的地球化学环境。

关键词: [层间氧化带](#) [砂岩型铀矿床](#) [铁物相](#) [地球化学](#) [黄铁矿](#) [菱铁矿](#)

Characteristics and Geochemical Significance of the Ferrum Phases in the Shihongtan Zone Sandstone Type Uranium Deposit [Download Fulltext](#)

PENG Xinjian, MIN Maozhong, WANG Jinping, JIA Heng, WEI Guanhui, WANG Jianfeng Department of Earth Science, Nanjing University, Nanjing, 210093, Bureau of Geology, CNCC, Beijing, 100013 No. 203 Institute of Uranium Geology

Fund Project:

Abstract:

The interlayered-oxidation zone sandstone type uranium deposits correspond spatially to the interlayered-oxidation zone. The phases of ferrum are sensitive indicators of the geochemical environment. $FeFe_{2O_3}/Total\ Fe$, $Fe(FeCO_3+FeS_2)/Total\ Fe$, $FeFe_{2O_3}/Fe(FeCO_3+FeS_2)$ ratios are important parameters to reflect the geochemical environment. Using the phases of ferrum and the parameters above to divide the subzone of the interlayered-oxidation zone has both theoretical and practical significance in prospecting for uranium deposits. The enrichment of minerals such as siderite and pyrite, which are sensitive to geochemical environment, indicates that the geochemical environment is neutral-acidic and reductive and is propitious to uranium mineralization.

Keywords: [interlayered-oxidation zone](#) [sandstone type uranium deposit](#) [ferrum phases](#) [geochemistry](#)

[查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)