

秦岭金属矿床成矿系列与大陆造山带构造动力学背景

王靖华 张复新 于在平 于 岚

(西北大学大陆动力学教育部重点实验室, 陕西 西安 710069)

提要:根据构造单元?构造演化及其矿床组合, 将秦岭造山带划分为4个成矿集中区: 小秦岭古陆活化区?熊耳山裂谷增生区?南秦岭被动陆缘断陷区和碧口地体古拼合带?分别构成4个成矿系列: 花岗-绿岩带型金-铁矿床系列?陆相火山岩型金-钼矿床系列?沉积岩型金-铅锌-汞锑矿床系列?海相火山岩型金-银-多金属矿床系列与超基性岩型镍-金矿床系列?矿床系列表现出同生成矿作用和后生叠加改造造成矿作用的演化, 同生成矿作用与造山带形成早期(古生代及其以前)广泛的地幔羽或热点活动有关, 后生成矿作用是在盆山转化和陆内构造-岩浆活动时期(120~340Ma)完成的?

关键 词:金属矿床; 成矿系列; 矿化集中区; 秦岭造山带; 大陆动力学

中国分类号:P619.281 **文献标识码:**A

文章编号:1000-3657 (2002)02-0192-05

Minerogenetic series of metallic ore deposits in the Qinling Mountains and tectonodynamic background of the continental orogenic belts

WANG Jing-hua, ZHANG Fu-xin, YU Zai-ping, YU Lan

(Key Laboratory of Continental Dynamics
of the Ministry of Education, Department
of Geology,

Northwest University, Xi'an 710069,
Shaanxi, China)

Abstract: On the basis of the tectonic units, tectonic evolution and deposit association, the Qinling orogenic belt is divided into four mineralization concentration areas: the Xiao Qinling craton activation area, Xiong' ershan rift accretion area, South Qinling passive continental-margin down-faulted area and Bikou terrane paleo-assemblage zone, which separately form four minerogenetic series: the granite-greenstone belt-type gold-iron minerogenetic series, continental volcanic-hosted gold-molybdenum minerogenetic series, sedimentary-hosted gold-lead-zinc-mercury-antimony minerogenetic series and marine volcanic-hosted gold-silver polymetallic and ultrabasic-hosted nickel-gold minerogenetic series. Syngenetic mineralization is related to extensive mantle or hot spot activities in the early stage (Paleozoic and its preceding stage) of format of the orogenic belt; post-genetic mineralization was accomplished during the basin-range transformation and intracontinental tectono-magmatic activities (at 120~340Ma).

Key words: metallic ore deposit; minerogenetic series; mineralization concentration area; Qinling orogenic belt, continental dynamics