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عنوان مقاله:

Hydrothermal Gold Mineralization and Some Features of Ore Mineral at Onzon-Kanbani Area, Central Myanmar

محل انتشار:

مجله بین المللی معدن و مهندسی زمین, دوره 52, شماره 2 (سال: 1397)

تعداد صفحات اصل مقاله: 9

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خلاصه مقاله:

Onzon-Kanbani area is a western flank of Mogok Metamorphic Belt where gold mineralization is hosted as auriferous quartz-vein with epithermal low-sulphidation characters. Mineralization is closely associated with NE-SW trending fracture or shear zone probably related to the dextral movement of the Sagaing Fault system. Mineralization related hydrothermal alteration is developed as narrow zones beside of the hydrothermal conduit as silicic alteration, sericiteillite alteration, and propylitic alteration. Dominant alteration minerals are quartz, ±adularia, sericite, chlorite, actinolite, epidote, illite, and smectite. The quartz dominant and base metal quartz-carbonate mineralization veins are characterized by open-spaced fracture filling with sharp-walled as well as minor amounts of disseminating nature are also found in marble. Gold occurs as free grains or locked within pyrite, sphalerite, galena, and gangue mineral quartz. In place, large electrum gold grains are associated with sphalerite and pyrite in the gold bearing quartz vein whereas fine-grained inclusions or blebs of native gold are observed in pyrite and sphalerite as disseminated specks. Gold and base metal mineralization are mostly deposited in Stage I 'mineralization stage'. In place, 'Stage II' is a barren stage where veins are barren as quartz or calcite veins with very minor amounts of pyrite. At the last 'Stage III', some of the supergene minerals of hematite, goethite, and chalcocite are formed from primary sulphides by oxidation. Mineralogically, the correlation between gold (Au) and silver (Ag) is shown the positive nature as well as in copper (Cu) too. Otherwise, gold (Au) versus any other ore minerals of lead (Pb), zinc (Zn), tin (Sn) and antimony (Sb) are displayed negative correlations. The gold and other ore mineral content are suggested that higher grade .mineralization of these metal ores has reduced from mineralization vein to outer alteration zones

کلمات کلیدی:

Keywords: Hydrothermal alteration, Mogok Metamorphic Belt, Sagaing Fault, Electrum, Native gold

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