

عنوان مقاله:

Geometrical Analysis of Fractures and Mineralized Veins of Gazkhizan Copper Deposit in Semnan Province, Iran

محل انتشار:

مجله معدن و محیط زیست، دوره 14، شماره 1 (سال: 1402)

تعداد صفحات اصل مقاله: 20

نویسندگان:

Zahra Rezaee Shahzadehaliakbari - *Department of Earth Sciences, Science and Research Branch, Islamic Azad University, Tehran, Iran*

Mehran Arian - *Department of Earth Sciences, Science and Research Branch, Islamic Azad University, Tehran, Iran*

Mohsen Pourkermani - *Department of Geology, North Tehran Branch, Islamic Azad University, Tehran, Iran*

Ali Solgi - *Department of Earth Sciences, Science and Research Branch, Islamic Azad University, Tehran, Iran*

Anahita Keynezhad - *Department of Geology, Chalus Branch, Islamic Azad University, Chalus, Iran*

خلاصه مقاله:

The Gazkhizan Copper deposit is located in the Troude-Reshm zone, Central Iran. It is situated in a shear zone bounded by the Anjilo and Troude sinistral strike-slip faults from the north and south, respectively. Mineralization is done by siliceous-shear veins along with copper mineralization. About ۴۱ mapping points carried out around the fault outcrops, along with the interpretation of the Win Tensor software data and geometrical analysis of structural features paved our way to study the Riddle pattern in the region. The structural features include sinistral and dextral strike-slip faults, normal faults, reverse faults (rarely), and mineralized veins, as well as different types of shear zone fractures with different grades of copper ore. The mineralized veins in the area are frequent in four types including the R', R, T, and X fractures, respectively. The highest number of the veins have been formed within the Riddle fractures. Because of the hybrid nature of the fractures, the veins are formed within the tensile fractures, and then they are aligned along the R fractures' strike by the clockwise rotations. The importance and necessity of this research work is as what follows. The definitive reserve of this mineralized area is ۴۳۴,۵۰۰ tons of copper ore with an average grade of ۱.۶۱% of copper. For this reason, it is necessary to determine and classify the fractures that host this reserve.

کلمات کلیدی:

Gazkhizan mine, Troude, Mineralization, Shear zone, Central Iran

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1634072>



