

# **Discussion On Terrane Tectonics Of Shandong Peninsula And The Genetic Types of Gold Deposits In Eastern Jiaobei Terrane**

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Demarcated by Yishu Fault Zone, Shandong Peninsula can be divided into two terranes i.e. Luxi Terrane and Ludong Amalgamation Terrane. The latter one is a combination of Terranes of Jiaobei, Jiaonan and Jiaodongnan. Based on a vast amount of information of geology, geophysics and isotopic age, the author of this paper proves the occurrences of these terranes, their epochs of collision & subduction and their close relationships with gold mineralization.

The crystalline basement of eastern Jiaobei Terrane was constituted by Lower Proterozoic Jingshan Group, and the granite exposed in it can be divided into two genetic series. Series I refers to the granite complexes formed by migmatization and granitization (including replacement and anatexis) of ore-source beds i.e. Jingshan Group. Series II refers to granite complexes of syntaxis type formed in the period from Indosinian to Yanshanian.

The genetic types of gold deposits are: ① granitizing hydrothermal genetic type, ② subvolcanic hydrothermal genetic type and ③ polygenous type i. e. the previous gold deposit of granitizing hydrothermal superimposed by gold mineralization of subvolcanic hydrothermal. With regard to each genetic type, the author expounds the different characteristics on geology of mineral deposits, mineral assemblages of every mineralizing stage, stable isotopic composition and physicochemical parameters of mineral forming solution.