

## Characteristics and Key Exploration Directions of Gold Deposits in China

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**Abstract :** Based on the geodynamic environment, basic geological characteristics of minerals and so on, gold deposits in China are divided into 11 categories, of which tectonic fracture altered rock, mid-intrudes and contact zone, micro-fine disseminated and continental volcanic types are the main prospecting kinds. The metallogenic age of gold deposits in China is dominated by the Mesozoic and Cenozoic. According to the geotectonic units, geological evolution, geological conditions, spatial distribution, gold deposits types, metallogenic factors etc., 42 gold concentration areas are initially determined and have a concentrated distribution feature. On the basis of the gold exploration density, gold concentration areas are divided into high, medium and low level areas. High ones are mainly distributed in the central and eastern regions. 93.04% of the gold exploration drillings are within 500 meters, but there are some problems, such as less and shallower of drilling verification etc.. The paper discusses the resource potentials of gold deposits and proposes the future prospecting directions and suggestions. The deep and periphery of old mines in the central and eastern regions and western area, especially in Xinjiang and Qinghai, will be the future key prospecting one and have huge potential gold reserves. If the exploration depth is extended to 2,000 meters shallow, the gold resources will double.

**Keywords :** gold deposits, gold deposits types, gold concentration areas, prospecting, resource potentiality

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