

纳米粒子-胶体溶液-吸附作用--对某些金属矿床成因的探讨

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摘要: 根据物质呈纳米粒级状态时, 其物理性质发生显著的变化, 认为由其作为分散相分散于不同的分散介质(气体?液体或固体)中所构成的气溶胶?胶体溶液或固体溶胶, 尤其是胶体溶液对运移成矿物质尤为重要, 而对于被运移的胶粒来说, 自身凝聚或被其他载体矿物或岩石的吸附富集将是一种重要的成矿作用, 这特别有助于解释微细浸染型金矿?砂金矿及某些稀有及分散元素矿床的成因?

关键词: 纳米; 金; 胶体溶液; 吸附作用; 矿床 中图分类号: P661 文献标识码: A 文章编号: 1000-3657(2002)01-0082-04

Nanometer-sized Particles, Colloidal Solution and Adsorption-Exploration on the Genesis of Some Metal Deposits

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Abstract: According to the significant change of the physical properties of nanometer sized particles, the authors consider that aerosol, colloidal solution or solid solution, especially colloidal solution, formed by dispersion of dispersed phases in different dispersed media (gas, liquid or solid) is very important for the transport of ore forming substances. For the transported colloidal particles, their coagulation or adsorption by other carrier minerals or rocks and concentration is a kind of important mineralization. This view is particularly conducive to explaining the genesis of finely disseminated gold deposits, placer gold deposits and some rare and dispersed metal deposits.

Key words: nanometer; gold; colloidal solution; adsorption; ore deposit