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Nota di contenuto	An Introduction to Coordination Chemistry Theory -- Coordination Characteristics of Mineral Flotation Systems -- Spatial Geometry of Mineral Surface Coordination -- Coordination of Flotation Chemicals with Metal Ions on Mineral Surfaces -- Effect of CFSE on the Interaction of Reagents with Surface -- Orbital Interactions of Reagents Molecules with Mineral Surfaces.
Sommario/riassunto	The advent of flotation, with selective interaction of reagents with minerals at its core, has greatly advanced the development of modern mining. Ever since, there has been continuous researched into the mechanism of mineral-reagent interactions, in an effort to design and develop more effective reagents. A unique perspective from coordination is presented to illustrate the principles of reagent molecules interacting with metal ions on mineral surface. For the first time, the influence is unveiled of mineral crystal structures and surrounding atoms on metal ion properties and further on mineral-reagent interactions. The introduction of classical theories for modern chemistry, including orbital structure, electron spin and orbital symmetry matching, into flotation is realized. Researchers, engineers and graduate students among others in the field of mineral processing

may gain new insight into flotation and the development of novel reagents.
