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Descrizione fisica	1 online resource (XIII, 487 p. 345 illus., 257 illus. in color.)
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Soggetti	Flotation
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Nota di contenuto	Introduction -- Dynamics of Flotation Procedure -- Characteristics of the Flotation Machines Hydrodynamics -- Numerical Simulation and Experimental Study of the Flow -- Principle and Methods of the Scale-up Design -- Air-induced Flotation Machine -- Air-forced Flotation Machine -- Flootation Machine for Minerals with Wide Particle Size Range -- Process Control System -- Design of Flotation Circuit.
Sommario/riassunto	This book highlights the principles and technologies of flotation machine mainly used in mineral processing in detail. Froth flotation is one of the most important mineral processing techniques. Over 90% of the nonferrous minerals and 50% of the ferrous minerals in the world are treated using flotation: a complicated technique including procedures from chemistry, physics and multi-scale fluid mechanics. The book introduces readers to air-forced and air-induced flotation cells and discusses the various mechanical structures and working principles involved. A number of examples from industrial engineering practice are also discussed throughout the book, helping readers to better understand the technology and relevant equipment. The book is intended for researchers, professionals and graduate students in the fields of mining and mineral processing engineering.