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Sommario/riassunto	In this newly revised and expanded edition the reader finds both an introduction to igneous petrology and an exposition of the quantitative use of phase diagrams in understanding the origin and crystallization

history of basic magmas. The book provides a step-by- step analysis of crystallization and melting in a limited number of geologically significant phase diagrams. The limiting processes of fractional and equilibrium melting and fractional and equilibrium crystallization are rigorously examined. Examples of the use of phase diagrams are drawn from the literature of layered intrusions, redox equilibria in iron-bearing systems, and the high pressure equilibria of melting in the mantle.