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Nota di contenuto	1 Concepts in analytical chemistry -- 2 Classical and rapid methods of analysis -- 3 Optical spectrometry: principles and instrumentation -- 4 Atomic absorption spectrometry -- 5 Inductively coupled plasma—atomic emission spectrometry -- 6 Arc and spark source optical emission spectrometry -- 7 Ion-selective electrodes -- 8 X-ray fluorescence analysis: principles and practice of wavelength dispersive spectrometry -- 9 Energy dispersive X-ray spectrometry -- 10 Electron probe microanalysis -- 11 Other microbeam and surface analysis techniques -- 12 Neutron activation analysis -- 13 Nuclear techniques for the determination of uranium and thorium and their decay products -- 14 Ion exchange preconcentration procedures -- 15 Gold and platinum group element analysis -- 16 Mass spectrometry: principles and instrumentation -- 17 Thermal ionization mass spectrometry -- 18 Gas source mass spectrometry -- 19 Spark source mass spectrometry -- 20 Inductively coupled plasma—mass spectrometry -- References.
Sommario/riassunto	The techniques available for the chemical analysis of silicate without an appreciation of what happens in between. rocks have undergone a revolution over the last 30 years. However, to use an analytical technique most effectively, No longer is the analytical balance the only instrument used it is essential to understand its analytical characteristics, in for quantitative measurement, as it was in the days of classi- particular the excitation mechanism and the response of the cal

gravimetric procedures. A wide variety of instrumental signal detection system. In this book, these characteristics techniques is now commonly used for silicate rock analysis, have been described within a framework of practical ana- including some that incorporate excitation sources and detec- lytical applications, especially for the routine multi-element tion systems that have been developed only in the last few analysis of silicate rocks. All analytical techniques available years. These instrumental developments now permit a wide for routine silicate rock analysis are discussed, including range of trace elements to be determined on a routine basis. some more specialized procedures. Sufficient detail is In parallel with these exciting advances, users have tended included to provide practitioners of geochemistry with a firm to become more remote from the data production process. base from which to assess current performance, and in some This is, in part, an inevitable result of the widespread intro- cases, future developments.
