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Nota di contenuto	From the Content: 14C dating -- 4He/3He dating -- Acasta gneiss -- Accelerator mass spectrometry -- Alpha spectroscopy -- Alpine terranes (K-Ar/Ar-Ar) -- Amino acid -- Amino Acid Racemization dating -- Amino acids (14C) -- Apatite -- Apex chert -- Aquifer characteristics (U-series) -- Aquifer residence time (36Cl) -- Ar-Ar and K-Ar dating -- Arctic environment (AAR) -- Band structure -- Beta counter -- Big Bang -- Biostratigraphy -- Biostratigraphy (AAR) -- Bomb carbon -- Bones (Gamma spectrometry/U-series) -- Bones (U-series) -- Carbonate, lacustrine (U-series).
Sommario/riassunto	The main purpose of the volume is to provide a synthesis of (1) the physical and chemical bases of dating methods, and (2) the applications of dating methods to the geological sciences, biology, and archaeology. This volume will serve as the most comprehensive treatise of widely-accepted dating methods in the earth sciences and related fields. No other volume has a similar scope, in terms of methods and applications and particularly time range. Dating methods are used to determine the timing and rate of various processes, such as sedimentation (terrestrial and marine), tectonics, volcanism, geomorphological change, cooling rates, crystallization, fluid flow, glaciation, climate change and evolution. The volume includes applications in terrestrial and extraterrestrial settings, the burgeoning field of molecular clock dating and topics in the intersection of earth sciences with forensics. The contents aim for breadth in techniques and

applications. Included are all major accepted dating techniques and as well as all major datable materials. .
