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Nota di contenuto	1. Introduction to the Critical Zone -- 2. The CZ as an ecological problem How the interplay of biotic and abiotic actors determines the functioning of Earth’s living skin -- 3. The Biogeography of the Earth Critical Zone -- 4. Surface water chemistry as an integrated signal of ecosystem vectors and critical zone reactors -- 5. Groundwater the dynamic base of the CZ -- 6. Bedrock, regolith, and soil continuum pedogenic perspectives and factors controlling spatial distribution of soils in the Critical Zone -- 7. Soil organic matter dynamics in the Critical Zone -- 8. The role of soil aggregation in the Critical Zone.
Sommario/riassunto	The critical zone is the thin outer veneer of continental Earth extending from the top of the vegetation canopy to subsurface depths where fresh groundwater circulates. It is the heterogeneous amalgamation of landscapes, ecosystems, and subsurface environments. The concept of the critical zone is relatively new and while thousands of manuscripts have been published from this interdisciplinary field, they exist within a wide array of journals, and none have comprehensively addressed the

intersection between the geosciences and ecosystem science—“where rock meets life”. The goal of this contributed book is to promote the great potential that exists in a merger of critical zone and ecosystem science to further scientific discovery by leveraging the strengths of multiple disciplines to address societally relevant questions, keep pace with scientific advances, and more effectively engage with broader scientific communities and the public. The core readership will be collaborative researchers working at the intersection between the greater Earth, environmental and ecological sciences, and policy and business sectors that draw on science evidence to support sustainable economic development. The book also serves further readership that includes scientists from many fields, particularly those in early and mid-career stages who are interested in environmental sustainability and are seeking to step out from disciplinary research into collaborative cross-disciplinary study. .