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Sommario/riassunto

This book is Open Access. A digital copy can be downloaded for free from Wiley Online Library. Explores the behavior of carbon in minerals, melts, and fluids under extreme conditions Carbon trapped in diamonds and carbonate-bearing rocks in subduction zones are examples of the continuing exchange of substantial carbon between Earth's surface and its interior. However, there is still much to learn about the forms, transformations, and movements of carbon deep inside the Earth. Carbon in Earth's Interior presents recent research on the physical and chemical behavior of carbon-bearing materials and serves as a reference point for future carbon science research. Volume highlights include: Data from mineral physics, petrology, geochemistry, geophysics, and geodynamics Research on the deep carbon cycle and carbon in magmas or fluids Dynamics, structure, stability, and reactivity of carbon-based natural materials Properties of allied substances that carry carbon Rates of chemical and physical transformations of carbon The American Geophysical Union promotes discovery in Earth and space science for the benefit of humanity.Its publications disseminate scientific knowledge and provide resources for researchers, students, and professionals.