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"Highlights in Mineralogical Crystallography" presents a collection of review articles with the common topic: structural properties of minerals and synthetic analogues. It is a valuable resource for mineralogists, materials scientists, crystallographers, and earth scientists. This book includes: An introduction to the RRUFF database for structural, spectroscopic, and chemical mineral identification. A systematic evaluation of structural complexity of minerals. ab initio computer modelling of mineral surfaces. Natural quasicrystals of meteoritic origin. The potential role of terrestrial ringwoodite on the water content of the Earth's mantle. Structural characterization of nanocrystalline bio-related minerals by electron-diffraction tomography. The uniqueness of mayenite-type compounds as minerals and high-tech ceramics.
