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Sommario/riassunto

The connection between a quantum behavior of the structure elements of a substance and the parameters that determine the macroscopic behavior of materials has a major influence on the properties exhibited by different solids. Although quantum theory and engineering should complement each other, this is not always the case. This book aims to demonstrate how the properties of materials can be derived and predicted proceeding from the features of their structural elements, generally electrons. In a sense, electronic structure forms the glue holding solids as whole, and it is centr