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Sommario/riassunto	This textbook teaches important material and technological fundamentals in various technical systems and applied geoscientific fields. Beginning with the mineralogical characteristics of selected non-metallic raw materials and industrial minerals, this book presents the connections between properties and industrial applications and discusses the environment-relevant aspects as well as problems of biomineralogy. An introduction is given to important mineralogical and physico-chemical aspects of ceramic materials such as silicate ceramics, glass, cement, refractory materials as well as an overview about material synthesis. This makes it the first textbook to present the

fundamentals of applied mineralogy as a material-related geoscience in a compact form and to show important bridges to industrial issues and approaches to solutions. It is aimed primarily at undergraduate students of geosciences and materials science, but is also suitable for related disciplines and practical applications. The authors Prof. Dr. Jens Götze and Prof. Dr. Matthias Göbbels, teach and research in the field of applied mineralogy at the Institute of Mineralogy of the TU Bergakademie Freiberg, Germany and at the Chair of Mineralogy of the Friedrich-Alexander University Nuremberg-Erlangen, Germany, respectively, and have had intensive industrial contacts and cooperation for many years. This book is a translation of an original German edition. The translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily in terms of content, so that the book will read stylistically differently from a conventional translation.
