1. Record Nr. UNINA9910726287803321

| | |
|---|---|
| Autore | Lu Anhuai |
| Titolo | Introduction to environmental mineralogy / / Anhuai Lu, Yan Li, Changqiu Wang, Hongrui Ding |
| Pubbl/distr/stampa | Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023 |
| ISBN | 981-19-7792-5 |
| Edizione | [1st ed. 2023.] |
| Descrizione fisica | 1 online resource (xv, 265 pages) |
| Altri autori (Persone) | LiYan<br>WangChangqiu<br>DingHongrui |
| Disciplina | 549 |
| Soggetti | Mineralogy |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Chapter 1 Environmental Property of Minerals-1205 -- Chapter 2 Environmental Effects of Tunnel Structure Minerals-0113 -- Chapter 3 Photoactivity of Mn Oxides on Earth’s Surface-1230 -- Chapter 4 Redox Activity of Iron Sulfide and Mn Oxide-0106 -- Chapter 5 Interaction Between Fe & Mn-Bearing Minerals and Microbes-1230 -- Chapter 6 Photocatalytic reduction effects of sphalerite and native sulfur-1213 -- Chapter 7 Photocatalytic oxidation effects of rutile-1213 -- Chapter 8 Interactions between Semiconducting Minerals and Microbes-1209 -- Chapter 9 Human Pathological Mineral Features-1213 -- Chapter 10 Infrared Effect of Minerals-0107. |
| Sommario/riassunto | This book focuses on the environmental property of minerals including mineralogical record of environmental changes, mineralogical influence on the environmental quality, mineralogical evaluation of the environment, mineralogical processing of environmental pollutants and interaction between minerals and microbes. Understanding of the environmental property of minerals is a good supplementary to the traditional concept of “mineral”. By demonstrating plenty of case studies with easy-to-understand figures and tables, this book introduces the environmental effects of interaction between minerals and microbes, physiological and ecological effects of biomineralization, reductive precipitation property of iron sulfide minerals, photocatalytic reduction property of sphalerite, photocatalytic oxidation property of |

rutile, tubular structure property of chrysotile, tunnel structure property of K-feldspar tetrahedron, tunnel structure property of cryptomelane octahedron, nano property of cryptomelane, crystallization property of jarosite, interaction between semiconducting minerals and microbes, pathological mineralization of human body, mineralogical processing of inorganic pollutants, mineralogical degradation of organic pollutants, mineralogical purification of smoke-type pollutants, mineralogical evaluation of soil environmental quality, mineralogical prevention and control of waste pollutants and mineralogical processing of mine tailings. The book is written for environmental mineralogist as well as postgraduates majoring in environmental science.