1. Record Nr. UNINA9910683344303321 Autore Ghosh Bhaskar Titolo Clay minerals: their antimicrobial and antitoxic applications / / Bhaskar Ghosh and Dola Chakraborty Pubbl/distr/stampa Cham, Switzerland: ,: Springer Nature Switzerland AG, , [2023] ©2023 **ISBN** 3-031-22327-6 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (182 pages) Disciplina 615.2 Soggetti Anti-infective agents Clay minerals Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. An Overview of the Clay Minerals: Composition, Classification, Internal Nota di contenuto Structure and Properties -- Clay-induced Antimicrobial and Antitoxic Mechanisms: How do the Clays Protect Us From Pathogens and Toxins? -- Traditional Applications of the Antimicrobial and Antitoxic Properties of Clay Minerals -- Antimicrobial Applications of Clays and Their Derivatives in Protection of Human Health -- Antitoxic Applications of Clays in the Protection of Human Health -- Clays in the Global War Against COVID-19: Why are They Preferable Over the Conventional Weaponry? -- The Present and the Future: Advantages, Drawbacks, and Future Prospects of Clays for Protection of Human Health. Sommario/riassunto This book provides a comprehensive description of the application of clay minerals as disinfectants and the ingredients of medicines. While the presently available literature highlights one or two aspects of medicinal clays, a comprehensive text on all their major pharmaceutical applications is lacking. This book endeavors to fill up this lacuna. It further elucidates the properties of clay minerals that facilitate their application in the protection of human health, and how these properties are related to the chemical compositions and internal structures of selected mineral groups, thus revealing to the students,

teachers and researchers the underlying relationship of seemingly different disciplines like mineralogy, material science and medical

science. The thought-provoking questions added at the end of each chapter will give the readers a better insight of this subject. The tangible definitions and explanations of all the relevant scientific terms provided in this book, both within the text and in a glossary list at the end, are expected to help the beginners to develop a clear-cut understanding regarding different aspects of the subject and clear any confusion resulting from the ambiguous usage of terms in the existing literature.