

1. Record Nr.	UNINA9910736992503321
Autore	Vithanage Meththika
Titolo	Clay Composites : Environmental Applications / / edited by Meththika Vithanage, Giuseppe Lazzara, Anushka Upamali Rajapaksha
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	9789819925445 9819925444
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (582 pages)
Collana	Advances in Material Research and Technology, , 2662-477X
Altri autori (Persone)	LazzaraGiuseppe RajapakshaAnushka Upamali
Disciplina	620.198
Soggetti	Composite materials Building materials Ceramic materials Composites Structural Materials Ceramics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Clays and Clay Minerals: Long Lasting Applications in Environmental Remediation -- Clay Composites: Physico-chemical Characterization -- Computational Chemistry Tools for Atomic Level Investigation of Clay Composites -- Advances in the Development and Applications of Clay-based Composites -- Synthesis and Characterization of Clay–biochar Composites -- Application of Clay–biochar Composites as Adsorbents for Water Treatment -- Clay–biochar Composites: Emerging Applications in Soil -- Mitigation of Greenhouse Gas (GHG) Emissions using Clay–biochar Composites -- Surface Modification of Clay with Organics -- Organoclay with Surfactants: Detoxification of Hazardous Compounds -- Surfactant Modified Clay Composites: Water Treatment Applications.
Sommario/riassunto	This book describes the advantages and disadvantages and characterization techniques of clay-composites for environmental applications. It examines the structure and chemistry of different types of clay-composites and their synthesis, characteristics and applications

in detail with a special focus on upscaling and limitations. Various topics covered in this book include overview of clay composites and their environmental applications, clay-biochar composites, clay-surfactants composites, organo-clay composites, clay hybrids and enriched clay composites. This book will be useful for beginners, researchers, material scientists and engineers who are interested in applied research of clay-based composites.
