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Autore	Ismadji Suryadi
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Introduction -- Natural clay minerals as environmental cleaning agents -- Modification of clay materials for adsorption purpose -- The equilibrium studies in the adsorption of hazardous substances using clay minerals -- The characterization of clay minerals and adsorption mechanism onto clays -- The kinetic studies in the adsorption of hazardous substances using clay minerals.
Sommario/riassunto	A comprehensive review of environmental remediation is presented with an emphasis on the role of clay minerals in water purification. In the first chapter, important aspects of environmental problems and

possible solutions are discussed. In the second chapter, the application of natural clay minerals as environmental cleaning agents are explained. The discussion is focused on the role of different types of clay materials in hazardous substance removal from air, aqueous solutions, wastewater, aquaculture, ground water, etc. In the next chapter, the modification of clay materials is explored including the preparation of clay composite materials for environmental remediation. Various aspects of clay material modifications and the effects of clay surface chemistry on the removal of hazardous material is also discussed. Next, the equilibrium and kinetics of hazardous substance adsorption is presented. This chapter summarizes recent studies on the removal of hazardous substances from aqueous solutions and the environment using various types of clay minerals. The brief also includes various models used in adsorption studies and touches on the characterization of clay minerals.