

1. Record Nr.	UNINA9910787843903321
Titolo	Carbon capture and storage : CO2 management technologies / / edited by Amitava Bandyopadhyay, PhD
Pubbl/distr/stampa	Waretown, N.J. : , : Apple Academic Press, Inc., , [2014] ©2014
ISBN	1-77463-341-8 0-429-16302-9 1-77188-021-X
Edizione	[First edition.]
Descrizione fisica	1 online resource (408 p.)
Disciplina	628.5/32
Soggetti	Carbon sequestration - Technological innovations Geological carbon sequestration - Technological innovations Carbon dioxide mitigation - Technological innovations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Front Cover; About The Editor; Contents; Acknowledgment Andhow To Cite; List Of Contributors; Introduction; Part I Absorption, Adsorption, and Membrane Based Separation Processes For Co2 Capture; Chapter 1 Amine Versus Ammonia Absorption Of Co2 As A Measure Of Reducing Ghg Emission: A Critical Analysis; Chapter 2 Co2 Capture In A Spray Column Using A Critical Flow Atomizer; Chapter 3 Characteristics Of Co2 Hydrateformation And Dissociation In Glass Beads And Silica Gel; Part II Geological Sequestration Of Co2 Chapter 4 Geological Carbon Sequestration: A New Approach For Near-surface Assurance MonitoringChapter 5 Enzymatic Carbon Dioxide Capture; Chapter 6 On The Potential For Co2 Mineral Storage In Continental Floodbasalts-phreeqc Batch And 1d Diffusion-reaction Simulations; Chapter 7 Experimental Study Of Cements And Stone/shale-brine-co2 Interactions; Part III Biological Sequestration Of Co2; Chapter 8 Identification Of A Co2 Responsive Regulon In Bordetella; Chapter 9 Co2 Efflux From Cleared Mangrove Peat Chapter 10 Soil Microbial Responses To Elevated Co2 And O3 In A Nitrogen-aggrading AgroecosystemPart IV Current Research Trends In

Co2capture Using Ionic Liquids; Chapter 11 Overview Of Ionic Liquids Used As Working Fluids In Absorption Cycles; Chapter 12 Co2 Capture In Ionic Liquids: A Review Of Solubilities And Experimental Methods; Chapter 13 Capturing Carbon Dioxide From Air; Author Notes; Back Cover

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Sommario/riassunto

Carbon capture and storage (CCS) refers to a set of technologies and methods for the mitigation, remediation, and storage of industrial CO<sub>2</sub> emissions, the most imminent and virile of the greenhouse gases (GHG). The book addresses the methods and technologies currently being applied, developed, and most in need of further research. The book: Discusses methods of carbon capture in industrial settings Presents biological and geological approaches to carbon sequestration Introduces ionic liquids as a method of carbon capture Introduces new app

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