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Titolo	Introduction to carbon capture and sequestration // Berend Smit, Jeffrey A. Reimer, University of California, Berkeley, USA, Curtis M. Oldenburg, Ian C. Bourg, Lawrence Berkeley National Laboratory, USA
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Descrizione fisica	1 online resource (xv, 580 pages) : color illustrations, maps
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1 Energy and Electricity -- Chapter 2 The Atmosphere and Climate Modeling -- Chapter 3 The Carbon Cycle -- Chapter 4 Introduction to Carbon Capture -- Chapter 5 Absorption -- Chapter 6 Adsorption -- Chapter 7 Membranes -- Chapter 8 Introduction to Geological Sequestration -- Chapter 9 Fluids and Rocks -- Chapter 10 Large-Scale Geological Carbon Sequestration -- Chapter 11 Land Use and Geo-Engineering -- Chapter 12 List of Symbols -- Chapter 13 Credits -- Glossary -- Answers -- Index.
Sommario/riassunto	The aim of the book is to provide an understanding of the current science underpinning Carbon Capture and Sequestration (CCS) and to provide students and interested researchers with sufficient background on the basics of Chemical Engineering, Material Science, and Geology that they can understand the current state of the art of the research in the field of CCS. In addition, the book provides a comprehensive discussion of the impact of CCS on the energy landscape, society, and climate as these topics govern the success of the science being done in this field. The book is aimed at undergraduate students, graduate

students, scientists, and professionals who would like to gain a broad multidisciplinary view of the research that is being carried out to solve one of greatest challenges of our generation.

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