

1. Record Nr.	UNINA9910830072403321
Autore	Fan Liang-Shih
Titolo	Chemical looping systems for fossil energy conversions [[electronic resource] /] / Liang-Shih Fan
Pubbl/distr/stampa	Hoboken, NJ, : Wiley-AIChE, 2010
ISBN	1-118-06313-9 1-282-77332-1 9786612773327 0-470-87288-8 0-470-87287-X
Descrizione fisica	1 online resource (436 p.)
Disciplina	621.402/3 621.4023
Soggetti	Fluidized-bed combustion Fossil fuels - Combustion Energy conversion
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	CHEMICAL LOOPING SYSTEMS FOR FOSSIL ENERGY CONVERSIONS; CONTENTS; PREFACE; CHAPTER 1: INTRODUCTION; CHAPTER 2: CHEMICAL LOOPING PARTICLES; CHAPTER 3: CHEMICAL LOOPING COMBUSTION; CHAPTER 4: CHEMICAL LOOPING GASIFICATION USING GASEOUS FUELS; CHAPTER 5: CHEMICAL LOOPING GASIFICATION USING SOLID FUELS; CHAPTER 6: NOVEL APPLICATIONS OF CHEMICAL LOOPING TECHNOLOGIES; SUBJECT INDEX; AUTHOR INDEX
Sommario/riassunto	This book presents the current carbonaceous fuel conversion technologies based on chemical looping concepts in the context of traditional or conventional technologies. The key features of the chemical looping processes, their ability to generate a sequestration-ready CO ₂ stream, are thoroughly discussed. Chapter 2 is devoted entirely to the performance of particles in chemical looping technology and covers the subjects of solid particle design, synthesis, properties, and reactive characteristics. The looping processes can be applied for combustion and/or gasification of carbon-based material s

