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Disciplina	620.11223
Soggetti	Corrosion and anti-corrosives Cogeneration of electric power and heat Fossil fuels Coatings Environmental chemistry Energy policy Energy and state Power resources Corrosion Fossil Fuel Environmental Chemistry Energy Policy, Economics and Management Natural Resource and Energy Economics
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Nota di contenuto	Background -- Corrosion theory and characterization techniques -- Corrosion in CO2 capture and transportation -- Corrosion in CO2 geological utilization and storage -- Impact of corrosion on wellbore stability -- Corrosion control (I): Corrosion-resistant steel and cement -- Corrosion control (II): Anti-corrosion coating -- Corrosion control (III): Corrosion inhibitors.
Sommario/riassunto	This book systematically discusses the operational stages with high risk of CO2-induced corrosion in CCUS projects, and related measures for corrosion control. CO2 capture, utilization, and storage (CCUS) is a key

technology to mitigate climate change and substantially reduce greenhouse gas emissions from fossil fuels. CCUS deals with high concentration CO<sub>2</sub>, which is very corrosive in a humid environment. Therefore, it is very important to characterize, monitor, and mitigate CO<sub>2</sub>-induced corrosion in all processes of the CCUS operation chain. Some corrosion control techniques included in this book (e.g., CO<sub>2</sub>-resisting wellbore cement additives) are beneficial for corrosion control research and engineering practices. This book belongs to the field of corrosion science and engineering, and the expected readership is researchers and engineers working on CCUS. .

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