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Nota di contenuto	Introduction -- Fluid Characterization -- CO2 Storage Mechanisms -- CO2 Enhanced Oil Recovery Mechanisms -- Integrated CCS-EOR Model -- New Technologies.
Sommario/riassunto	This book provides a comprehensive and detailed description of the various mechanisms of the CCS–EOR process. Whereas previous texts have primarily focused on carbon capture and storage (CCS) and enhanced oil recovery (EOR) separately, this book provides a general overview of both technologies when used together. Coupled CCS–EOR technology has become increasingly important, as it overcomes the respective shortcomings of the two technologies. The book presents an integrated numerical model including the hysteresis effect, solubility trapping, miscibility, and formation damage by asphaltene deposition. The experimental and model-based evaluation of fluid properties is also discussed. The book concludes by discussing the latest research into CO2 storage coupled with EOR, most notably performance control by including additives in CO2 injection, and CO2 injection into shale reservoirs. Ideally suited for graduate students and researchers in the

fields of carbon capture, utilisation, and storage, the book shares essential insights into maximising the efficiency of CCS and EOR alike.