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Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XXVI, 489 p.)
Disciplina	660 665.5
Soggetti	Chemical engineering Geochemistry Fossil fuels Industrial engineering Production engineering Industrial Chemistry/Chemical Engineering Fossil Fuels (incl. Carbon Capture) Industrial and Production Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Characteristics and History of Use -- Crude Assay and Physical Properties -- Chemical Composition -- Classification and Characterization -- Petroleum System and Occurrence -- Exploration for Discovery -- Production for Recovery -- Significant Events and Current Status in Petroleum Refining -- Desalting, Distillation and Hydrotreating -- Isomerization, Reforming, Alkylation and Polymerization -- Cracking, Coking and Visbreaking -- Other Refining Processes -- Lubricant Processes and Products -- Petroleum Products -- Safety and Environment.
Sommario/riassunto	Aimed at students and professionals, this book covers every major aspect of petroleum: the origin of fossil hydrocarbons and their chemical/physical properties; discovering hydrocarbon reserves; recovering oil, gas, and bitumen; purifying gas; the chemical and physical characterization of crude oil; refining crudes into fuels and

lubricants; and converting simple chemicals into solvents, polymers, fibers, rubbers, coatings, and myriad other products, including pharmaceuticals. Readers will learn how the industry operates, from "upstream" exploration and production, "midstream" transportation to "downstream" refining, and manufacturing of finished products. The book also contains unique chapters on midstream operations, learnings from major accidents, and safety/environmental laws and regulations. It builds on the authors' previous books and teaching material from a highly rated course that is taught at the Florida A&M University/Florida State University (USA).
