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Autore	Burnham Alan K
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Nota di contenuto	1. Classification and Characterization -- 2. Introduction to Chemical Kinetics -- 3. Structures of Coal, Kerogen, and Asphaltenes -- 4. Pyrolysis in Open Systems -- 5. Pyrolysis in Semi-Open Systems -- 6. Pyrolysis in Closed Systems -- 7. Application to Fossil Fuel Processes -- Index. .
Sommario/riassunto	This book covers the origin and chemical structure of sedimentary organic matter, how that structure relates to appropriate chemical reaction models, how to obtain reaction data uncontaminated by heat and mass transfer, and how to convert that data into global kinetic models that extrapolate over wide temperature ranges. It also shows applications for in-situ and above-ground processing of oil shale, coal and other heavy fossil fuels. It is essential reading for anyone who wants to develop and apply reliable chemical kinetic models for natural petroleum formation and fossil fuel processing and is designed for course use in petroleum systems modelling. Problem sets, examples and case studies are included to aid in teaching and learning. It presents original work and contains an extensive reanalysis of data from the literature.

