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Descrizione fisica	1 online resource (440 p.)
Collana	De Gruyter Graduate
Disciplina	660
Soggetti	Chemistry, Technical Chemical reactors Chemical engineering Electronic books.
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Note generali	Includes index.
Nota di contenuto	Frontmatter -- Preface -- About the author -- Contents -- Chapter 1. Chemical technology as science -- Chapter 2. Physico-chemical foundations of chemical processes -- Chapter 3. Chemical processes and unit operations -- Chapter 4. Chemical process industry -- Chapter 5. Hydrogen and syngas generation -- Chapter 6. Cracking -- Chapter 7. Catalytic reforming of gasoline fractions: combining isomerization and dehydrogenation -- Chapter 8. Halogenation -- Chapter 9. Oxidation -- Chapter 10. Hydrogenation and dehydrogenation -- Chapter 11. Reactions involving water: hydration, dehydration, etherification, hydrolysis, and esterification -- Chapter 12. Alkylation -- Chapter 13. Reactions with CO, CO ₂ , and synthesis gas -- Chapter 14. Key reactions in the synthesis of intermediates: nitration, sulfation, sulfonation, alkali fusion, ketone, and aldehyde condensation -- Chapter 15. Polymerization -- Final words -- Index
Sommario/riassunto	The book discusses the sciences of operations, converting raw materials into desired products on an industrial scale by applying chemical transformations and other industrial technologies. Basics of chemical technology combining chemistry, physical transport, unit operations and chemical reactors are thoroughly prepared for an easy

understanding.
