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Nota di contenuto	Frontmatter -- Preface -- About the Editors -- Contents -- 1 Conventional scale-up method: challenges and opportunities -- 2 Iterative scale-up method: concept and basics -- 3 Process extrapolation by simulation -- 4 Transition from e-pilot to full commercial scale -- 5 Life-cycle assessment and technology scale-up -- 6 Case study I: n-Butane partial oxidation to maleic anhydride: VPP manufacture -- 7 Case study II: n-Butane partial oxidation to maleic anhydride: commercial design -- 8 Case study III: Methanol to olefins -- 9 Case study IV: Hydropotash from potassium feldspar -- 10 Case study V: Lactide production process development -- 11 Case study VI: CO2 sequestration in microalgae photobioreactors -- 12 Discussion and concluding remarks -- Index
Sommario/riassunto	Common scale-up methods are conventional where the blind piloting is essential. This imposes huge investment and leads to failures mostly in solid processing. However, the limitations of resources, current shortcomings, short time-to-market demand are forced companies to minimize piloting. With these situations in mind, current digitalization outlook and computational facilities, we proposed and developed a novel iterative scale up method with case studies which highly expedites the process innovation through the following key sequences:

