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Nota di contenuto	1. Introduction and Strategy -- 2. Synthesis of Nitro-containing Compounds through Multistep Continuous-flow with Heterogeneous Catalysts -- 3. Polysilane-Supported Pd Catalysts for Continuous-flow Hydrogenations -- 4. Anion Exchange Resins as Catalysts for Direct Aldol-type Reactions of Ketones, Esters and Nitriles under Continuous-flow -- 5. Multistep Continuous-flow Synthesis of APIs Based on Aldol-hydrogenation Strategy -- 6. Summary -- 7. Experimental Section.
Sommario/riassunto	This book describes the development of two kinds of continuous-flow transformation using heterogeneous catalysts, and explains how they can be applied in the multistep synthesis of active pharmaceutical ingredients. It demonstrates and proves that fine chemicals can be synthesized under continuous-flow conditions using heterogeneous catalysis alone. Importantly, the book also proposes a general concept and strategy for achieving multistep flow synthesis and developing heterogeneous catalysts, and shows that commercially available anion

exchange resin can be used as a water-tolerant strong base catalyst for various types of continuous-flow aldol-type reaction. Reviewing the state of the art in heterogeneous catalysis in flow chemistry – a “hot topic” and rapidly developing area of organic synthesis – the book will provide readers with a deeper understanding of fine chemical flow synthesis and its future prospects. .
