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Titolo	Fluidized-Bed Reactors: Processes and Operating Conditions / / by John G. Yates, Paola Lettieri
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Descrizione fisica	1 online resource (XVIII, 205 p. 66 illus., 7 illus. in color.)
Collana	Particle Technology Series, , 1567-827X ; ; 26
Disciplina	547
Soggetti	Amorphous substances Complex fluids Chemical engineering Fluid mechanics Fluids Waste management Soft and Granular Matter, Complex Fluids and Microfluidics Industrial Chemistry/Chemical Engineering Engineering Fluid Dynamics Fluid- and Aerodynamics Waste Management/Waste Technology
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Dedication -- Acknowledgement -- Foreword -- Preface -- Introduction -- Catalytic Processes -- Non-Catalytic Processes, Combustion, Gasification and Chemical Looping -- Conversion of Biomass and Waste Fuels in Fluidized-Bed Reactors -- Effect of Process Conditions on Fluidization -- Fluidized-Bed Scaling -- Subject Index -- Author Index.
Sommario/riassunto	The fluidized-bed reactor is the centerpiece of industrial fluidization processes. This book focuses on the design and operation of fluidized beds in many different industrial processes, emphasizing the rationale for choosing fluidized beds for each particular process. The book starts with a brief history of fluidization from its inception in the 1940’s. The

authors present both the fluid dynamics of gas-solid fluidized beds and the extensive experimental studies of operating systems and they set them in the context of operating processes that use fluid-bed reactors. Chemical engineering students and postdocs as well as practicing engineers will find great interest in this book.