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Descrizione fisica	1 online resource (XI, 133 p. 74 illus., 60 illus. in color.)
Disciplina	621.042
Soggetti	Renewable energy resources Energy systems Energy policy Renewable and Green Energy Energy Systems Energy Policy, Economics and Management
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1 Introduction -- 2 Literature review -- 3 Materials and Methods -- 4 Development of Millimetric Particle for Biodiesel Production -- 5 Production of Biodiesel using Spherical Millimetric Catalyst -- 6 Conclusions.
Sommario/riassunto	This book provides a single-source reference to green technologies in advanced biofuel technology. The main focus is on the description of the state of the art in catalytic processes for the "green" production of biofuels. The authors describe two different, practical approaches for catalysts, which allow for effective and easy separation of the catalyst by simple filtration, and enable reuse for several cycles. Readers will gain understanding as to the mechanisms involved in the synthesis and structure formation of the catalyst, in order to maximize yield of biodiesel production. The authors also address the question of how catalytic material should be distributed inside a porous support to obtain optimal performance. The effects of physicochemical and operating parameters are analyzed to gain insight into the underlying phenomena governing the performance of optimally designed catalysts.

Emphasizes the comparison of green biofuel technologies with existing methods, in order to evaluate efficient methods for producing biofuel technologies; Highlights the macroscopic and encapsulated technology of catalyst preparation; Balances theory and practice, with emphasis on commercial applications.