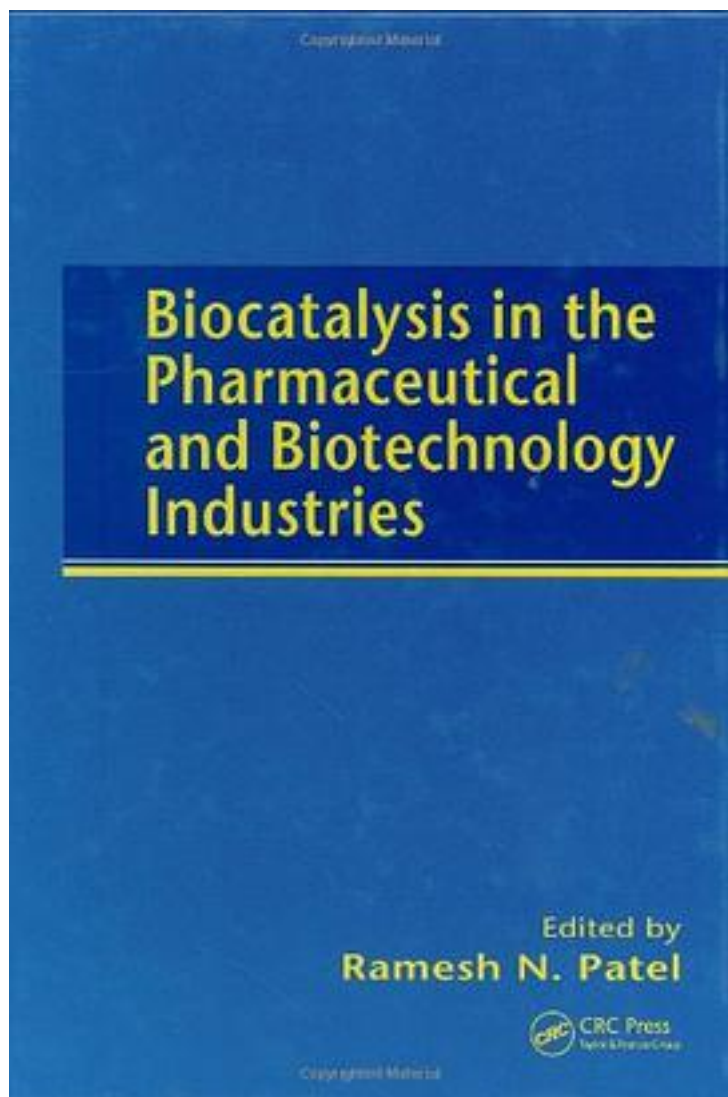


Biocatalysis in the Pharmaceutical and Biotechnology Industries



[Biocatalysis in the Pharmaceutical and Biotechnology Industries_ 下载链接1](#)

著者:Patel, Ramesh N. 编

出版者:CRC Pr I Llc

出版时间:2006-9

装帧:HRD

isbn:9780849337321

Because enzyme-catalyzed reactions exhibit higher enantioselectivity, regioselectivity, substrate specificity, and stability, they require mild conditions to react while prompting higher reaction efficiency and product yields. Biocatalysis in the Pharmaceutical and Biotechnology Industries examines the use of catalysts to produce fine chemicals and chiral intermediates in a variety of pharmaceutical, agrochemical, and other biotechnological applications. Written by internationally recognized scientists in biocatalysis, the authors analyze the synthesis of chiral intermediates for over 60 brand-name pharmaceuticals for a wide range of drug therapies and treatments. From starting material to product, the chapters offer detailed mechanisms that show chiral intermediates and other by-products for each reaction-including hydrolytic, acylation, halogenation, esterification, dehalogenation, oxidation-reduction, oxygenation, hydroxylation, deamination, transamination, and C-C, C-N, C-O bonds formation. Cutting-edge topics include advanced methodologies for gene shuffling and directed evolution of biocatalysts; the custom engineering of enzymes; the use of microbial cells and isolated biocatalysts; the use of renewable starting materials; and generating novel molecules by combinatorial biocatalysis and high-throughput screening. Focusing on industrial applications, the book also considers factors such as bulk processes, instrumentation, solvent selection, and techniques for catalyst immobilization, reusability, and yield optimization throughout. Biocatalysis in the Pharmaceutical and Biotechnology Industries showcases the practical advantages and methodologies for using biocatalysts to develop and produce chiral pharmaceuticals and fine chemicals.

作者介绍:

目录:

[Biocatalysis in the Pharmaceutical and Biotechnology Industries_下载链接1_](#)

标签

评论

[Biocatalysis in the Pharmaceutical and Biotechnology Industries_下载链接1_](#)

书评

[Biocatalysis in the Pharmaceutical and Biotechnology Industries 下载链接1](#)