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| 1. Record Nr. | UNISA996206390203316 |
| Autore | Mosier Nathan S. <1974-> |
| Titolo | Modern biotechnology [[electronic resource]] : connecting innovations in microbiology and biochemistry to engineering fundamentals // Nathan S. Mosier, Michael R. Ladisch |
| Pubbl/distr/stampa | Wiley, : Hoboken, NJ, c2009 |
| ISBN | 1-118-21020-4 1-282-30360-0 9786612303609 1-61344-162-2 0-470-47341-X 0-470-47340-1 |
| Descrizione fisica | 1 online resource (461 p.) |
| Classificazione | BIO 250f CHE 800f CIT 900f WF 9700 WF 9720 |
| Altri autori (Persone) | LadischMichael R. <1950-> |
| Disciplina | 660.6 |
| Soggetti | Biotechnology Chemical engineering |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Includes index. |
| Nota di contenuto | MODERN BIOTECHNOLOGY; CONTENTS; Preface; Acknowledgments; List of Illustrations; 1 Biotechnology; Introduction; The Directed Manipulation of Genes Distinguishes the New Biotechnology from Prior Biotechnology; Growth of the New Biotechnology Industry Depends on Venture Capital; Submerged Fermentations Are the Industry's Bioprocessing Cornerstone; Oil Prices Affect Parts of the Fermentation Industry; Growth of the Antibiotic/Pharmaceutical Industry; The Existence of Antibiotics Was Recognized in 1877; Penicillin Was the First Antibiotic Suitable for Human Systemic Use Genesis of the Antibiotic Industry Other Antibiotics Were Quickly Discovered after the Introduction of Penicillin; Discovery and Scaleup |

Are Synergistic in the Development of Pharmaceutical Products; Success of the Pharmaceutical Industry in Research, Development, and Engineering Contributed to Rapid Growth but Also Resulted in Challenges; Growth of the Amino Acid/Acidulant Fermentation Industry; Production of Monosodium Glutamate (MSG) via Fermentation; The Impact of Glutamic Acid Bacteria on Monosodium Glutamate Cost Was Dramatic

Auxotrophic and Regulatory Mutants Enabled Production of Other Amino Acids Prices and Volumes Are Inversely Related; Biochemical Engineers Have a Key Function in All Aspects of the Development Process for Microbial Fermentation; References; Homework Problems; 2 New Biotechnology; Introduction; Growth of the Biopharmaceutical Industry; The Biopharmaceutical Industry Is in the Early Part of Its Life Cycle; Discovery of Type II Restriction Endonucleases Opened a New Era in Biotechnology; The Polymerase Chain Reaction (PCR) Is an Enzyme-Mediated, In Vitro Amplification of DNA

Impacts of the New Biotechnology on Biopharmaceuticals, Genomics, Plant Biotechnology, and Bioproducts Biotechnology Developments Have Accelerated Biological Research; Drug Discovery Has Benefited from Biotechnology Research Tools; The Fusing of Mouse Spleen Cells with T Cells Facilitated Production of Antibodies; Regulatory Issues Add to the Time Required to Bring a New Product to Market; New Biotechnology Methods Enable Rapid Identification of Genes and Their Protein Products; Genomics Is the Scientific Discipline of Mapping, Sequencing, and Analyzing Genomes

Products from the New Plant Biotechnology Are Changing the Structure of Large Companies that Sell Agricultural Chemicals Bioproducts from Genetically Engineered Microorganisms Will Become Economically Important to the Fermentation Industry; References; Homework Problems; 3 Bioproducts and Biofuels; Introduction; Biocatalysis and the Growth of Industrial Enzymes; Glucose Isomerase Catalyzed the Birth of a New Process for Sugar Production from Corn; Identification of a Thermally Stable Glucose Isomerase and an Inexpensive Inducer Was Needed for an Industrial Process

The Demand for High-Fructose Corn Syrup (HFCS) Resulted in Large-Scale Use of Immobilized Enzymes and Liquid Chromatography

Sommario/riassunto

Biotechnology introduces students in science, engineering, or technology to the basics of genetic engineering, recombinant organisms, wild-type fermentations, metabolic engineering and microorganisms for the production of small molecule bioproducts. The text includes a brief historical perspective and economic rationale on the impact of regulation on biotechnology production, as well as chapters on biotechnology in relation to metabolic pathways and microbial fermentations, enzymes and enzyme kinetics, metabolism, biological energetics, metabolic pathways, nucleic acids, genetic enginee

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| 2. Record Nr. | UNINA9910707766303321 |
| Titolo | American River Watershed common features general reevaluation report : communication from the Assistant Secretary of the Army, Civil Works, Department of Defense, transmitting the American River Watershed common features general reevaluation final reports and appendices for December 2015 (revised May 2016) |
| Pubbl/distr/stampa | Washington : , : U.S. Government Publishing Office, , 2016 |
| Edizione | [Revised May 2016.] |
| Descrizione fisica | 1 online resource (3 volumes) : illustrations, maps |
| Collana | House document / 114th Congress, 2d session ; ; 114-169 |
| Soggetti | Flood damage prevention - California - American River Watershed Flood control - California - American River Watershed Hydraulic structures - California - American River Watershed Levees - California - American River Watershed Erosion - California - American River Watershed - Prevention Habitat (Ecology) - Modification - California - American River Watershed Ecology Erosion - Prevention Flood control Flood damage prevention Habitat (Ecology) - Modification Hydraulic structures Levees Legislative materials. Online resources. American River Watershed (Calif.) Environmental conditions California American River Watershed |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | "Referred to the Committee on Transportation and Infrastructure." "September 22, 2016." |
| Nota di bibliografia | Includes bibliographical references. |

