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| 1. Record Nr.           | UNINA9910780046203321  |
| Titolo                  | Applied microbiology . volume 2 / [[electronic resource] /] / edited by Alain Durieux and Jean-Paul Simon  |
| Pubbl/distr/stampa      | London ; ; Dordrecht, : Kluwer Academic, c2002   |
| ISBN                    | 1-280-04350-4<br>9786610043507<br>0-306-46888-3  |
| Edizione                | [1st ed. 2002.]  |
| Descrizione fisica      | 1 online resource (282 p.)   |
| Collana                 | Focus on biotechnology ; ; v. 2  |
| Altri autori (Persone)  | DurieuxAlain<br>SimonJean-Paul   |
| Disciplina              | 660.62   |
| Soggetti                | Microbial biotechnology<br>Food - Microbiology<br>Industrial microbiology  |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Description based upon print version of record.  |
| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | Starters -- New Aspects of Fungal Starter Cultures for Fermented Foods -- Starters for the Wine Industry -- Physiology, Biosynthesis and Metabolic Engineering -- Metabolism and Lysine Biosynthesis Control in Brevibacterium Flavum: Impact of Stringent Response in Bacterial Cells -- Molecular Breeding of Arming Yeasts with Hydrolytic Enzymes by Cell Surface Engineering -- Metabolic Pathway Analysis of Saccharomyces Cerevisiae -- State Parameters and Culture Conditions -- Effect of Aeration in Propagation on Surface Properties of Brewers' Yeast -- Effect of the Main Culture Parameters on the Growth and Production Coupling of Lactic Acid Bacteria -- Pseudohyphal and Invasive Growth in Saccharomyces Cerevisiae -- Microbial Production of the Biodegradable Polyester Poly-3-Hydroxybutyrate (PHB) from Azotobacter Chroococcum 6B: Relation between PHB Molecular Weight, Thermal Stability and Tensile Strength -- Novel Approaches to the Study of Microorganisms -- Sharing of Nutritional Resources in Bacterial Communities Determined by Isotopic Ratio Mass Spectrometry of Biomarkers -- A Comparison of the Mechanical Properties of Different Bacterial Species -- Novel Applications -- Kocuria Rosea as a |

New Feather Degrading Bacteria -- Comparison of PB2+ Removal Characteristics Between Biomaterials and Non-biomaterials -- Hydrocarbon Utilisation by Streptomyces Soil Bacteria -- Food Security and Food Preservation -- Molecular Detection and Typing of Foodborne Bacterial Pathogens: A Review -- Bioencapsulation Technology in Meat Preservation.

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Sommario/riassunto

This book illustrates the major trends in applied microbiology research with immediate or potential industrial applications. The papers proposed reflect the diversity of the application fields. New microbial developments have been done as well in the food and health sectors than in the environmental technology or in the fine chemical production. All the microbial genera are involved : yeast, fungi and bacteria. The development of biotechnology in parallel with the industrial microbiology has enabled the application of microbial diversity to our socio-economical world. The remarkable properties of microbes, inherent in their genetic and enzymatic material, allow a wide range of applications that can improve our every day life. Recent studies for elucidating the molecular basis of the physiological processes in micro-organisms are essential to improve and to control the metabolic pathways to overproduce metabolites or enzymes of industrial interest. The genetic engineering is of course one of the disciplines offering new horizons for the « fantastic microbial factory » . Studies of the culture parameter incidence on the physiology and the morphology are essential to control the response of the micro-organisms before its successful exploitation at the industrial scale. For this purpose, fundamental viewpoints are necessary. Development of novel approaches to characterise micro-organisms would also facilitate the understanding of the inherent metabolic diversity of the microbial world, in terms of adaptation to a wide range of biotopes and establishment of microbial consortia.

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