Record Nr. UNINA9910739415903321 Autore Chen Hongzhang Titolo Modern solid state fermentation: theory and practice / / Hongzhang Chen New York, : Springer, 2013 Pubbl/distr/stampa 94-007-6043-4 **ISBN** Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (xi, 324 pages): illustrations (some color) Collana Gale eBooks Disciplina 664.024 Soggetti Solid-phase biochemistry Solid-state fermentation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references. Nota di bibliografia Introduction -- Biotechnology principles of solid-state fermentation --Nota di contenuto Principles of solid-state fermentation engineering and its scale-up --Aerobic solid state fermentation -- Anaerobic solid state fermentation -- Principle and Application of Solid-state Fermentation Carried Out on Inert Support Materials (Adsorbed carrier solid-state fermentation) --Development trends and application prospects of the modern solidstate fermentation. Sommario/riassunto "Modern Solid State Fermentation: Theory and Practice" covers stateof-the-art studies in the field of solid state fermentation (SSF). In terms of different characteristics of microbial metabolites, this book catalogs SSF into two main parts: anaerobic and aerobic SSF. Based on the principles of porous media and strategies of process control and scaleup, which are introduced in the book, it not only presents a wellfounded explanation of essence of solid state fermentation, but also their influence on microbial physiology. In addition, due to the rapid development of this field in recent years, inert support solid state fermentation is also examined in detail. At last, the modern solid state fermentation technology platform is proposed, which will be used in solid biomass bioconversion. This book is intended for biochemists. biotechnologists and process engineers, as well as researchers

interested in SSF. Dr. Hongzhang Chen is a Professor at Institute of Process Engineering, Chinese Academy of Sciences, Beijing, China. .