Record Nr. UNINA9910373899003321 Systems and Synthetic Biotechnology for Production of Nutraceuticals / **Titolo** / edited by Long Liu, Jian Chen Pubbl/distr/stampa Singapore:,: Springer Singapore:,: Imprint: Springer,, 2019 **ISBN** 981-15-0446-6 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (V, 208 p. 38 illus., 28 illus. in color.) 660.62 Disciplina Soggetti Food—Biotechnology Biology—Technique Food Science **Biological Techniques** Aliments funcionals Biotecnologia alimentària Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Nutraceuticals: definition, kinds and applications -- Construction of microbial cell factories by systems and synthetic biotechnology --Microbial production of functional organic acids -- Microbial production of oligosaccharides and polysaccharides -- Microbial production of flavonoids -- Microbial production of natural food colorants -- Microbial production of vitamins -- Microbial production of oils and fatty acids -- Microbial production of nutraceuticals: challenges and prospects. . Sommario/riassunto This book discusses systems and synthetic biotechnologies for the production of nutraceuticals, and summarizes recent advances in nutraceutical research in terms of the physiological effects on health, potential applications, drawbacks of traditional production processes, characteristics of production strains, and advances in microbial production based on systems and synthetic biotechnology. It also examines future directions in the microbial production of nutraceuticals using systems and synthetic biology. The book is intended for

researchers and graduate students in the field of molecular biology and

industrial biotechnology as well as staff working in the nutraceutical industry.