1. Record Nr. UNINA9910484294803321 Autore Bajpai P (Pratima) Titolo Developments in bioethanol. / / Pratima Bajpai Pubbl/distr/stampa Gateway East, Singapore:,: Springer,, [2021] ©2021 **ISBN** 981-15-8779-5 Edizione [1st ed. 2021.] 1 online resource (XIV, 222 p. 27 illus., 20 illus. in color.) Descrizione fisica Green Energy and Technology, , 1865-3529 Collana Disciplina 662.6692 Soggetti Ethanol as fuel Biomass conversion Biochemical engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes index. Note generali General background and introduction -- Historical perspectives -- Key Nota di contenuto drivers and trends -- Chemistry, types and sources of ethanol --Production of bioethanol -- Pretreatment of lignocelluloses biomass for bioethanol production -- Ethanol markets -- Characteristics of fuel ethanol. This book provides an updated and detailed overview on the recent Sommario/riassunto developments of bioethanol technology. It looks at the historical perspectives, chemistry, sources and production of ethanol and discusses biotechnology breakthroughs and promising developments, its uses, advantages, problems, environmental effects and characteristics. In addition, it presents information about ethanol in different parts of the world and also highlights the challenges and future of ethanol. The first edition of this book was published as a SpringerBriefs in 2013. Since then, many new developments have taken place in the last six years. This new edition will highlight the evolution in bioethanol development from first-generation production to the futuristic fourth-generation bioethanol production, the various constraints and challenges involved, and the scope for development. This book caters to the audience who are interested in alternative

transportation fuels which are both biodegradable and sustainable to

the environment.