Record Nr. UNINA9911007268003321 Autore Jacob-Lopes Eduardo Titolo 3rd Generation Biofuels: Disruptive Technologies to Enable Commercial Production / Jacob[and others] Sawston, Royaume-Uni, : Woodhead Publishing, 2022 Pubbl/distr/stampa **ISBN** 9780323903387 032390338X 9780323909716 032390971X Descrizione fisica 1 online resource Collana Woodhead Publishing Series in Energy Queiroz Zepka PhdLeila Altri autori (Persone) Severolhana Aguiar Disciplina 662.88 Soggetti Algal biofuels Biomass energy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Sommario/riassunto 3rd Generation Biofuels: Disruptive Technologies to Enable Commercial Production is a comprehensive volume on all aspects of algal biofuels. offering the latest advances on commercial implementation. In addition to the fundamentals, the book discusses all applied aspects of 3rd generation biofuels production, including design approaches, unit operations of the upstream and downstream biomass processing, and every potential microalgae-based energy product, including microbial fuel cells. Policy, economic, environmental, and regulatory issues are addressed in a dedicated section. Finally, the book presents pilot and demonstration-scale projects for 3rd generation biofuels production in the format of a white paper. Each chapter reviews the state of the art, discusses the disruptive technological approaches that will potentially enable large-scale production, and concludes with specific recommendations on how to achieve commercial competitiveness. The book provides readers with an invaluable reference for researchers,

graduates, and practitioners working in the areas of renewable energy.

bioenergy and alternative fuels, and biotechnology.