1. Record Nr. UNINA9910557295803321 Autore Kim Tae Hyun Titolo Advancements in Catalytic Conversion of Biomass into Biofuels and Chemicals Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020 Descrizione fisica 1 electronic resource (86 p.) Soggetti History of engineering & technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Numerous efforts have been devoted to using biomass as a feedstock for the production of bio-based materials, biochemicals, and biofuels that reduce greenhouse gas emissions and dependence on conventional fossil resources. Conversion strategies for the production of platform chemicals, building blocks, fine chemicals, and biofuels include a wide range of processes such as chemical and mechanical pretreatment for improved carbohydrate production, fractionation of biomass into carbohydrates and lignin and their further conversions, microbial and enzymatic conversion of biomass into valuable products, and direct catalytic conversion of biomass or its components into chemicals and fuels. This Special Issue introduces recent innovative research results in the area of bioenergy and value-added chemicals from various feedstocks through chemical and biological catalytic

processes.