1. Record Nr. UNINA9910557333803321 Autore **Topakas Evangelos** Titolo Environmental Biocatalysis: From Remediation to Waste Valorization Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021 Descrizione fisica 1 electronic resource (121 p.) Soggetti Technology: general issues Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia This Special Issue aims to highlight the dual potential of novel Sommario/riassunto biocatalytic processes, where the first part is dedicated to waste valorization for the production of high value products, while the second part is focused on the detoxification of pollutants. Several examples of microbial systems employed for the valorization of waste streams derived by the forest, agricultural, and food industries or the use of whole-cell or enzyme approaches for the removal of nitrogen or dyes from industrial wastewaters are provided. Last but not least, an example of the utilization of polyhydroxyalkanoates (PHAs) was highlighted for the production of fatty acids, which were used for the

enzymatic synthesis of sugar esters with antimicrobial properties.