1. Record Nr. UNINA9910595078803321 Autore Bedia Jorge Titolo New Carbon Materials from Biomass and Their Applications Pubbl/distr/stampa Basel, : MDPI Books, 2022 Descrizione fisica 1 electronic resource (272 p.) Technology: general issues Soggetti Chemical engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Carbon-based materials, such as chars, activated carbons, onedimensional carbon nanotubes, and two-dimensional graphene nanosheets, have shown great potential for a wide variety of applications. These materials can be synthesized from any precursor with a high proportion of carbon in its composition. Although fossil fuels have been extensively used as precursors, their unstable cost and supply have led to the synthesis of carbon materials from biomass. Biomass covers all forms of organic materials, including plants both living and in waste form and animal waste products. It appears to be a renewable resource because it yields value-added products prepared using environmentally friendly processes. The applications of these biomass-derived carbon materials include electronic, electromagnetic, electrochemical, environmental and biomedical applications. Thus,

applications.

novel carbon materials from biomass are a subject of intense research, with strong relevance to both science and technology. The main aim of this reprint is to present the most relevant and recent insights in the field of the synthesis of biomass-derived carbons for sustainable applications, including adsorption, catalysis and/or energy storage