

1. Record Nr.	UNINA9910764262603321
Autore	Ferri Joseì Miguel
Titolo	Advances in Biocompatible and Biodegradable Polymers II
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2023
Descrizione fisica	1 online resource
Soggetti	Technology: general issues History of engineering and technology Environmental science, engineering and technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Among the strategies for reducing the negative effects on the environment affected by the uncontrolled consumption and low potential for the recovery of conventional plastics, the synthesis of new biodegradable and recyclable plastics represents one of the most promising methods for minimizing the negative effects of conventional non-biodegradable plastics. The spectrum of existing biodegradable materials is still very narrow. Therefore, to achieve greater applicability, research is being carried out on biodegradable polymer mixtures, the synthesis of new polymers, and the incorporation of new stabilizers for thermal degradation, alongside the use of other additives such as antibacterials or new and more sustainable plasticizers. Some studies analyze direct applications, such as shape memory foams, new cartilage implants, drug release, etc. The reader can find several studies on the degradation of biodegradable polymers under composting conditions. However, novel bacteria that degrade polymers considered non-biodegradable in other, unusual conditions (such as conditions of high salinity) are also presented.