1. Record Nr. UNINA9910583480903321

Titolo	Algae based polymers, blends, and composites : chemistry, biotechnology and materials science / / edited by Khalid Mahmood Zia, Mohammad Zuber, Muhammad Ali
Pubbl/distr/stampa	Amsterdam, [Netherlands] : , : Elsevier, , 2017 ©2017
ISBN	0-12-812361-3
Descrizione fisica	1 online resource (740 pages) : illustrations
Disciplina	660.62
Soggetti	Algae - Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Algal-based biopolymers -- Synthetic materials and the problems they pose -- Microalgae: a promising feedstock for energy and high value products -- Origin of algae and their plastids -- Algae-based biologically active compounds -- Production and processing of algal biomass -- Algae biotechnology: a green light for engineered algae -- A biorefinery processing perspective for the production of polymers -- Blends of algae with natural polymers -- Algae-based polyurathane blends and composites -- Algae as alternative biomaterial for biobased polyesters -- Algae-based polyolefins -- Chlorella-based composites -- Alginate blends of poly (vinyl alcohol) and Poly(N-vinyl-2-pyrrolidone) for higher Physicomechanical properties: rationale of making heteropolymers -- Alginate-poly(ethylene) Glycol and poly(ethylene) oxide blend Materials -- Alginate-based hybrid nanocomposite materials -- Characterization techniques for Algae-based materials -- Processing Techniques of algae-based materials -- Future prospects of algae-based materials.