1. Record Nr. UNINA9910373894103321

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| Titolo | Aquatic Biopolymers : Understanding their Industrial Significance and Environmental Implications / / by Ololade Olatunji |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020 |
| ISBN | 3-030-34709-5 |
| Edizione | [1st ed. 2020.] |
| Descrizione fisica | 1 online resource (XVIII, 359 p.) |
| Collana | Springer Series on Polymer and Composite Materials, , 2364-1878 |
| Disciplina | 572.33 |
| Soggetti | Polymers<br>Natural resources<br>Engineering—Materials<br>Biomaterials<br>Marine sciences<br>Fresh water<br>Polymer Sciences<br>Natural Resources<br>Materials Engineering<br>Marine & Freshwater Sciences |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Introduction -- Aquatic Organisms and Materials -- Classification of Aquatic Biomaterials and Biopolymers -- Chitin -- Collagen -- Alginates -- Cellulose -- Polyesters -- Algea Biomass - Polymer Composites -- Composite Structures and Formations -- Other Polymers and Recent Innovations -- Future Perspectives and Conclusion. |
| Sommario/riassunto | This book presents a comprehensive survey about the most recent developments in industrial applications, processing techniques and modifications of polymers from marine sources. It systematically introduces the reader to the biomaterials Chitin, Collagen, Alginates, Cellulose and Polyesters and links their interwoven industrial significance and environmental implications. The book elucidates the impact of industrial sourcing of the aquatic system for organic and |

inorganic matter on the environment and deepens the understanding of the industrial and economic significance of aquatic biopolymers. Further it addresses the question of how to balance the conservation of aquatic life and the industrial and economic interest in developing biodegradable alternatives for plastic. Thus the book will appeal to scientists in the field of chemistry, materials and polymer science as well as engineering.