

1. Record Nr.	UNINA9910132410003321
Titolo	Biodegradable polyesters // edited by Stoyko Fakirov
Pubbl/distr/stampa	Weinheim, Germany : , : Wiley-VCH, , 2015 ©2015
ISBN	1-5231-1008-2 3-527-65697-9 3-527-65695-2 3-527-65698-7
Descrizione fisica	1 online resource (370 p.)
Disciplina	668.4225
Soggetti	Polyesters Biodegradable plastics
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Cover; Contents; List of Contributors; List of Abbreviations and Symbols; Preface; Chapter 1 Biodegradable Polyesters: Synthesis, Properties, Applications; 1.1 Historical Overview on the Origin of Polymer Science and Synthesis of Polyamides and Polyesters; 1.1.1 Synthesis of Polyamides; 1.1.2 Initial Knowledge about Polyesters; 1.2 Publication Trend of Representative Biodegradable and Nonbiodegradable Polyesters in the Past Century; 1.3 Biodegradable Polyesters; 1.3.1 Biodegradable Aliphatic Polyesters and Their Copolymers; 1.3.1.1 Poly(lactic acid) 1.3.1.2 Polyglycolide or Poly(glycolic acid)1.3.1.3 Poly(caprolactone); 1.4 Concluding Remarks; Acknowledgment; References; Chapter 2 Functional (Bio)degradable Polyesters by Radical Ring-Opening Polymerization; 2.1 Introduction; 2.2 Radical Ring-Opening Polymerization (RROP) of Cyclic Ketene Acetals; 2.2.1 Starting Monomers: Cyclic Ketene Acetals; 2.2.2 Radical Ring-Opening Polymerization Mechanism; 2.2.3 Functional Polyesters by Conventional and Controlled Radical Homopolymerization of CKAs; 2.2.4 Functional Polyesters by Copolymerization of CKAs and Vinyl Monomers; 2.3

## Conclusions

References Chapter 3 Microbial Synthesis of Biodegradable Polyesters: Processes, Products, Applications; 3.1 Introduction; 3.2 Biogenesis of Microbial Polyhydroxyalkanoate Granules; 3.3 The Diversity of Biopolyesters; 3.4 Polyester (PHA) Synthases are the Key Enzymes; 3.5 Catalytic Reaction Mechanism; 3.6 PHA Inclusions: Self-Assembly and Structure; 3.7 Industrial Production of Bacterial Polyhydroxyalkanoates: PHAs via Fermentation; 3.8 Application Opportunities of Bacterial Polyhydroxyalkanoates; 3.8.1 In Energy Industry: Biofuels Based on PHAs  
3.8.2 In Material Industry: PHAs as Polymeric Materials 3.8.2.1 PHAs as Biodegradable Plastics and Fiber Materials; 3.8.2.2 PHAs as Medical Implant Materials; 3.8.2.3 PHAs as Drug Delivery Carrier; 3.8.3 Fine Chemical Industry: PHA Chiral Monomers; 3.8.4 Application of PHA Granule Surface Proteins; 3.8.5 Production of Tailor-Made Biopolyester Nanoparticles and Potential Applications; 3.8.6 Future Development of PHA-Based Industry; 3.8.6.1 The Development of Low-Cost PHA Production Technology; 3.8.6.2 Unusual PHAs with Special Properties; 3.8.6.3 High Value Added Applications  
3.8.6.4 Other Future Applications 3.8.6.5 Microbial Synthesis of Poly (lactic acid) (PLA); 3.8.7 Applications of PHA Inclusions as Functionalized Biobeads; 3.8.7.1 Bioseparations; 3.8.7.2 Drug Delivery; 3.8.7.3 Protein Purification; 3.8.7.4 Enzyme Immobilization; 3.8.7.5 Diagnostics and Imaging; 3.8.7.6 Vaccine Delivery; 3.9 Conclusions and Outlook; Acknowledgments; References; Chapter 4 Synthesis, Properties, and Mathematical Modeling of Biodegradable Aliphatic Polyesters Based on 1,3-Propanediol and Dicarboxylic Acids; 4.1 Introduction; 4.1.1 Aliphatic Polyesters  
4.1.2 Production of 1,3-Propanediol

---

### Sommario/riassunto

Collating otherwise hard-to-get and recently acquired knowledge in one work, this is a comprehensive reference on the synthesis, properties, characterization, and applications of this eco-friendly class of plastics. A group of internationally renowned researchers offer their first-hand experience and knowledge, dealing exclusively with those biodegradable polyesters that have become increasingly important over the past two decades due to environmental concerns on the one hand and newly-devised applications in the biomedical field on the other. The result is an unparalleled overview for the

---

2. Record Nr.	UNINA9910811568603321
Titolo	Challenges to Chinese foreign policy : diplomacy, globalization, and the next world power // edited by Yufan Hao, C. X. George Wei, and Lowell Dittmer
Pubbl/distr/stampa	Lexington, Kentucky : , : The University Press of Kentucky, , 2009 ©2009
ISBN	0-8131-9202-1 0-8131-5006-X
Descrizione fisica	1 online resource (384 p.)
Collana	Asia in the New Millennium
Disciplina	327.51
Soggetti	China Foreign relations 1976-
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Title; Copyright; Contents; Introduction; 1. Overview: The Evolution of China's Diplomacy and Foreign Relations in the Era of Reform, 1976-2005; Part I: China's Relations with the United States; 2. Building a New Conceptual Framework for U.S.-China Relations; 3. China's New Leadership and Strategic Relations with the United States; 4. American Nuclear Primacy or Mutually Assured Destruction: The Future of the U.S.-China Strategic Balance of Power; Part II: China's Relations with Other Major Powers; 5. The Sino-Russian Strategic Relationship: Ghost of the ""Strategic Triangle""? 6. The European Union and China: Partnership with Competition7. China's Japan Policy: Beijing's View of the U.S.-Japan Alliance; Part III: China's Regional Relations; 8. The Korean Peninsula: A Chinese View on the North Korean Nuclear Issue; 9. China's Dilemma over the North Korean Nuclear Problem; 10. Changes in South Asia since 9/11 and China's Policy Options; 11. After the Anti-Secession Law: Cross-Strait and U.S.-China Relations; 12. Hong Kong and Macao: In between China and the West; Part IV: Chinese Diplomacy with Chinese Characteristics 13. Between Rhetoric and Pragmatism: Nationalism as a Driving Force of Chinese Foreign Policy14. Engagement or Sanction? U.S. Economic Diplomacy toward China since the Cold War; 15. The Rupture of the Sino-Soviet Alliance: An Assessment of the National Intelligence

Evaluation; 16. A Misty Cold War in the Himalayas: China's Historical Temperament in International Relations; 17. An Intercultural Communication Model of International Relations: The Case of China; Conclusion; English-Chinese Terms; About the Contributors; Index; A; B; C; D; E; F; G; H; I; J; K; L; M; N; O; P; Q; R; S; T; U; V; W XY; Z

---

Sommario/riassunto

When Beijing hosted the 2008 Summer Olympics, China symbolically asserted its role as an emerging world power -- a position it is not likely to relinquish anytime soon. China's growing economy, military reforms, and staggering productivity have contributed to its ascendancy as a major player in international affairs. Western scholars have attempted to explain Chinese foreign policy using historical or theoretical evidence, but until this volume, few studies from a Chinese perspective have been published in English. In *Challenges to Chinese Foreign Policy: Diplomacy, Globalization, and the Next*

---