

1. Record Nr.	UNINA9910149366503321
Titolo	Green polymer composites technology : properties and applications / / edited by Inamuddin
Pubbl/distr/stampa	Boca Raton : , : Taylor & Francis Group, CRC Press, , [2017] ©2017
ISBN	1-315-35400-4 1-315-37118-9 1-4987-1547-8
Descrizione fisica	1 online resource (614 pages) : illustrations, tables
Disciplina	620.1/920286
Soggetti	Polymeric composites Green chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Chapter 1. Bio-based new materials for packaging applications / Asier Martinez, Itziar Eguez, Oihana Gordobil, Jalel Labidi and Susana C.M. Fernandes -- Chapter 2. Innovative green foams : opportunities and challenges in industrial potential applications / Fatima Charrier, El Bouhtoury -- Chapter 3. Properites and applications of polysaccharide green polymer composites for antibacterial and anti-fogging coatings in food / Vito Verardo and 6 others -- Chapter 4. Binders such as adhesives, gums, wallpaper paste, resisns, or any subclass in polymer division / R. Rajasekar, C. Moganapryia, P. Sathish Kumar, P. Navaneethakrishnan and Inamuddin -- Chapter 5. Active bio-packaging : recent developments and applications / Franciele Maria Pelissari, Tanara Sartori, Fabiana Helen dos Santos, Gustavo Molina and Florencia Cecilia Menegalli -- Chapter 6. Utilities such as purchase bags, goods packaing and composting bags / Alethia Vazquez-Morillas and 7 others -- Chapter 7. Smart coatings including antibacterial coatings, anti-fogging coatings and self-healing materials / Jahan B. Ghasemi, Behrouz Arab and Shahram Seidi -- Chapter 8. Application of technical lignin in wood adhesive / Sheng Yang, Tong-Qu Yuan and Run-Cang Sun -- Chapter 9. Food packaging applications of renewable

polymers incorporating nanocomposites / Adriano Brandelli and Stela Maris Meister Meira -- Chapter 10. Poly(hydroxyalkanoates) composites and their applications / Iza K. Radecka, Guozhan Jiang, David J. Hill and Marek M. Kowalcuk -- Chapter 11. Biodegradation properties of bioplastic-based planting pots / Kang Chiang Liew, Rahmatiah Al Faruqy, Chui Yee Chang and Wie Ling Moung -- Chapter 12. Biomediacl implants for bone tissue replacement and regeneration / Piotr Szczepanczyk, Krzysztof Pazdan, Kinga Pielichawska and Jan Chlopek -- Chapter 13. Starch modifications and their influence on the development and characteristics of biodegradable fils : a comparative review / Charanjit Singh Riar and Sakshi Sukhija -- Chapter 14. Green recycled cellulose aerogels : properites and applications / Hai Minh Duong and Son Truong Nguyen -- Chapter 15. Chitosan-based composite materials for anti-microbial food packaging / Shakeel Ahmed and Saiqa Ikram -- Chapter 16. Recent achievements in the synthesis of biosafe poly(vinyl alcohol) nanocompsite / Shadpour Mallakpour and Elham Khadem -- Chapter 17. High-performance polylactide and its composites / Purba Purnama and Soo Hyun Kim -- Chapter 18. Green polymer nanocomposites : preparation, properties and biomedical applications / Aniruddha Chatterjee and Dharmesh P. Hansora -- Chapter 19. Synthetic derivation of Inulin and its applications / Rahul and Gautam Sen -- Chapter 20. Mixing index of a starch composite extruder for food packaging application / Adeshina Fadeyibi, Zinash Delebo Osunde, Gbabo Agidi and Egwim Chidi Evans -- Chapter 21. Advances in polymers and tissue engineering scaffolds / Nandini A. Pattanashetti, Chinmay Hiremath, Nuno Alves and Mahadevappa Y. Kariduraganavar -- Chapter 22. Recent advances in green polymers and their pharmaceutical applications / Nitin Kumar Saun, Anuja Vohra and Reena Gupta -- Chapter 23. Drug delivery by green nanoparticles / Niteesh Kumar Pandey, Kalpana Hiteshi and Reena Gupta -- Chapter 24. Grafted nano-ZnO, TiO₂, and CuO by biosafe coupling agents and their applications for the green polymer nanocomposites fabrication / Shadpour Mallakpour and Vajiheh Behranvand -- Chapter 25. Advances in polymer composites : green and nanotechnology / Mitali Saha and Prasanta Sutradhar -- Chapter 26. An account of commercially important polysaccharide derivatives and their industrial applications / Kamalesh Prasad and A.K. Siddhanta -- Chapter 27. Advances in polymeric implants for biomedical applications / Geetha B. Heggannavar, Nandini A. Pattanashetti, Artur Mateus and Mahadevappa Y. Kariduraganavar -- Chapter 28. Polycarbonate : synthesis, properties and its applications / Jin-Gang Yu -- Chapter 29. Polyactic acid (PLA) synthesis and catalytic mechanism / Joon Ching Juan and Chin Hua Chia -- Chapter 30. Use of green composites for removal of metal ions and dyes / Hayshree Ramkumar and S. Chandramouleeswaran -- Chapter 31. New advances in bio-based resins / Itziar Eguez, Xabier Erdocia, Ane Sequeiros and Jalel Labidi -- Chapter 32. Clean and effective ligning upgrading pathway as green polymer feedstock : strategies to break through the restrictios of lignin heterogeneity / Guanhua Wang and Hongzhang Chen -- Chapter 33. Properties and applications of chitosan and its derivatives in the pharmaceutical and food sectors / Patricia Severino, Marco Vinicius Chaud, Francine Ferreira Padilha, Antonello Santini, and Eliana Barbosa Souto -- Chapter 34. Refinery of Eucommia ulmoides oliv. : from pharmaceutical value to green polymers application / Lan-Zhi Qin and Hongzhang Chen -- Chapter 35. Design strategies of green polymer nanacomposites containing amino acid linkages / Shadpour Mallakpour and Mashal Javadpour -- Chapter 36. Biopolymers in drug-delivery

applications / Chinmay Hiremath, Geetha B. Heggannavar, Geoffrey R. Mitchell and Mahadevappa Y. Kariduraganavar -- Chapter 37. Poly(*e*-caprolactone)(PCL) : application in biodegradable films and bags
Arantzazu Valdes, Ana Beltran, Ana Cristina Mellinas and Maria Carmen Garrigos -- Chapter 38. Starch-based biocomposites / Preetha Balakrishnan, Sabu Thomas, and M.S. Sreekala -- Chapter 39. New approach towards the studies of starch modification : processing and characterization / Dorota Kolodynska, Magdalena Koziol, Andrzej Odyga and Zbigniew Hubicki.
