

1. Record Nr.	UNINA9910800189503321
Titolo	Materials science of polymers : plastics, rubber, blends, and composites // edited by A.K. Haghi, PhD, Eduardo A. Castro, PhD, Sabu Thomas, PhD, P.M. Sivakumar, PhD, and Andrew G. Mercader, PhD
Pubbl/distr/stampa	Toronto ; ; New Jersey : , : Apple Academic Press, , [2015] ©2015
ISBN	0-429-16103-4 1-4822-9913-5
Descrizione fisica	1 online resource (383 p.)
Disciplina	620.1/92 620.192
Soggetti	Composite materials Plastics Polymer engineering Rubber Chemical & Materials Engineering Engineering & Applied Sciences Chemical Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Front Cover; About The Editors; Contents; List Of Contributors; List Of Abbreviations; List Of Symbols; Preface; Chapter 1 A Detailed Review On Characteristics, Application, And Limitation Of Amorphous Glassy Polymers As Natural Nanocomposites; Chapter 2 Structure Of Graphitic Carbons: A Comprehensive Review; Chapter 3 Radiation Cross- Linking Of Acrylonitrile- Butadiene Rubber; Chapter 4 Rubber Vulcanizates Containig Plasmochemically Modified Fillers; Chapter 5 Modification Of The Indian Rubber In The Form Of Latex With Ozone Chapter 6 Influence Of The Structure Of Polymer Material On Modification Of The Surface Layer Of Iron Counterface In Tribological ContactChapter 7 Boron Oxide As A Fluxing Agent For Silicone Rubber- Based Ceramizable Composites; Chapter 8 Application Of Micro- Dispersed Silicon Carbide Along With Slurries As A Functional Filler In

Fire And Heat Resistant Elastomer Compositions; Chapter 9 Thermal Stability Of Elastic Polyurethane; Chapter 10 Pan/ Nano-TiO- S Composites: Physicochemical Properties; Chapter 11 Viscoelastic Properties Of The Polystyrene Chapter 12 Nanostructured Polymeric Composites Filled With NanoparticlesChapter 13 Structure, Properties, And Application Of Dendritic Macromolecules In Various Fields: Molecular Simulation Techniques In Hyperbranched Polymer And Dendrimers; Chapter 14 A Study On Influence Of Electrospinning Parameters On The Contact Angle Of The Electrospun Pan Nanofiber Mat Using Response Surface Methodology (Rsm) And Artificial Neural Network (Ann) Chapter 15 Fabrication And Characterization Of The Metal Nanosized Branched Structures And The Composite Nanostructures Grown On Insulator Substrates By The Ebid ProcessChapter 16 A Case Study On Hyperbranched Polymers; Chapter 17 A Study On Network Of Sodium Hyaluronate With Nano- Knots Junctions; Chapter 18 The Magnetic Photocatalyst Conversion To The Magnetic Dye- Adsorbent Catalyst Via Hydrothermal Followed By Typical Washing And Thermal Treatments; Chapter 19 Solid Polymer Fuel Cell: A Three- Dimensional Computation Model And Numerical Simulations; Back Cover

Sommario/riassunto

Technical and technological development demands the creation of new materials that are stronger, more reliable, and more durable-materials with new properties. This book skillfully blends and integrates polymer science, plastic technology, and rubber technology to highlight new developments and trends in advanced polyblends. The fundamentals of polymerization, polymer characteristics, rheology and morphology, as well as composition, technology, testing and evaluation of various plastics, rubbers, fibers, adhesives, coatings, and composites are comprehensively presented in this informative volu
