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Titolo	Plasma Modification of Polyolefins : Synthesis, Characterization and Applications / / edited by N. S. Baneesh, P. S. Sari, Tatana Vackova, Sabu Thomas
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Descrizione fisica	1 online resource (262 pages) ; : illustrations (some color)
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Nota di contenuto	Chapter 1: Different techniques used for plasma modification of polyolefin surfaces -- Chapter 2: Air and Oxygen-containing plasma modification of polyolefin -- Chapter 3: Surface modification of polyolefin by nitrogen and ammonia low pressure plasma -- Chapter 4: Inert gas plasmas modification of polyolefin -- Chapter 5: Halo-form plasma modification of polyolefin surfaces -- Chapter 6: Plasma modification of EPDM rubber -- Chapter 7: Plasma assisted modification and etching process for polyolefin nanocomposites. .
Sommario/riassunto	This book addresses plasma modification of polyolefin surfaces. It comprises 21 chapters divided into three major sections. The first section covers the different techniques used for plasma modification of polyolefin surfaces and the effects of various gases as a surrounding medium, while the second provides a detailed analysis of the physics and chemistry of plasma modification and discusses various innovative characterization techniques, as well as ageing of the modified surface. It focuses on the analysis of changes in polymers' surface chemistry

using various spectroscopic techniques, and of changes in their surface morphology after plasma treatment using optical microscopy, electron microscopy and atomic force microscopy. In addition, it provides detailed information on the characterization of modified polymer surfaces. The book’s third and last section covers a range of applications of plasma-modified polyolefin surfaces varying from the packaging industry to the biomedical field, and shares valuable insights on the lifecycle analysis of plasma modification and modified surfaces.