

1. Record Nr.	UNIORUON00464746
Autore	MÖNX-AMGALAN, Ju'mjir
Titolo	Mongol ulsyn ix surguuliin Erdem Shinjilgeenii bicgiin nom zuin burtgel / Ju. Mönx-Amgalan, M. Kunai
Pubbl/distr/stampa	Ulaanbaatar, : MUIS-iin khevlekh uildver, 2010
Descrizione fisica	308 p. ; 22 cm
Classificazione	MON GEN B I
Altri autori (Persone)	KUNAI, M.
Soggetti	MONGOLIA - BIBLIOGRAFIE
Lingua di pubblicazione	Mongolian
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9911019919303321
Titolo	Plasma technology for hyperfunctional surfaces : food, biomedical and textile applications / / edited by Hubert Rauscher, Massimo Perucca, Guy Buyle
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, 2010
ISBN	9786613140463 9781283140461 1283140462 9783527630455 3527630457 9783527630462 3527630465
Descrizione fisica	1 online resource (428 p.)
Altri autori (Persone)	RauscherHubert PeruccaMassimo BuyleGuy
Disciplina	621.044
Soggetti	Plasma devices Surfaces (Technology) Hyperfunctions

Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	<p>Plasma Technology for Hyperfunctional Surfaces; Contents; Preface; List of Contributors; List of Contacts; Part I Introduction to Plasma Technology for Surface Functionalization; 1 Introduction to Plasma and Plasma Technology; 1.1 Plasma: the Fourth State of Matter; 1.2 Historical Highlights; 1.3 Plasma Fundamentals; 1.3.1 Free Ideal Gas; 1.3.2 Interacting Gas; 1.3.3 The Plasma as a Fluid; 1.3.4 Waves in Plasmas; 1.3.5 Relevant Parameters that Characterize the State of Plasma; 1.4 Classification of Technological Plasmas; 1.4.1 Hot (Thermal) Plasmas and Their Applications 1.4.2 Cold (Nonthermal) Plasmas and Their Applications 1.5 Reactive Plasmas; 1.5.1 Elementary Plasma-Chemical Reactions; 1.5.2 Elastic Scattering and Inelastic Thomson Scattering: Ionization Cross-section; 1.5.3 Molecular Ionization Mechanisms; 1.5.4 Stepwise Ionization by Electron Impact; 1.6 Plasma Sheaths; 1.7 Summary; References; 2 Plasma Systems for Surface Treatment; 2.1 Introduction; 2.2 Low Pressure Plasma Systems; 2.2.1 Microwave Systems; 2.2.1.1 Introduction; 2.2.1.2 Standard Microwave System for Textile Treatment; 2.2.1.3 Example: Duo-Plasmaline-a Linearly Extended Plasma Source 2.2.1.4 Electron Cyclotron Resonance Heated Plasmas 2.2.2 Capacitively Coupled Systems; 2.2.2.1 Introduction; 2.2.2.2 Capacitive Coupled Plasma for Biomedical Applications; 2.2.3 Physical Vapor Deposition Plasma: LARC; 2.2.3.1 Background; 2.2.3.2 Cathodic Arc PVD Systems; 2.2.3.3 Example: Treatment of Food Processing Tools by LARCPVD System; 2.3 Atmospheric Pressure Plasma Systems; 2.3.1 Corona-type Surface Treatment; 2.3.1.1 Standard Corona Treatment; 2.3.1.2 Controlled Atmosphere Corona Treatment-Aldyne Treatment; 2.3.1.3 Liquid Deposition; 2.3.2 Remote Surface Treatment 2.3.2.1 Plasma Sources Used for Modeling 2.3.2.2 Example: AcXys Plasma; 2.4 Summary; Acknowledgment; References; 3 Plasma-surface Interaction; 3.1 Introduction; 3.2 Polymer Etching; 3.3 Plasma Grafting; 3.4 Chemical Kinetics; 3.4.1 Chain Polymerization; 3.4.2 Plasma Polymerization; 3.5 Example: Plasma Polymerization; 3.5.1 Plasma Polymerization of HEMA; 3.5.1.1 Theoretical Background; 3.5.1.2 Example: Polymerization of HEMA on PET Fabric; 3.5.2 Plasma Polymerization of HDMSO; 3.6 Conclusion; References; 4 Process Diagnostics by Optical Emission Spectroscopy; 4.1 Introduction 4.2 Optical Emission Spectroscopy 4.2.1 Theory of Optical Emission; 4.2.2 Spectroscopy; 4.2.3 OES Bench and Set-up; 4.3 Optical Absorption Spectroscopy; 4.3.1 Actinometry; 4.4 Laser Induced Fluorescence (LIF); 4.5 Conclusion; References; 5 Surface Analysis for Plasma Treatment Characterization; 5.1 Introduction to Surface Characterization Techniques; 5.2 X-ray Photoelectron Spectroscopy (XPS) or Electron Spectroscopy for Chemical Analysis (ESCA); 5.2.1 Principles of XPS; 5.2.2 XPS Core Level Chemical Shift; 5.2.3 Quantitative Analysis 5.2.4 Quantitative Analysis of Nitrogen Plasma-Treated Polypropylene</p>
Sommario/riassunto	<p>Based on a project backed by the European Union, this is a must-have resource for researchers in industry and academia concerned with application-oriented plasma technology research. Clearly divided in three sections, the first part is dedicated to the fundamentals of plasma and offers information about scientific and theoretical plasma topics,</p>

plasma production, surface treatment process and characterization. The second section focuses on technological aspects and plasma process applications in textile, food packaging and biomedical sectors, while the final part is devoted to concerns about t
