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   Soggetti   Nanotechnology
   Nanoscale science
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   Nanostructures
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   Nanoscale Science and Technology
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   Nota di bibliografia   Includes bibliographical references at the end of each chapters.

   Nota di contenuto   Preface -- Introduction to Electrospinning for High Performance Sensing -- Introduction to COST MP1206 -- Facile and Ultrasensitive Sensors Based on Electrospinning-Netting Nanofibers/nets -- Controlling the Nanostructure of Electrospun Polymeric Fibers -- Graphene-based Composite Materials for Chemical Sensor Application -- Electrospinning of Electro-Active Materials: Devices Based on Individual and Crossed Nanofibers -- Photoconductive Electrospun Titania Nanofibres to Develop Gas Sensors Operating at Room Temperature -- Electrospun Fluorescent Nanofibers and Their Application in Optical Sensing -- Nanofibre-Based Sensors for Visual and Optical Monitoring -- Electrospun Fluorescent Nanofibers for Explosive Detection -- Nanoparticle/Nano channels-Based Electrochemical Biosensors -- Electrospun Fibre-Based Biosensors --

Development by Electrohydrodynamic Processing of Heat Storage Materials for Multi sectorial Applications -- Coaxial Electrospun Brain Mimetic Fibres for Diffusion Magnetic Resonance Imaging -- Turning Nanofibres into Products: Electrospinning from a Manufacturer's Perspective.

Sommario/riassunto	This book aims to present the different aspects of electrospinning for designing and fabricating high performing materials for sensors applied in gaseous and liquid environments. Since electrospinning is a versatile and inexpensive manufacturing technology, the book emphasizes the industrial applications perspective. The volume is an edited collection of the most recent and encouraging results concerning advanced nanostructured (bio)sensors. The feats achieved by these sensors range from high sensitivity to extreme operating conditions and satisfy a wide range of requirements. Most of the contributions in this book come from First International Workshop on Electrospinning for High Performance Sensing (EHPS2014) that was held in Rome in 2014, as part of the European COST Action MP1206 Electrospun Nano-fibres for bio inspired composite materials and innovative industrial applications.