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Nota di contenuto	From Unidimensional Carbonaceous Materials to Multidimensional Structures through Molecular Modelling -- A Comprehensive Review of Synergetic Effect on Graphene Oxide and Metal Organic Framework Nanocomposites as Electrocatalysts for Hydrogen Evolution Reaction -- Polymer based Graphene Oxide Nanocomposites for Water Remediation -- Characterization of Hydrogen-free and Hydrogenated DLC Films -- Grphene/Graphene Oxide in Renewable Energy Technology: Photocatalytic Electrodes -- Hydrogen Storage Performance of Sufrance Modified Metal Nanoparticle Decorated Multi-walled Carbon Nanotubes -- Helical Carbon Nanotube and Nanofiber: Catalytic Synthesis and Applications -- Carbon Materials as Electrodes of Electrochemical Double-layer Capacitors: Textural and Electrochemical Characterization -- Biological Interactions of Graphene -- Electroless Deposition of Graphene-based Materials -- Graphene Aerogels -- Electrochemical DNA Biosensors Based on Carbon Nanomaterials -- Environmental Impacts and Safety Concerns Related to Carbon Nanomaterials -- Surface of Plasma Irradiated PET and Tight Bonding of Plastic Films -- Improvement of Strength of Polypropylene Reinforced by Carbon Fiber with Sizing Film -- Photo-mechanical Response of Amorphous Carbon Nitride Thin Films and Its Applications -- Structural Modifications of Polymers and Nanocomposites Synthesis by Pulsed Electrical Discharges

in Liquids -- Nanostructured Carbon-Based Electrode Materials for Supercapacitor Applications -- Carbon-Nanostructured Materials for Fuel Cell Applications. .

Sommario/riassunto

This book commemorates the “Nobel Laureate Professor Suzuki Special Symposium” at the International Union of Material Research Society–International Conference on Advanced Materials (IUMRS-ICAM2017), which was held at Kyoto University, Japan, in 2017. The book begins with a foreword by Professor Akira Suzuki. Subsequently, many authors who attended the special symposium describe the latest scientific advances in the field of carbon materials and carbon nanomaterials including polymers, carbon nanocomposites, and graphene. Carbon-based materials have recently been the focus of considerable attention, given their wide range of potential applications. Fittingly, the chapters in this book cover both experimental and theoretical approaches in several categories of carbon-related materials.
