Contents

Preface	XI
Chapter 1 New Perspective of Nano Fibers: Synthesis and Applications by Deepthi Sista	1
Chapter 2 Green Synthesis of Nanofiber and Its Affecting Parameters by Dan Bahadur Pal and Deen Dayal Giri	19
Chapter 3 Fabrication of PVA/Carbon-Based Nanofibers Using Electrospinning by Gatut Yudoyono, Diky Anggoro, Lutfi Fitria Ningsih and Rizki Romadoni	39
Chapter 4 Recent Advances in Applications of Ceramic Nanofibers by Nuray Kizildag	55
Chapter 5 Electrospun Nanofibers: Characteristic Agents and Their Applications by Lingayya Hiremath, O. Sruti, B.M. Aishwarya, N.G. Kala and E. Keshamma	81
Chapter 6 An Insight into Biofunctional Curcumin/Gelatin Nanofibers by Nand Jee Kanu, Eva Gupta, Venkateshwara Sutar, Gyanendra Kumar Singh and Umesh Kumar Vates	95
Chapter 7 Electrochemical Behavior of Cellulose Nanofibrils Functionalized with Dicyanovinyl Groups by Robson V. Pereira, Thais E. Gallina, Marcelo A. Pereira-da-Silva, Kênia S. Freitas and Aparecido J. de Menezes	117
Chapter 8 The Nanocellulose Fibers from Symbiotic Culture of Bacteria and Yeast (SCOBY) Kombucha: Preparation and Characterization by Pingkan Aditiawati, Rudi Dungani, Salsabila Muharam, Aminudin Sulaeman, Sri Hartati, Mustika Dewi and Enih Rosamah	129

	Chapter 9 Electrodeposition of Nanoporous Gold Thin Films by Palak Sondhi and Keith J. Stine	143
2	Chapter 10 Micro Nano Manufacturing Methods for Chemical, Gas and Bio Sensors, Water Purification and Energy Technologies by Amos Adeleke Akande, Aderemi Timothy Adeleye, Abraham Abdul Adenle and Bonex Wakufwa Mwakikunga	163
	Chapter 11 Microwave Assisted Synthesis of Organic Compounds and Nanomaterials by Anjali Jha	177
	Chapter 12 Polarization of Electrospun PVDF Fiber Mats and Fiber Yarns by Harshal Gade, Sreevalli Bokka and George G. Chase	195
	Chapter 13 Recent Developments in All-Solid-State Micro-Supercapacitors Based on Two-Dimensional Materials by Minu Mathew, Sithara Radhakrishnan and Chandra Sekhar Rout	209
	Chapter 14 Pulsed Electrochemical Micromachining in Stainless Steel by Pablo Rodríguez, Daniel Hidalgo and Julio Eduardo Labarga	239
	Chapter 15 RF MEMS Switch Fabrication and Packaging by Lakshmi Swaminathan	253
	Chapter 16 Vacuum-Free Fabrication of Transparent Electrodes for Soft Electronics by Arshad Khan, Shawkat Ali, Saleem Khan, Moaaz Ahmed, Bo Wang and Amine Bermak	279
	Chapter 17 Calculation of the Electronic Properties and Reactivity of Nanoribbons by Pedro Navarro-Santos, Rafael Herrera-Bucio, Judit Aviña-Verduzco and Jose Luis Rivera	305