1. Record Nr. UNINA9910819293703321 Frontiers of nanofiber fabrication and applications: special topic **Titolo** volume with invited peer reviewed papers only / / edited by Hong-Yan Liu and Ji-Huan He Durnten-Zurich:,: TTP,, [2014] Pubbl/distr/stampa ©2014 **ISBN** 3-03826-329-X Descrizione fisica 1 online resource (120 p.) Collana Advanced materials research, , 1022-6680; ; volume 843 Altri autori (Persone) LiuHongyan HeJi-Huan Disciplina 620.11 Soggetti **Nanofibers** 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 indexes. Nota di contenuto Frontiers of Nanofiber Fabrication and Applications; Preface; Table of Contents; Effect of Ultrasonic Vibration on Electrospun Poly(vinyl Alcohol) (PVA) Nanofibers: Vibration and Heat Effect on Electrospinning Modeling: Hierarchical Motion of Charged Jets in Electrospinning and Nanofibers with Minimal Diameter of about 5nm; High Orientation Ordered Nanofibers Fabricated by Electrospinning; Multi-Bubble Electrospinning of Nanofibers: Two Dimensional Nano-Net by Bubble Electrospinning; Frequency of Bubble Formation in Modified Bubble Electrospinning Edible Starch for Fabrication of Nanoparticles by ElectrospinningWeb-Like Nanofibers for Improving Fibroblast Growth: Antibacterial Activity of Polyester Fabric Treated with Nano-TiO2 via One-Bath Process; Fabrication and Preliminary Study of a Prototype Bi-Layered Small Diameter Vascular Prosthesis Composed of Nano-Fiber and Silk Fiber; Influence of Chemical Structure on Wetting Property of Down Fibers; Fabrication of Micro Yarn Composed of Nanofibers by Blown Bubble Spinning; Droplet-Like Beads in the Surface of Nanofibers by Bubble-Electrospinning A Belt-Like Superfine Film Fabricated by Bubble-

ElectrospinningDiffusion of Silver Ions in Hollow Cylinders with an Auxiliary Cylinder; Change of Leaf Morphology along Altitudinal

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Gradients; An Exact Solution to the Local Fractional Richards' Equation for Unsaturated Soils and Porous Fabrics; Experimental Verification and Theoretical Analysis of Silk Dyeing and Finishing Functions with Modified Natural Tea Polyphenols Dye; Functionalization Research of Silk Fabrics with PVP/ZnO Nanoparticles for Improving Silk Dyeability with Natural Tea Polyphenol Dye; Keywords Index; Authors Index

This special issue covers mainly electrospinning, vibration-electrospinning, bubble electrospinning and blown bubble spinning, and it is a good reference not only for materials science, but also for various communities in physics, nanotechnology and chemistry. The most widely used method for fabricating nanofiber is electrospinning, but there are intrinsic deficiencies when using it for mass production, and one theme of these papers is variations or alternatives that works better in various situations. The topics include high-orientation ordered nanofibers fabricated by electrospinning, the fr