1. Record Nr.   UNINA9910163962603321

   Titolo   Smart Textiles : Fundamentals, Design, and Interaction / / edited by
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   Pubbl/distr/stampa   Cham : , : Springer International Publishing : , : Imprint : Springer, ,
                        2017

   ISBN   3-319-50124-0

   Edizione   [1st ed. 2017.]

   Descrizione fisica   1 online resource (IX, 396 p. 199 illus., 135 illus. in color.)

   Collana   Human–Computer Interaction Series, , 1571-5035

   Disciplina   624.1

   Soggetti   User interfaces (Computer systems)
                        Optical materials
                        Electronics - Materials
                        Pattern perception
                        Medical informatics
                        User Interfaces and Human Computer Interaction
                        Optical and Electronic Materials
                        Pattern Recognition
                        Health Informatics

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Nota di bibliografia   Includes bibliographical references at the end of each chapters.

   Nota di contenuto   Introduction to Smart Textiles -- Precision Fabric Production in Industry
                        -- Textile Pressure Force Mapping -- Strain and Angular Sensing
                        Fabrics for Human- Motion Analysis in Daily Life -- Integrated Non-
                        Light-Emissive Animateable Textile Displays -- Haptic Feedback for
                        Wearables and Textiles Based on Electrical Muscle Stimulation --
                        Textile Antennas -- Electronics Integration -- Reversible Contacting for
                        Smart Textiles -- Energy Harvesting Smart Textiles -- A Strategy for
                        Material-Specific e-Textile Interaction Design -- Designing for Smart
                        Clothes and Wearable's: A User Experience Design Perspective --
                        Designing (inter)active Costumes for Professional Stages -- Textile
                        Building Blocks: Towards Simple, Modularized and Standardized Smart
                        Textiles -- Smart Textiles and Smart Personnel Protective Equipment --
                        Textile Integrated Wearable Technologies for Sports and Medical
                        Applications -- E-Garments: Future as 'Second Skins'?.

Sommario/riassunto

From a holistic perspective, this handbook explores the design, development and production of smart textiles and textile electronics, breaking with the traditional silo-structure of smart textile research and development. Leading experts from different domains including textile production, electrical engineering, interaction design and human-computer interaction (HCI) address production processes in their entirety by exploring important concepts and topics like textile manufacturing, sensor and actuator development for textiles, the integration of electronics into textiles and the interaction with textiles. In addition, different application scenarios, where smart textiles play a key role, are presented too. Smart Textiles would be an ideal resource for researchers, designers and academics who are interested in understanding the overall process in creating viable smart textiles.