

The Global Market for Electronic Textiles (E-textiles)

<https://marketpublishers.com/r/GAF094A41CF0EN.html>

Date: July 2021

Pages: 225

Price: US\$ 1,375.00 (Single User License)

ID: GAF094A41CF0EN

Abstracts

Traditional textiles simply function as a covering material. Based on the rapidly changing global demands and due to advanced technological improvements, the development of integrated electronics and responsive functionality on textiles has led to the emergence of E-textiles and smart textiles accommodating the revolution we are witnessing in wearable electronics. The development of high value-added products such as smart fabrics and clothing, wearable consumer and medical devices and protective textiles has increased rapidly in the last decade. Recent advances in stimuli-responsive surfaces and interfaces, sensors and actuators, flexible electronics, nanocoatings and conductive nanomaterials has led to the development of a new generation of smart and adaptive electronic fibers, yarns and fabrics for application in E-textiles.

Advances in the ability to free-form print circuit processes enables electronic systems to be assembled directly onto textile items. This type of technology, "E-textiles," will compete with existing wearable devices that have dominated the market (smartwatches and fitness trackers), as a more discrete alternative to health and physiological monitoring. Electronic textiles incorporate interdisciplinary studies such as textiles, nano/micro technologies, computing systems, and communications and information technologies. E-textiles monitor heart health (heart rate, heart rate variability, electrocardiogram), activity recognition and measurement, sleep stage and sleep quality detection, drug adherence, stress level monitor and body temperature measurement, chemical sensing and can return heat and stimulus through the very fibers of textile products.

Report contents include:

Market drivers and trends in electronic textiles (E-textiles).

Investment and product news 2020-2021.

Materials and components analysis.

Applications and markets including smart clothing products, heated clothing, sports and fitness, smart footwear, military, medical and healthcare, workplace monitoring & protection, motion capture, soft exoskeletons, wearable advertising and power sources for E-textiles.

Global market revenues by market, historical and forecast to 2031.

112 company profiles including Myant, Inc., Sensing Tex, Nextiles, Apple, OMsignal, Hexoskin, Ohmatex A/S, Sensoria Inc., Xenoma Inc., AiQ Smart Clothing Inc., Interactive Wear AG, Loomia, Garmin and many more.

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