

# The Global Market for Nanotextiles

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## Abstracts

The Market for Nanotextiles broadly encompasses:

Nanocoated/finished textiles (e.g. anti-bacterial nanocoatings, self-cleaning, flame retardant nanoclays). Most nano-enabled textiles on the market fall into this category.

Nanocomposite textiles fibre materials (e.g. CNTs integrated into manufacture for enhanced strength; smart textiles with sensor elements; conductive textiles; shape memory textiles).

Nanofiber textiles (electrospun nanofibers for protection, conductivity etc.)

Nano-based non-wovens (e.g. barrier nanofilm integrated in layers).

E-textiles/wearable electronics incorporating nanomaterials.

The development of high value-added products such as smart fabrics, 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.

Report contents include:

Markets and applications of nanotextiles including wearable electronics, E-textiles, apparel, sportswear, footwear, medical textiles and industrial textiles.

Nanomaterials utilized in nanotextiles including graphene, carbon nanotubes, nanocellulose, metal oxide nanomaterials, nanosilver, nanofibers and nanocoatings.

Market drivers and trends

Nanotextiles industrial collaborations and licence agreements

Global market revenues for nanotextiles to 2030 by applications and nanomaterials types.

Advantages of nanomaterials in textiles.

Market and technical challenges for nanotextiles.

Recent commercial activity.

72 nanotextiles producer profiles.

## Contents

### **1 RESEARCH METHODOLOGY**

- 1.1 Market opportunity analysis
- 1.2 Properties of nanomaterials.

### **2 EXECUTIVE SUMMARY**

- 2.1 Advantages of nanomaterials in textiles
- 2.2 Markets and applications of nanotextiles.
- 2.3 Products
- 2.4 Market outlook
- 2.5 Market drivers and trends.
- 2.6 Nanotextiles industrial collaborations and licence agreements
- 2.7 Market and technical challenges
- 2.8 Global market revenues for nanotextiles.

### **3 MARKETS FOR NANOTEXTILES**

- 3.1 Smart textiles.
- 3.2 Wearable electronics
  - 3.2.1 Wearable sensors
  - 3.2.2 Wearable gas sensors
  - 3.2.3 Wearable strain sensors
  - 3.2.4 Wearable tactile sensors
  - 3.2.5 Industrial monitoring
  - 3.2.6 Military.
- 3.3 Apparel
- 3.4 Sportswear.
- 3.5 Footwear.
- 3.6 Medical textiles.

### **4 GRAPHENE IN NANOTEXTILES**

- 4.1 Applications
- 4.2 Apparel
- 4.3 Footwear.
- 4.4 Industrial textiles

4.5 Electronic textiles/wearables

4.5.1 Conductive yarns.

4.6 Conductive coatings

## **5 CARBON NANOTUBES IN NANOTEXTILES**

5.1 Applications

5.1.1 Flame retardant coatings

5.2 SWNCTS in wearables

## **6 NANOCELLULOSE IN NANOTEXTILES**

6.1 Cellulose nanofibers

6.2 Cellulose nanocrystals (CNC).

6.3 Sanitary products.

## **7 NANOFIBERS IN NANOTEXTILES**

7.1 Applications

7.2 E-textiles.

7.3 Wound dressings.

7.4 Sanitary products.

## **8 NANOSILVER IN NANOTEXTILES**

8.1 Anti-bacterial textiles and wound dressings

## **9 NANOCOATINGS IN NANOTEXTILES**

9.1 Types of nanocoatings in textiles

9.2 Anti-bacterial nanocoatings in textiles

9.3 Self-cleaning nanocoatings in textiles

9.4 UV-resistant nanocoatings in textiles

9.5 Protective textiles.

## **10 NANOTEXTILE COMPANY PROFILES 77 (72 COMPANY PROFILES)**

## **11 REFERENCES**

## Tables

### TABLES

Table 1. Categorization of nanomaterials

Table 2. Desirable functional properties for the textiles industry afforded by the use of nanomaterials

Table 3. Markets and applications of nanotextiles

Table 4. Textiles products incorporating nanomaterials

Table 5. Market opportunity assessment matrix for nanotextiles

Table 6. Market drivers and trends in nanotextiles.

Table 7. Nanotextile industrial collaborations, licence agreements and target markets

Table 8. Market and technical challenges in nanotextiles

Table 9. Global market for nanotextiles, 2018-2030, by application, Millions USD.

Table 10. Global market for nanotextiles, 2018-2030, by nanomaterials, Millions USD

Table 11. Types of smart textiles

Table 12. Smart textile products

Table 13. Wearable electronics devices and stage of development.

Table 14. Applications and benefits of graphene in textiles and apparel

Table 15. Applications and benefits of CNTs in textiles and apparel

Table 16. Nanofibers types, properties and applications.

Table 17. Nanocoatings applied in the textiles industry-type of coating, nanomaterials utilized, benefits and applications

Table 18. Applications in textiles, by advanced materials type and benefits thereof

Table 19. Nanomaterials utilized in Anti-bacterial coatings-benefits and applications

## Figures

### FIGURES

Figure 1. Global market for nanotextiles, 2018-2030, by application, Millions USD

Figure 2. Global market for nanotextiles, 2018-2030, by nanomaterials, Millions USD

Figure 3: C2Sense flexible sensor

Figure 4. Wearable gas sensor.

Figure 5. BeBop Sensors Smart Helmet Sensor System.

Figure 6. Torso and Extremities Protection (TEP) system

Figure 7. Colmar graphene jacket

Figure 8. Inov 8 graphene footwear.

Figure 9. Smartphone app integration with BonBouton graphene sensor technology

Figure 10. Conductive yarns

Figure 11. Formation of a protective CNT-based char layer during combustion of a CNT-modified coating.

Figure 12. TEM image of cellulose nanocrystals.

Figure 13. An iridescent biomimetic cellulose multilayer film remains after water that contains cellulose nanocrystals evaporates

Figure 14. CNF deoderant products.

Figure 15. nanofiber conductive shirt original design(top) and current design (bottom)

Figure 16. Garment-based printable electrodes

Figure 17. Wound dressing by electrospinning

Figure 18. Anti-bacterials mechanism of silver nanoparticle coating

Figure 19. Mechanism of microbial inactivation and degradation with anti-microbial PhotoProtect nanocoatings

Figure 20. Self-cleaning mechanism of hydrophobic coatings

Figure 21. Omniphobic-coated fabric

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