

The Global Market for Stretchable and Conformable Materials and Electronics

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Abstracts

There is huge global interest in incorporating electronic functions into clothing and wearable devices for applications such as wearable sensing, healthcare, soft robotics and human computer interfaces. These areas will greatly benefit from developing electrical interconnects, sensors, transistors and circuits, lighting elements and power sources that are fully stretchable and conformable.

Electronics and power sources electronics which are not only flexible but also conformable and deformable offer the advantages of conventional devices while ideally maintaining excellent electrical properties under strain. They can stretched like a rubber band and twisted like a rope without any significant reduction in performance. Their development is key to the realization of wearables as they can deform along with soft interfaces such as:

textiles.

skin.

tissue.

moving components in devices and robots.

Applications include:

Stretchable conductors.



Gas sensor textiles.

Soft robotics.

Wearables in sport and healthcare.

Transparent electrodes on textile substrates.

Sensory skins.

Medical on-body skin patches.

Artificial muscles.

Battery and supercapacitor textiles.

Sensors for diabetes monitoring and therapy.

Comfort electronics in apparel and clothing.

Formable plastics.

Stretchable conductive elastomers.

Report contents include:

Future applications in Stretchable and Conformable Materials and Electronics

Trends in Stretchable and Conformable Materials and Electronics

Applications of Stretchable and Conformable Materials and Electronics

Organic and polymeric materials for Flexible and Stretchable Electronics analysis.

Components analysis.

Over 150 company profiles.



Market revenue forecasts to 2028.



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