Nano Science, Technology and Industry Scoreboard

Flexible Movement Sensors

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Imperial researchers have developed flexible clothing sensors that can detect body movement, with potential applications in injury rehabilitation, human-computer interaction systems, and athletic training.

The researchers produced a new type of graphene-based TPU/textile composite sensor using small-scale manufacturing techniques such as laser cutting, film coating, and thermal transfer.

They found that when integrated into clothing, the sensors were able to detect a wide range of human body motions accurately, as well as subtle physiological signals.

Lead author Joy Zhou, PhD candidate at the Dyson School of Design Engineering, said: "Graphene has traditionally been too fragile to incorporate into clothing sensors, but our new technique makes them much more robust. Our sensors exhibit great potential for wearable monitoring devices."

Read more about the study in [Polymers for Advanced Technologies](link).

Read the [original article](link) on Imperial College London.