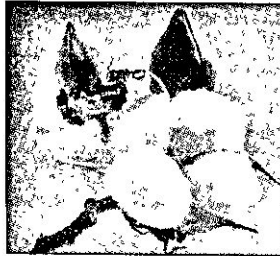


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Cotton fibre to monitor patients

Scientists are now envisioning hospital gowns that monitor medical patients and jerseys that test athletic performance, according to a new research.



According to Cornell University fibre scientist Juan Hinestroza, the latest breakthrough in cotton fibre research reveals how everyday cotton can be turned into high-tech fabric.

The first step in the study was aimed at creating a conformal layer of gold nanoparticles over the rough topography of cotton, the next layers were either conductive or semiconductive coatings, and the final step was to build the devices.

"The layers were so thin that the flexibility of the cotton fibers was preserved," Newswise quoted Hinestroza, co-author of the study as saying.

Hinestroza said that the innovation represents a significant step forward because it lays the groundwork for creating even more complex devices, like cotton-based circuits, which would allow fabrics to sense body temperature, track heart rate and blood pressure and monitor the physical effort of high-performance athletes.

"Perhaps one day we can even build computers out of cotton fibers in a similar way as khipus – a recording device based on knots and used by the Inca empire in Peru," he added.