

New nanofibers incorporate high durability just launched

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Professor Gregory Rutledge, the head, created these fibers using an existing technique called gel spinning, in which a polymer gel is extruded through a heat syringe and mechanical tube turned into fibers. . However, in this case, the gel is not stretched by mechanical means but through a certain electric field.

The obtained gel-electrospun nanoparticles are only a few hundred nanometers (billionths of a meter) wide, and have a toughness that is superior to conventional materials.



Compared to conventional carbon and ceramic fibers, new nanofibers have a higher strength, but their density is also less dense, meaning it is lighter than traditional materials by weight. Its material resilience is quite good, relatively easy and inexpensive to produce.

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