

Super spider silk opens way to nano medical devices

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Scientists in the United States said on Tuesday they had coated spider silk with carbon nanotubes, creating a fibre that is not only super-strong but also conducts electricity.

The new thread is three times stronger than untreated [spider silk](#), which weight-for-weight is already one of the strongest substances in Nature, they reported.

The first mooted application is in nano-scale medical devices.

In tests, the prototype has been used as heartbeat monitor and as a piston, able to raise a relatively huge 35 milligrammes using electrical current and humidity to make the thread contract like a muscle.

The study, published in the journal *Nature Communications*, is led by Eden Steven of the National High Magnetic Field Laboratory in Tallahassee, Florida.

More information: Paper: [dx.doi.org/10.1038/ncomms3435](https://doi.org/10.1038/ncomms3435)

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