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Stress Sensitive Electricity based on Ag/Cellulose Nanofiber Aerogel for Self-Reporting

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Highlights

- 3D networks aerogel of Ag nanoparticles anchored in cellulose nanofiber toward Stress Sensitive Electricity (SSE) was prepared via combined routes of silver mirror reaction and ultrasonication.
- The as-prepared Ag/CNF aerogel possessed an interconnected 3D fibrous structure, in which a densely-packed layer of sphere-like Ag nanoparticles were anchored in CNF through by the coherent interfaces.
- Ag/CNF aerogel as a self-reporting material for SSE not only possessed sensitivity and quick response, but also be easily recovered after 100 compressive cycle.

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