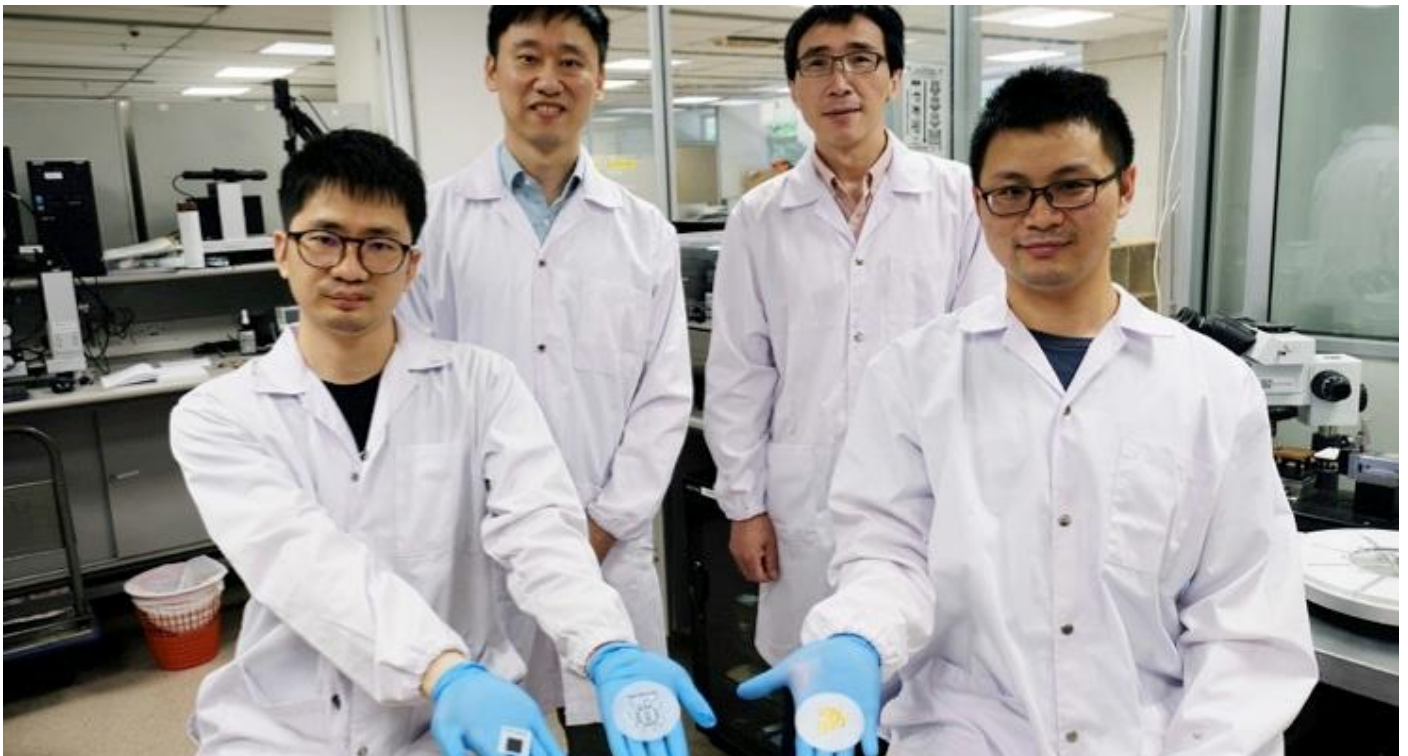


NTU Singapore: Batteries of the Future Could Be Paper-Thin and Biodegradable

Once the battery has been expended, it can be buried in soil, where it breaks down completely within a month.



Source: NTU Singapore

12.15.21

[NTU Singapore](#) scientists have developed paper-thin biodegradable zinc [batteries](#) that could one day become an environmentally sustainable option for powering flexible and wearable electronic systems.

These zinc batteries are made up of electrodes (through which the electrical current leaves or enters the battery) screenprinted on to both sides of a piece of cellulose paper that has been reinforced with hydrogel.

Once the battery has been expended, it can be buried in soil, where it breaks down completely within a month. The scientists think their printed battery could be integrated into flexible electronics such as foldable smart phones that are already on the market, or biomedical sensors for health monitoring.

https://www.printedelectronicsnow.com/contents/view_breaking-news/2021-12-15/ntu-singapore-batteries-of-the-future-could-be-paper-thin-and-biodegradable/47776