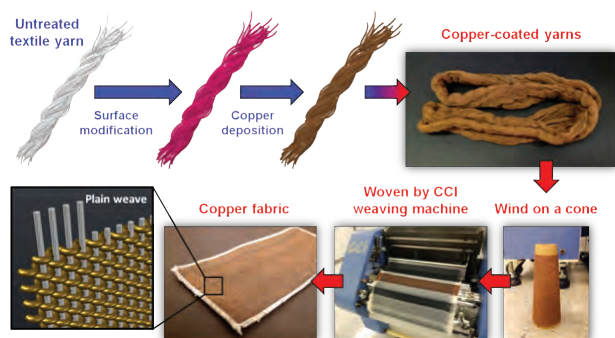


Flexible and Foldable Lithium-ion Battery

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Flexible lithium-ion batteries with high electrochemical performance and high mechanical durability, which can be integrated into wearable forms, are highly desired to power up the various wearable electronics. The technology is based on coating of active materials on conductive textiles to fabricate textile-based electrodes, and to assembled them into textile-based lithium-ion battery full cells. As such, lithium-ion batteries fabricated is of great flexibility and foldability, which is far better than the latest devices available in the market.

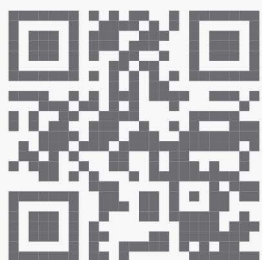
The 3D structure of textiles also improves the electrochemical stability and power density significantly. The energy density can reach as high as 200 Wh/kg while the devices can be folded for more than 1000 cycles without affecting the electrochemical properties. This technology can not only find huge impact in battery industry, but also provide competitive energy storage products for the next generation consumer electronics such as bendable/foldable smartphones and wearable healthcare equipment.



Fabrication of metallic textiles.



Batteries that are unfolded and folded while operating electronics devices.



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