



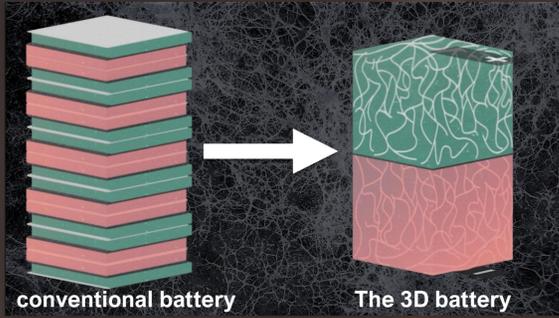
Batene fleece™ - 3D Current Collectors for Advanced Batteries

From ultrafine fibers to scalable cell performance

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Redefining Current Collectors and Battery Design: From 2D to 3D

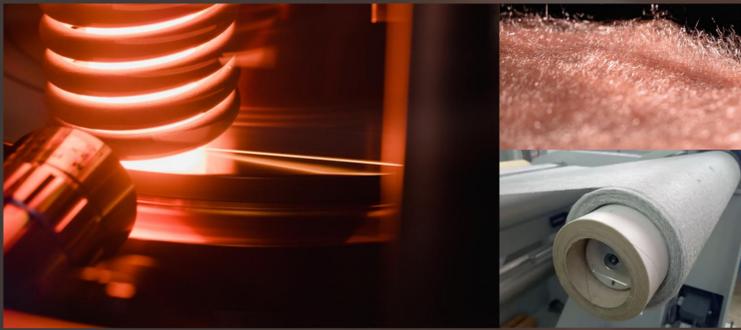


- Basic cell architecture unchanged for decades
- Power performance limited by electrode thickness
- Proprietary materials enabling next generation 3D electrode design

Founded in 2022 as a spin-off from Max-Planck-Society Batene focuses on proprietary metal fiber fleece technology for batteries



Ultrafine Fibers for Precisely Controlled Al and Cu Fleeces: Batene fleece™



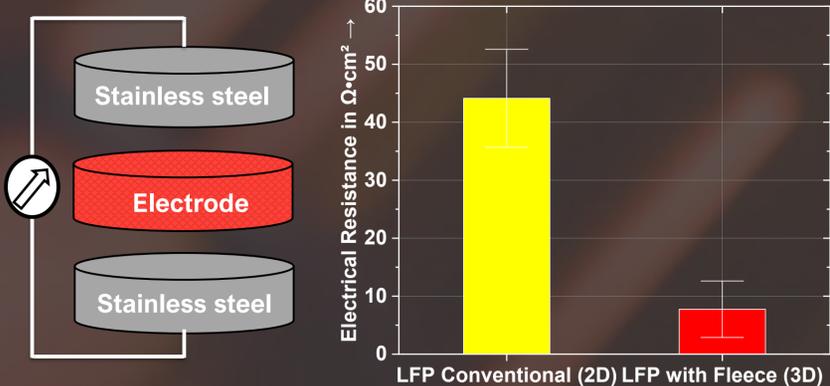
- Proprietary metal fiber manufacturing (<20 μm, Al, Cu, and more)
- Fiber-based 3D fleeces produced via paper-industry processes
- Metal fibers act as pathways for electrons, ions, and heat
- Scalable, cost-effective electrode manufacturing
- Chemistry- and cell-format agnostic, drop-in compatible
- Improved high-power performance and pack-level energy density

From Fiber to Cell: Applying Established Manufacturing Processes

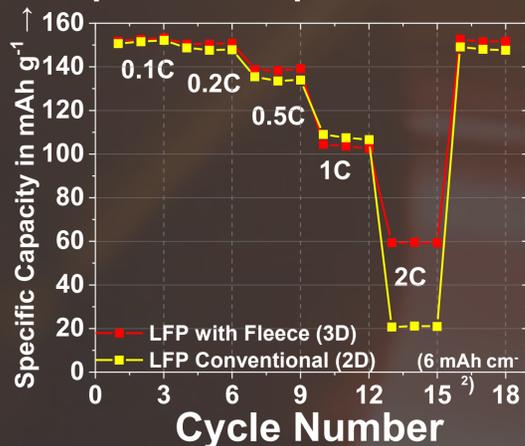


Performance Impact: Lower Resistance, Enhanced Power Density, Stable Cycling

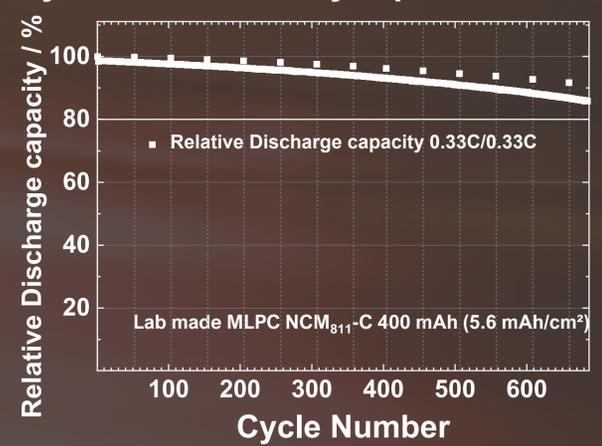
Improved electrical conductivity



Improved rate performance



Cycle life in multilayer pouch cells



The Batene fleece™

- Reduces electrical and ionic resistances vs. foil-based current collectors
- Yields higher rate capability, enabling thicker electrodes and higher power density
- Demonstrated cycling stability in 50 x 50 mm multilayer pouch cells

Curious to contribute?

- Contribute to next-generation battery materials and architectures
- Join or partner with an interdisciplinary team from lab to scale



Join us!