Laser4surf

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CIC energiGUNE @ Laser4Surf

Li ion batteries

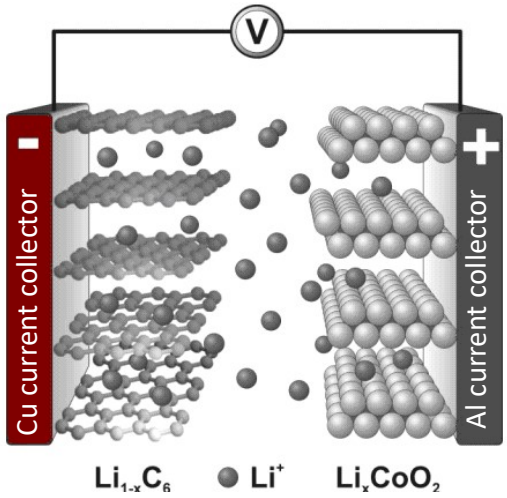
Effect of current collector nanostructuring on battery performance

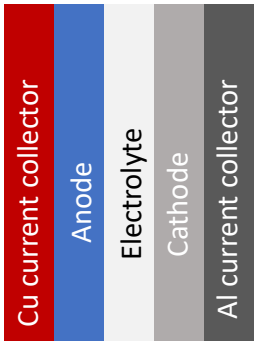
Dr. M.A. Muñoz-Márquez

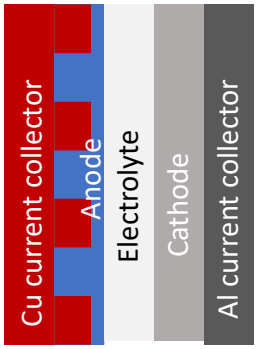
EPIC Online Technology Meeting on Surface Structuring

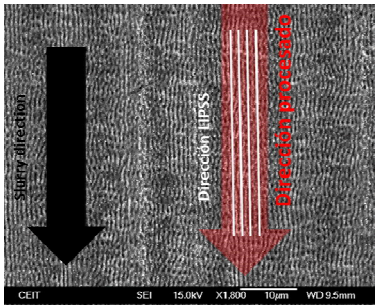
CIC energiGUNE
energy cooperative research centre

Importance of the current collector in a Li ion battery



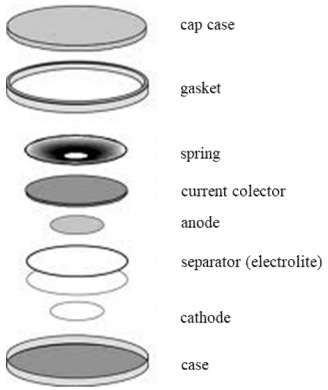




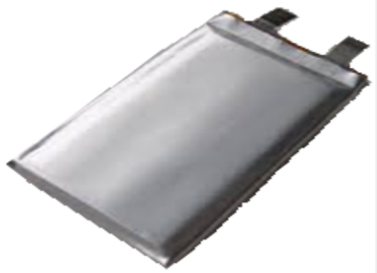


LIPSS Cu Current collectors made in CEIT

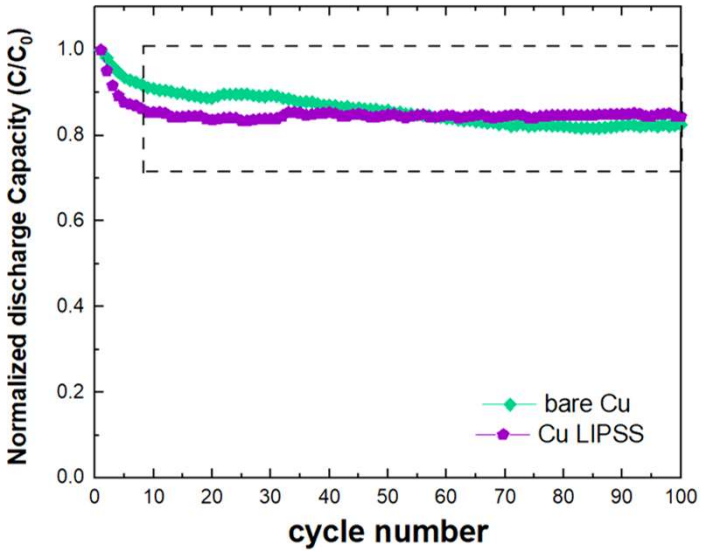
Coin cell

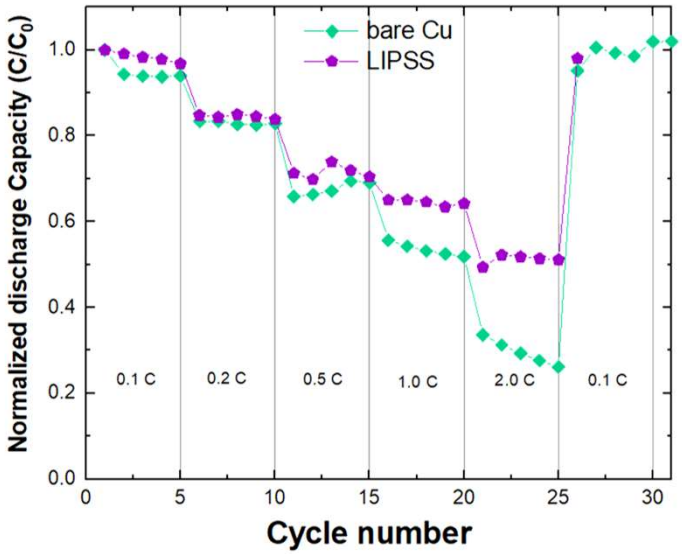


Pouch cell



Results in pouch cell





Current collector	Cap. Retention (%)
Bare Cu	**90%**
Cu LIPSS	**99%**

C-rate capability is enhanced by **16% at 1C** and **61% at 2C** using Cu LIPSS as current collectors

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https://www.laser4surf.eu/

CICe

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