



Article

Practical Approaches to Apply Ultra-Thick Graphite Anode to High-Energy Lithium-Ion Battery: Carbonization and 3-Dimensionalization

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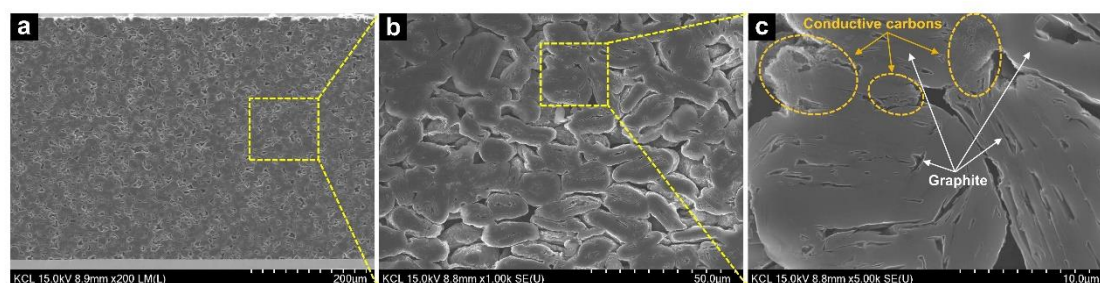


Figure S1. Cross-section SEM images of a typical thick Gr electrode.

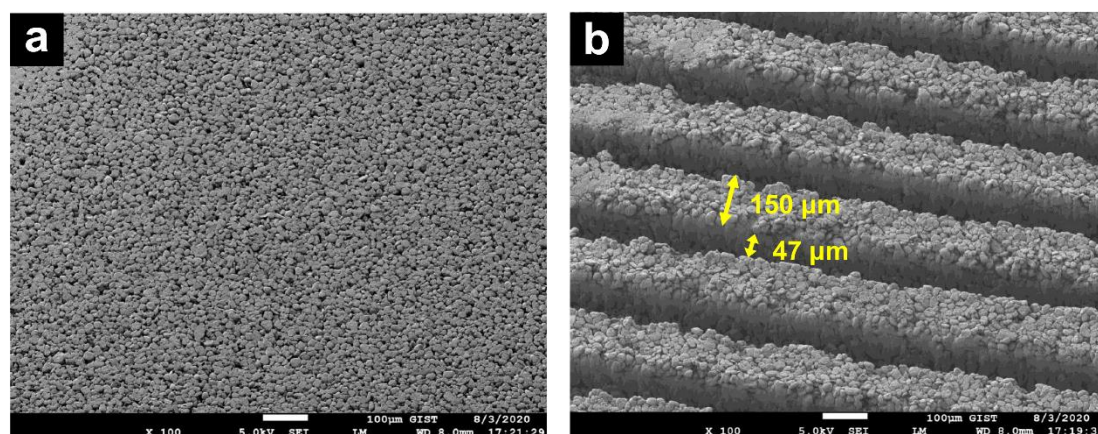


Figure S2. SEM images of an original and a PVDF-C-L electrode.

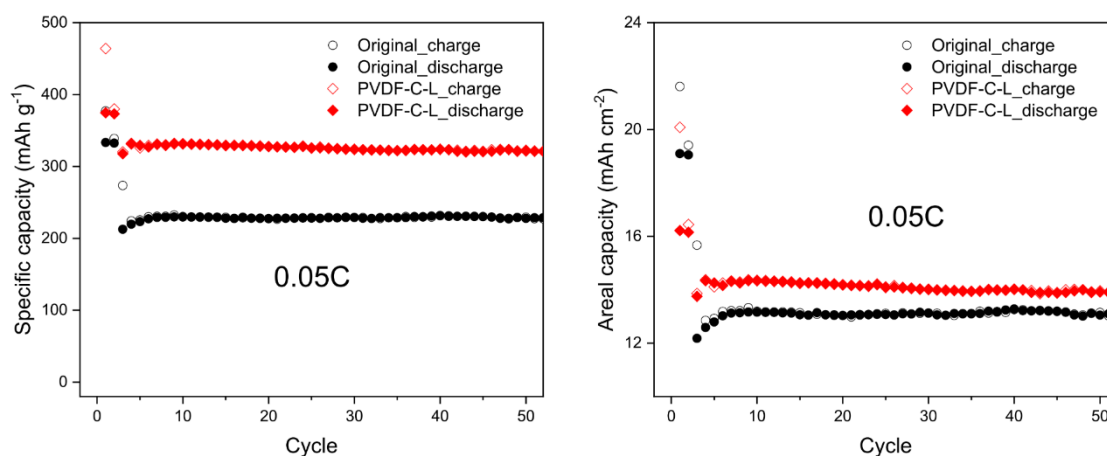


Figure S3. Comparison of full cell cycle performances such as (a) specific capacity normalized by mass of active material and (b) areal capacity of graphite anodes.

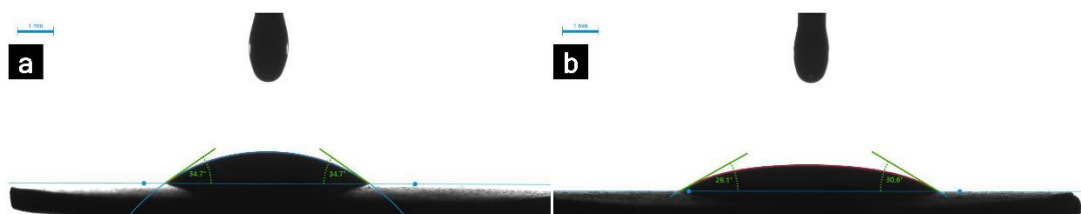


Figure S4. Contact angle of an electrolyte drop at the surface of (a) an original and (b) a PVDF-C-L.

Table S1. Wetting time of original and carbonized laser-treated electrodes depending on the contact angle.

	Wetting time	
	Immediately after drop (s/20°)	After a while (at the same angle) (s/5°)
Original	0.40 s (34.75° → 14.70°)	2.90 s (10.78° → 5.67°)
PVDF-C-L	0.25 s (28.92° → 8.95°)	0.20 s (10.70° → 5.71°)