
Supporting information

Surface-Pore-Modified N-Doped Amorphous Carbon Nanospheres Tailored with Toluene as Anode Materials for Lithium-Ion Batteries

Shiran Shan ¹, Chunze Yuan ^{1,2,*}, Guangsu Tan ¹, Chao Xu ¹, Lin Li ^{1,2}, Guoqi Li ¹, Jihao Zhang ¹ and Tsu-Chien Weng ^{1,2,*}

¹ School of Physical Science and Technology, ShanghaiTech University, Shanghai 201210, China; shanshr@shanghaitech.edu.cn (S.S.); tangs@shanghaitech.edu.cn (G.T.); xuchao1@shanghaitech.edu.cn (C.X.); lilin1@shanghaitech.edu.cn (L.L.); ligq1@shanghaitech.edu.cn (G.L.); zhangjh5@shanghaitech.edu.cn (J.Z.)

² Center for Transformative Science, ShanghaiTech University, Shanghai 201210, China

* Correspondence: yuanchz@shanghaitech.edu.cn (C.Y.); wengzq@shanghaitech.edu.cn (T.-C.W.)

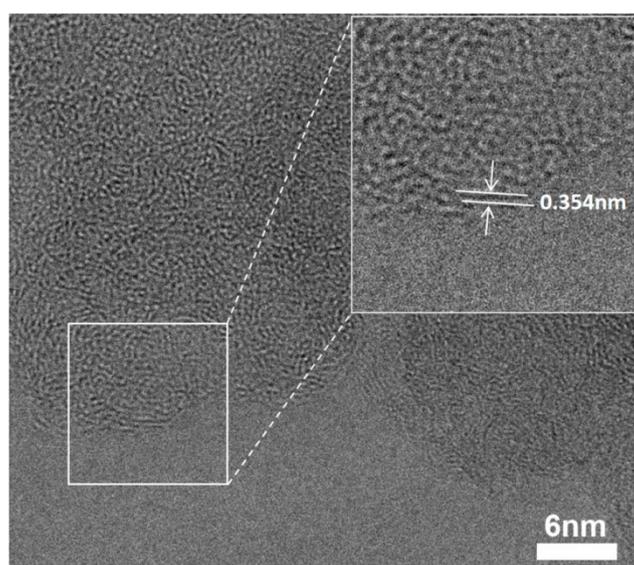


Figure S1. HR-TEM images of ACNs-100.

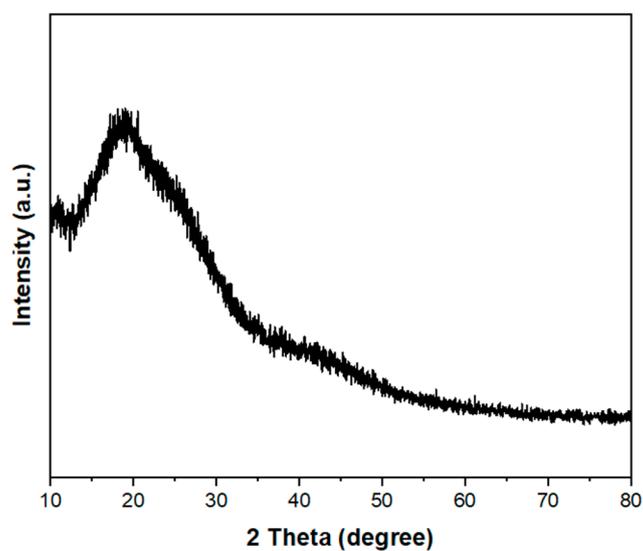


Figure S2. XRD pattern of resin nanospheres.

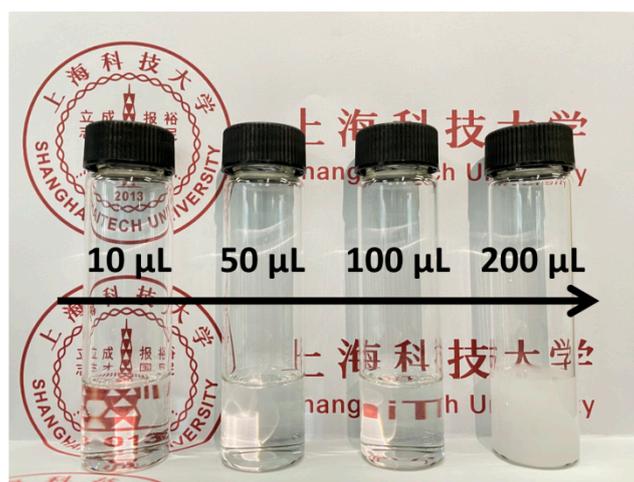


Figure S3. Images of the resulting F-127/toluene/TAPB nanoemulsions with the addition of 10 μL, 50 μL, 100 μL, and 200 μL toluene.

Table S1. Specific surface areas of ACNs.

Sample	ACNs-10	ACNs-50	ACNs-100	ACNs-200
S_{BET} ($\text{m}^2 \text{g}^{-1}$)	557.9	610.7	618.8	594.5
V_{MICRO} ($\text{m}^3 \text{g}^{-1}$)	0.212	0.198	0.191	0.177
S_{MICRO} ($\text{m}^2 \text{g}^{-1}$)	526.8	482.9	462.9	426.4
S_{EX} ($\text{m}^2 \text{g}^{-1}$)	31.1	127.8	155.9	168.1

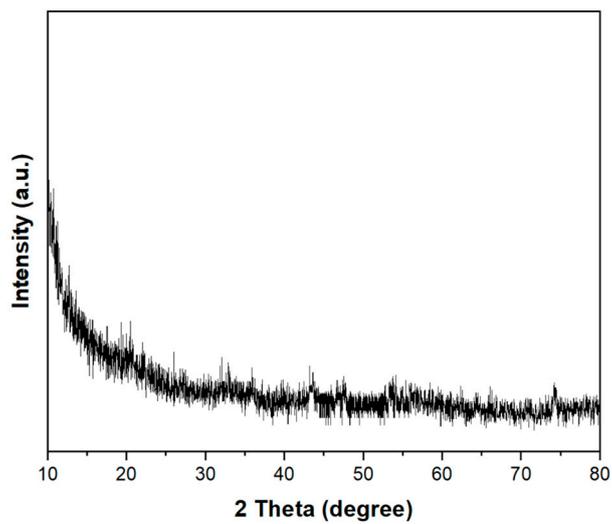


Figure S4. XRD pattern of ACNs-100 after cycling.