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## Supplementary data

Synthesis of Nitrogen-doped Reduced Graphene Oxide Directly from Nitrogen-doped Graphene Oxide as Highperformance Lithium Ion Battery Anodes

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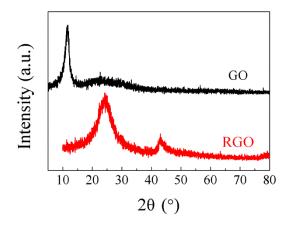


Figure S1. XRD patterns of GO and RGO.

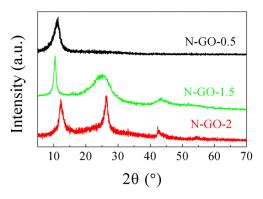
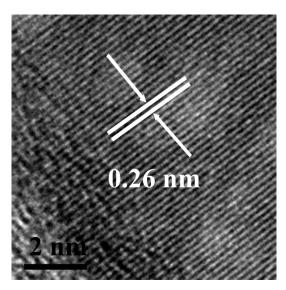
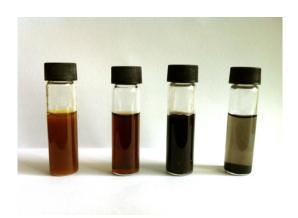


Figure S2. XRD patterns of N-GO-0.5, N-GO-1.5 and N-GO-2.



**Figure S3.** HRTEM image of Fe<sub>2</sub>O<sub>3</sub> particle in Fe<sub>2</sub>O<sub>3</sub>/N-RGO material.



**Figure S4.** Digital photograph of N-GO-0.5 (left 1), N-GO (left 2), N-GO-1.5 (left 3) and N-GO-2 (left 4) after 12 h.

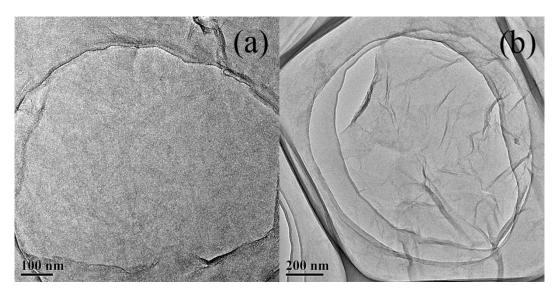


Figure S5. TEM images of GO at the measuring scale of (a) 100 nm and (b) 200 nm.

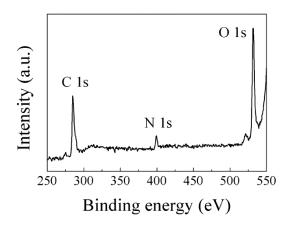
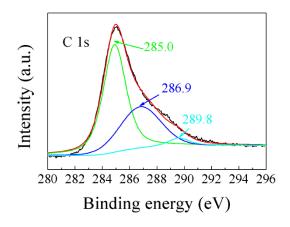


Figure S6. XPS spectrum of N-GO.



**Figure S7.** C 1s XPS spectrum of RGO.