

# A new synthetic route to hollow $\text{Co}_3\text{O}_4$ octahedra for supercapacitor applications

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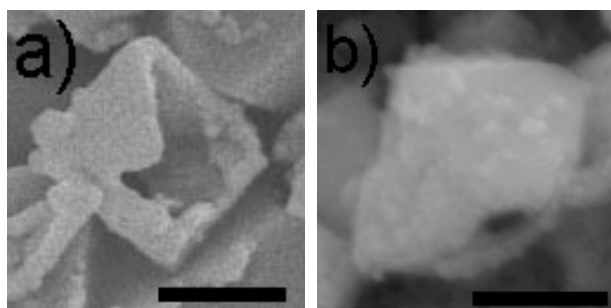
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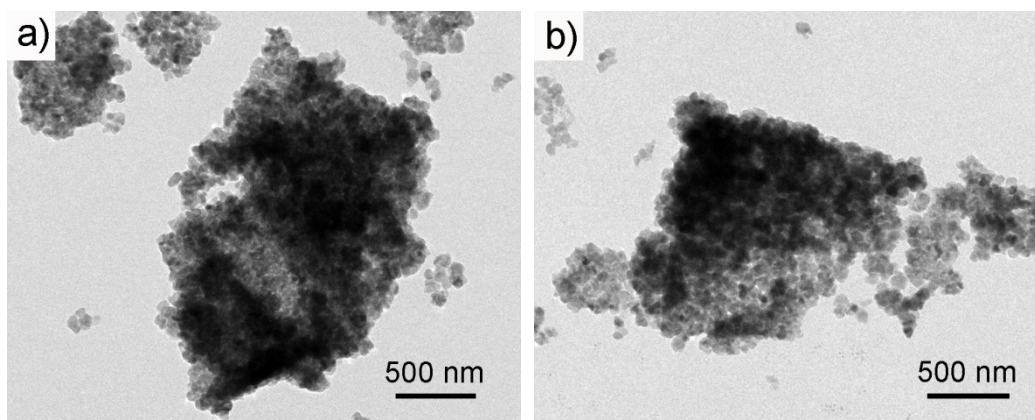
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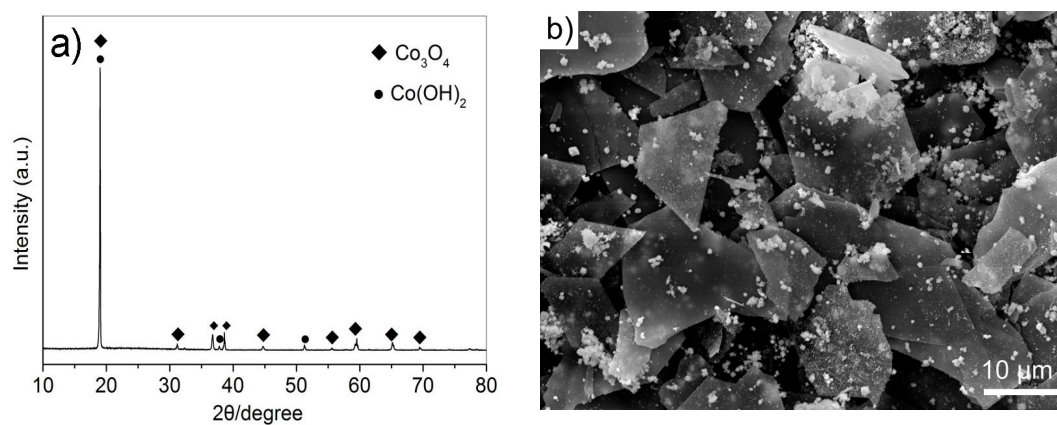
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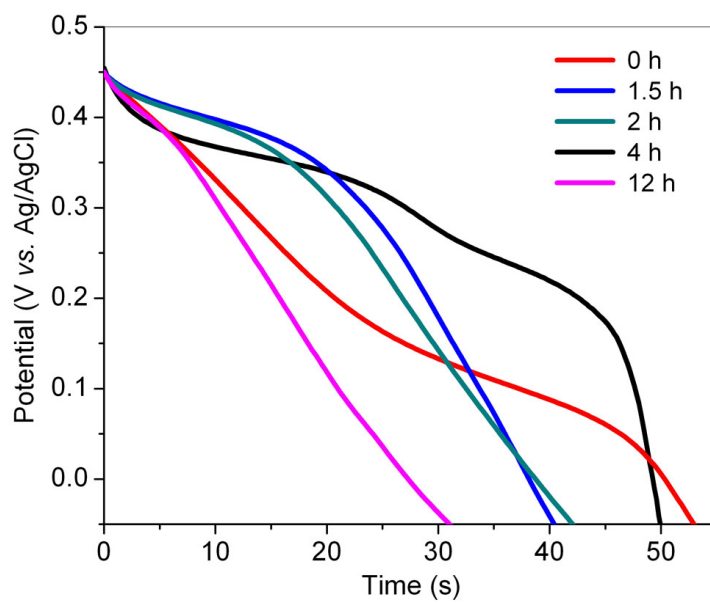
**Figure S1.** SEM images of broken  $\text{Co}_3\text{O}_4$  hollow octahedra. The scale bar in the images is 500 nm.



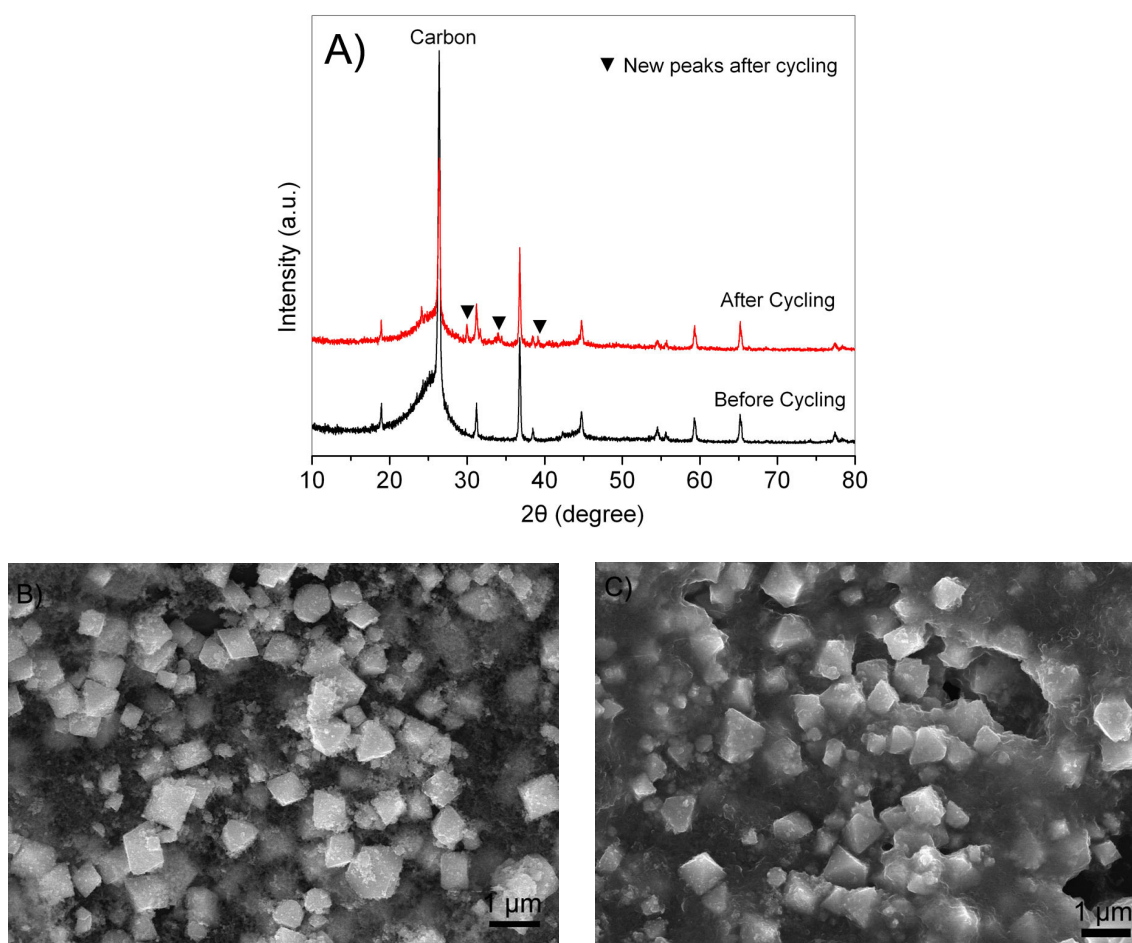
**Figure S2.** TEM images of the quasi-octahedra obtained after 2 h reaction.



**Figure S3.** (a) XRD pattern and (b) SEM image of the  $\text{Co}_3\text{O}_4$  and  $\beta\text{-Co(OH)}_2$  composite obtained when reaction was performed with 2 M NaOH for 24 h.



**Figure S4.** Discharging curves of the electrodes fabricated with the samples obtained at various reaction times (0, 1.5, 2, 4, and 12 h, respectively) at a discharging current of  $1 \text{ A g}^{-1}$ .



**Figure S5.** (a) XRD patterns and (b, c) SEM images of the Co<sub>3</sub>O<sub>4</sub> hollow octahedra electrode (b) before and (c) after cycling measurement. Cycling measurement was performed at a current density of 2 A g<sup>-1</sup> for 3000 cycles using a chronopotentiometry method.