

Ultrathin nanosheets-decorated honeycomb-like Co_3O_4 porous balls for high performance lithium-ion batteries

Yumei Wang*, Jimei Song, Fangfang Liu, Xiuting Lang, Lingyun Ren

College of Chemical Engineering and Environment, Weifang University of Science

and Technology, Weifang 262700, P. R. China

Corresponding author: wangyumei7608@163.com

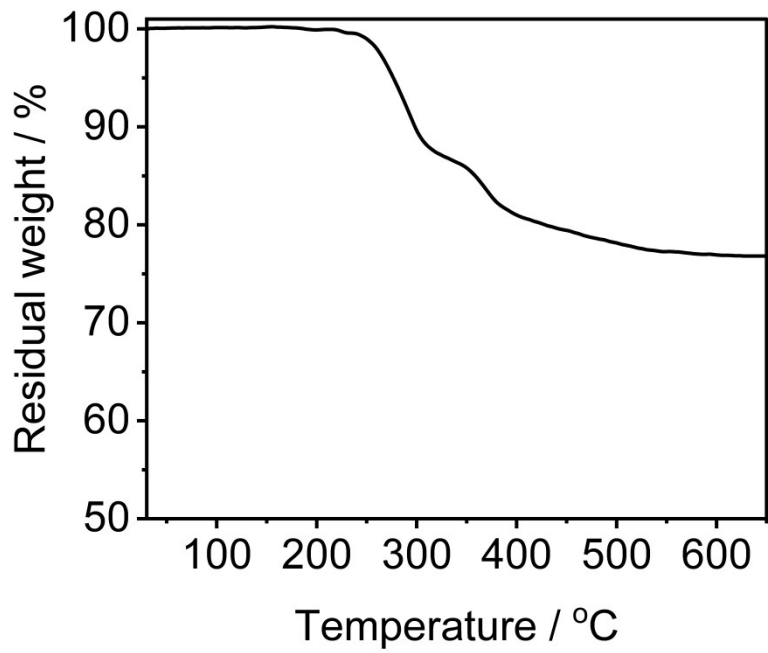


Fig. S1 TGA curve of honeycomb-like Co_3O_4 porous balls precursor

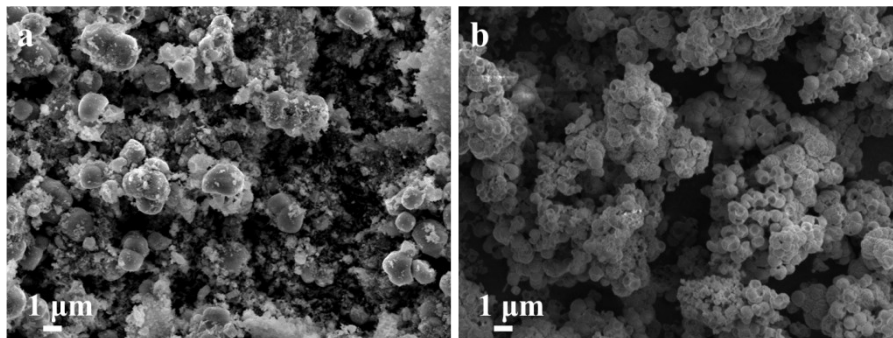


Fig. S2 SEM images of (a) 6M Co_3O_4 and (b) 12M Co_3O_4

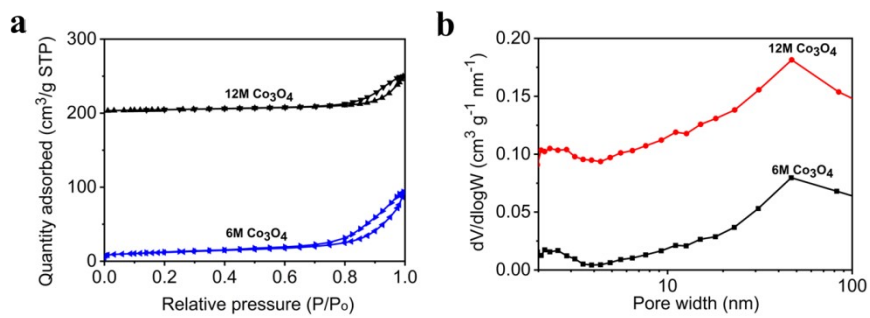


Fig. S3 N_2 adsorption-desorption isotherms (a), pore size distribution (b) of 6M Co_3O_4 and 12M Co_3O_4

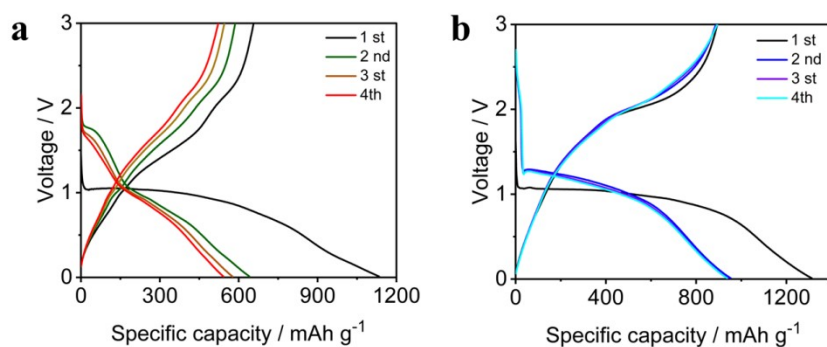


Fig. S4 Charge-discharge curves at 0.5 A g^{-1} of (a) $6\text{M Co}_3\text{O}_4$ and (b) $12\text{M Co}_3\text{O}_4$

Table S1 List of the reports on Co-based anodes for electrochemical performance

Sample	Current density/(mA g ⁻¹)	Cycles	Capacity/(mAh g ⁻¹)	Reference
Co ₃ O ₄ /CoO/C	1000	250	545	[1]
Co ₃ O ₄ /Co	100	200	690	[2]
CoO/C	100	52	633	[3]
Hollow CoO	71.6	50	832	[4]
Co ₃ O ₄ hexagonal	500	100	606	[5]
Co ₃ O ₄ nanoparticles	200	200	806.7	[6]
peanut-like Co ₃ O ₄	200	70	700	[7]
honeycomb-like	500	230	726	This work
Co ₃ O ₄ porous balls	2000	500	540	

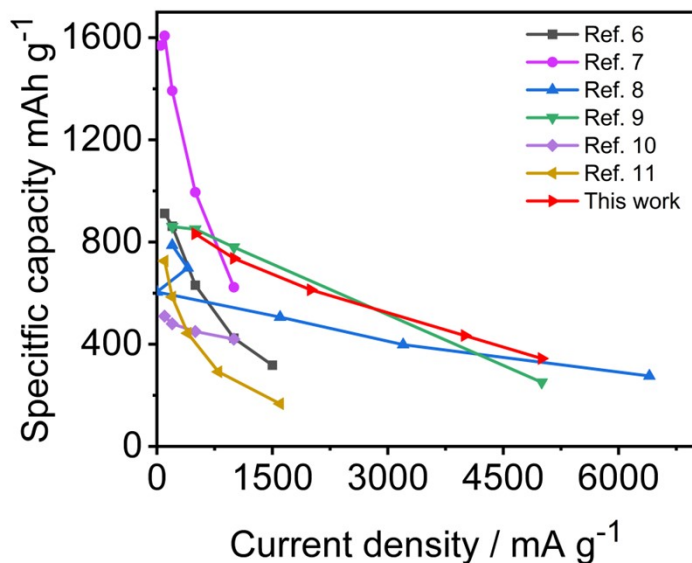


Fig. S5 The comparison of rate capacity for previous studies and this work at various current densities.

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