

Electronic Supplementary Information

Controllable Preparation of Layered Dual-Morphologies ZnCo_2O_4 for High Performance Supercapacitors

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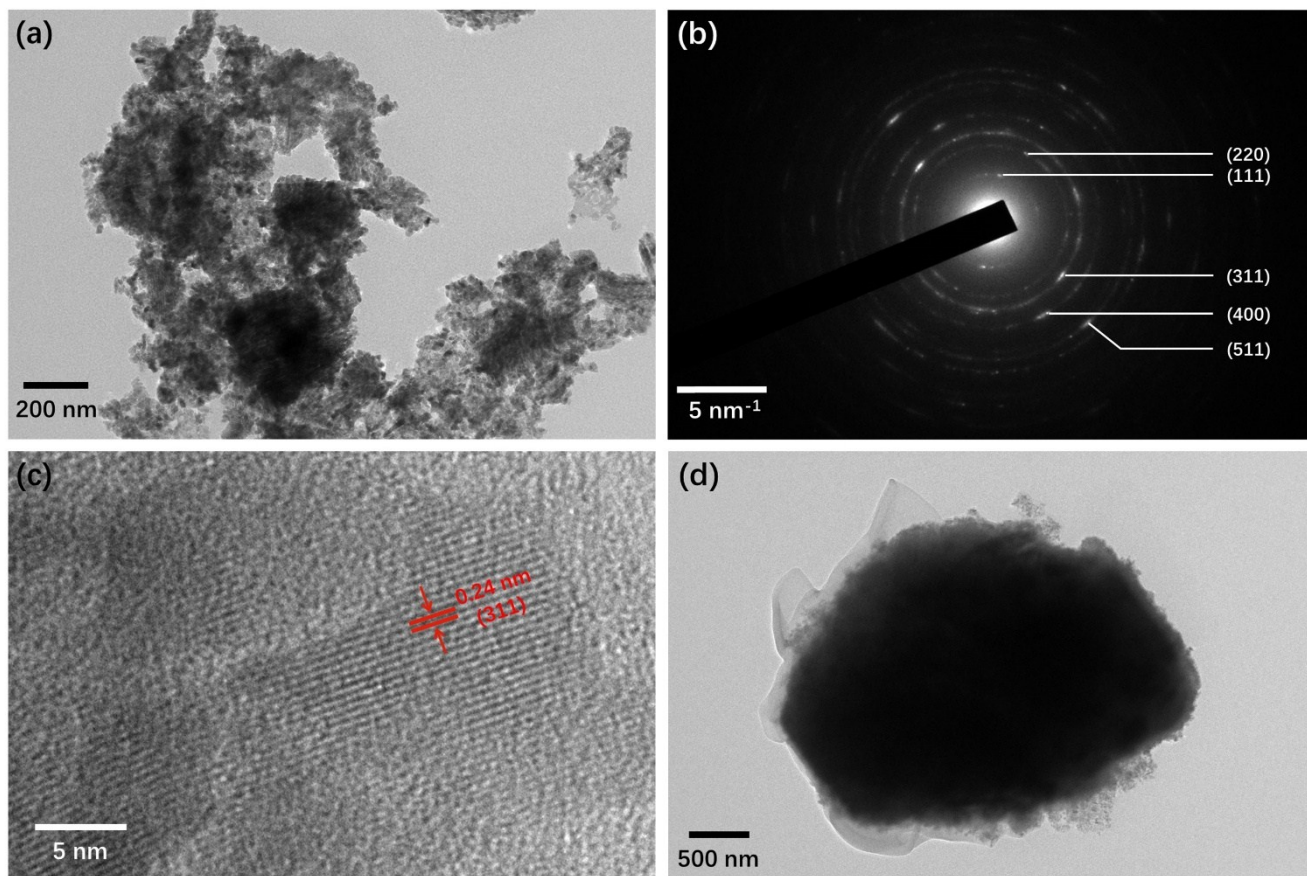


Fig. S1 (a) Low-magnification TEM image of ZNG; (b) corresponding SAED pattern; (c) HRTEM image and (d) TEM image of graphene.

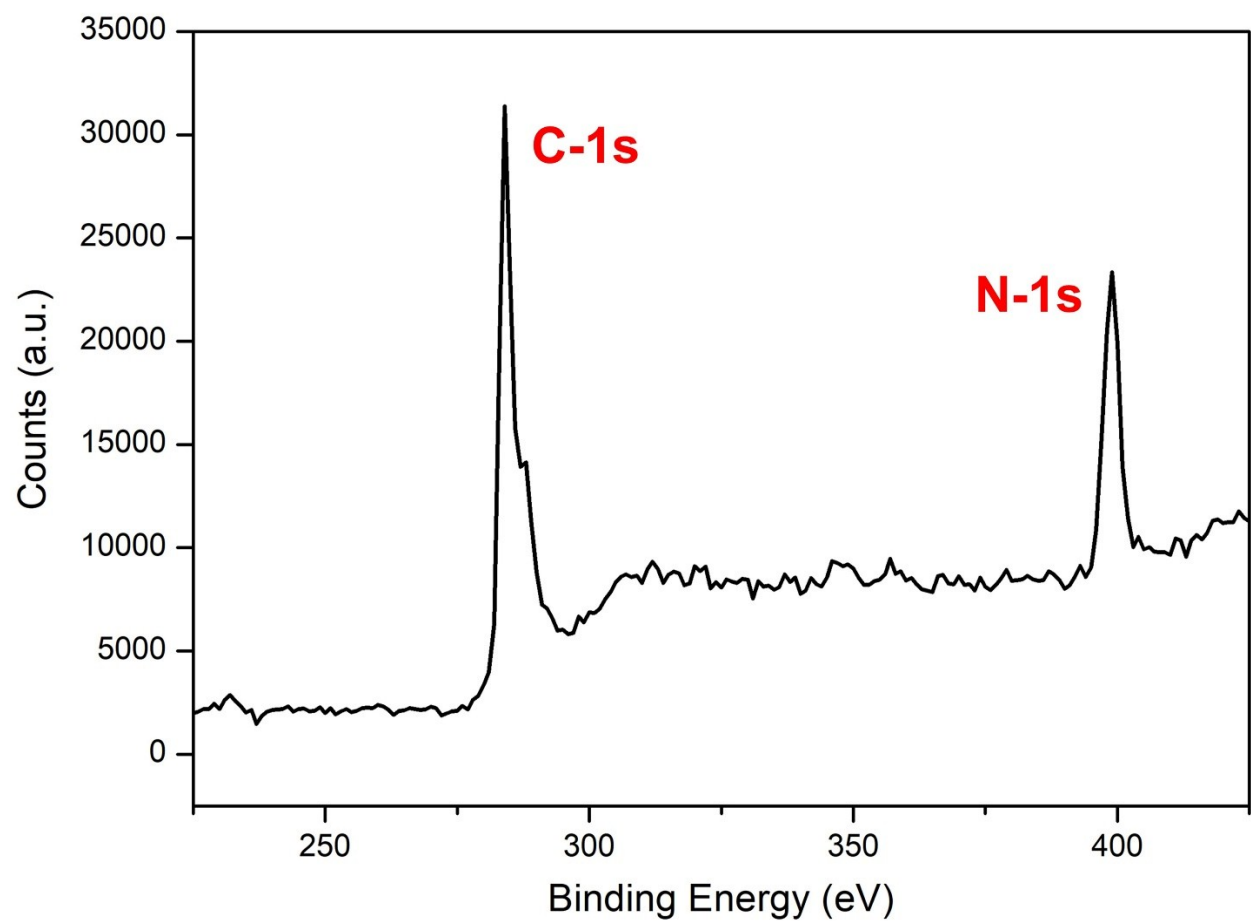


Fig. S2 XPS survey spectrum of N-rGO.

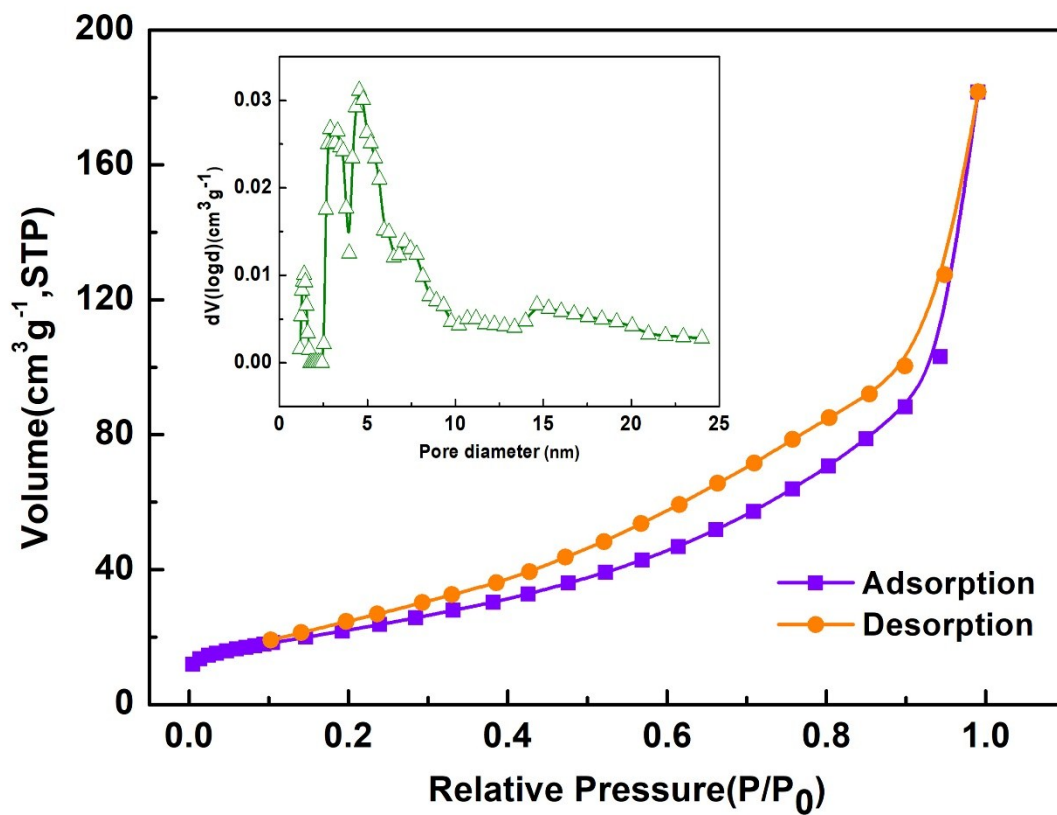


Fig. S3 N₂ adsorption-desorption isotherm of ZNG and the corresponding pore size distribution (in insert).

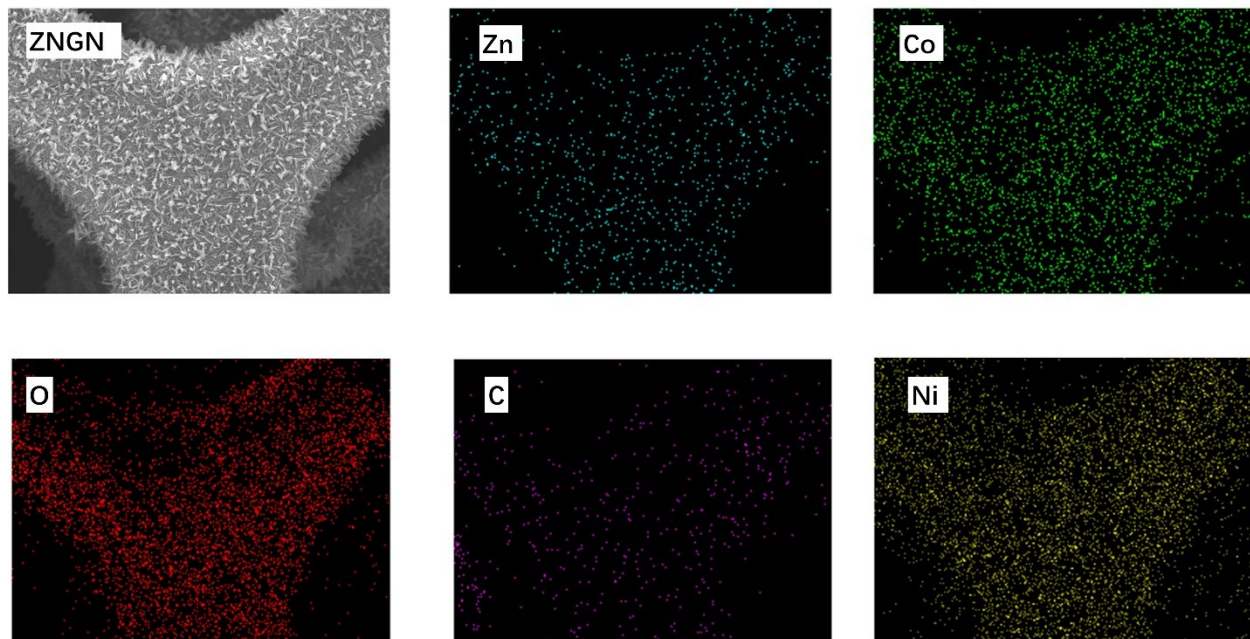


Fig. S4 EDS elemental mapping of ZNGN confirming the presence of Zn, Co, O, C, and Ni.

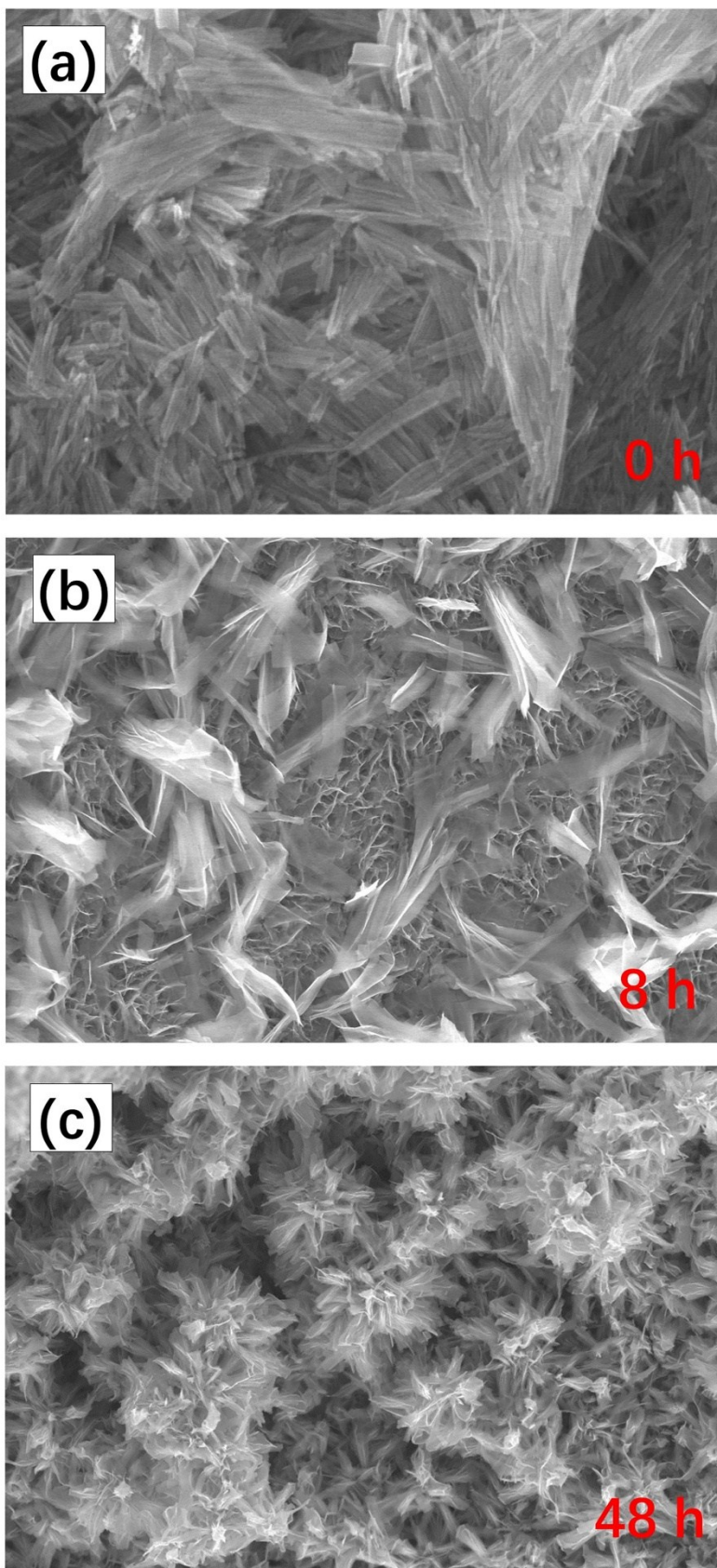


Fig. S5 SEM images of rGO and urea by ultrasonically processed in (a) 0h, (b) 8h and (c) 48h.

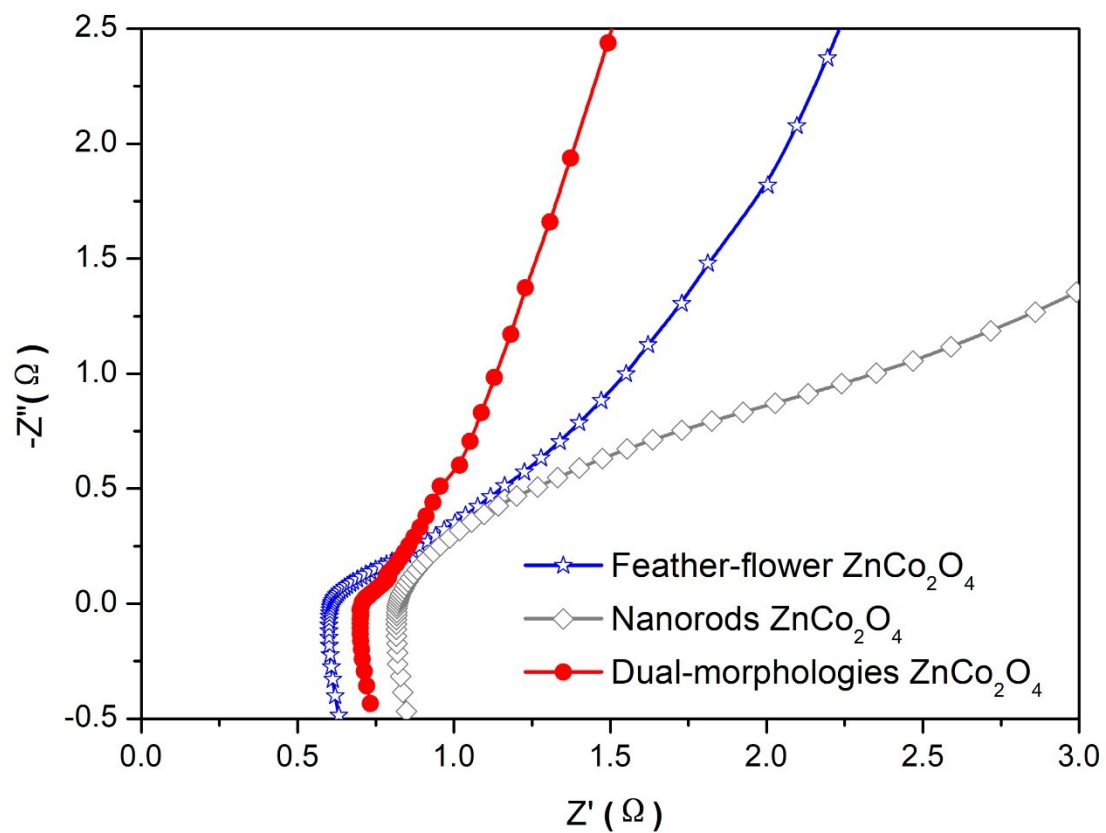


Fig. S6 Nyquist plots of feather-flower ZnCo₂O₄, nanorods ZnCo₂O₄ and dual-morphologies ZnCo₂O₄.

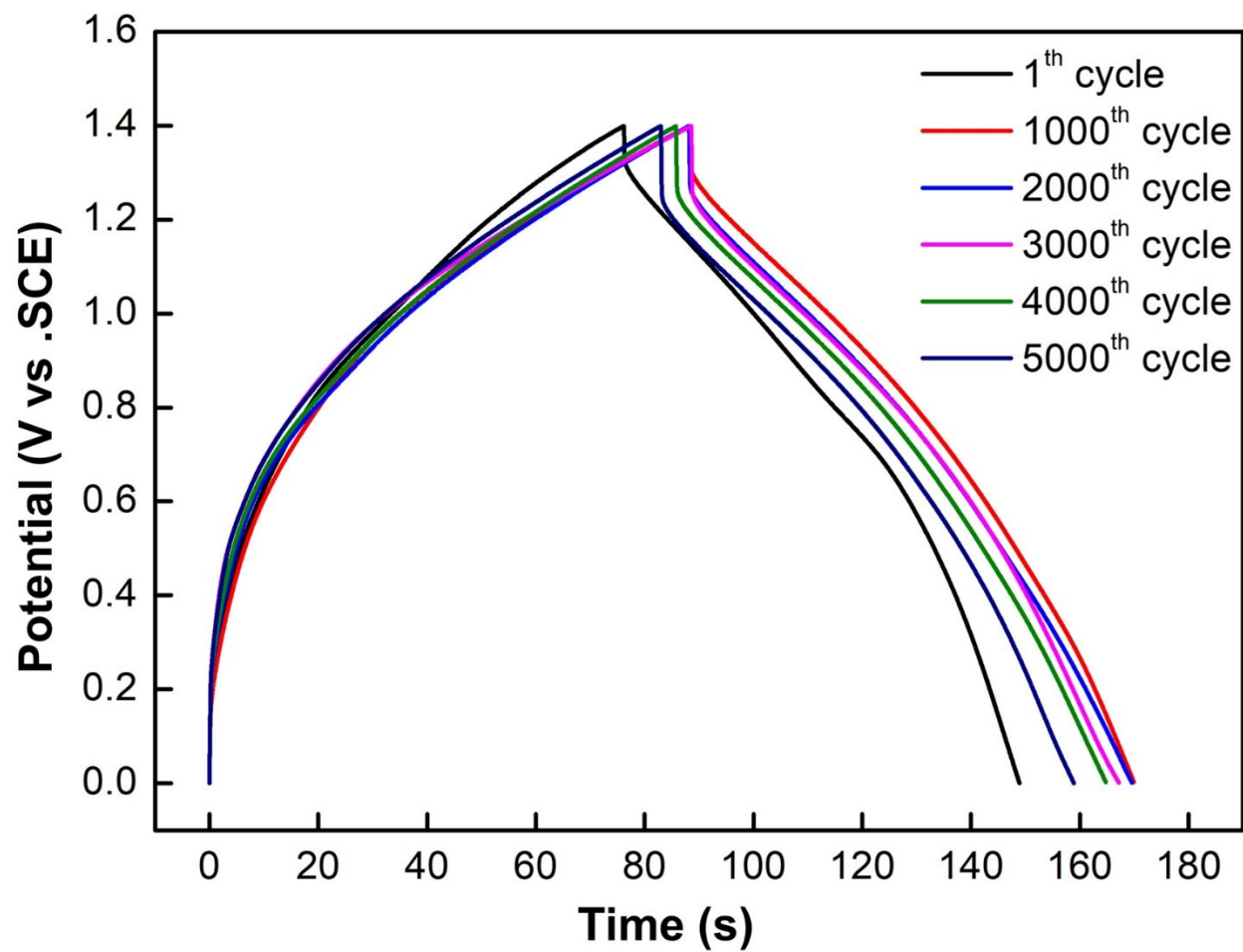


Fig. S7 GCD curves of ZNGN//AC with 1st, 1000th, 2000th, 3000th, 4000th, and 5000th cycles.

Table S1 Comparison of electrochemical performances of our work with previous reports

Electrodes	Specific capacitance (F/g)	Current density	Cyclic stability (%) (Cycles)
ZnCo ₂ O ₄ /N-doped rGO/NF ³¹	1613	1 A g ⁻¹	5000 (97%)
ZnCo ₂ O ₄ nanowire cluster arrays ⁴⁶	1620	8 A g ⁻¹	6000 (90%)
ZnCo ₂ O ₄ /MnO ₂ ⁴⁷	1957	3 mA cm ⁻²	--
ZnCo ₂ O ₄ /Co ₃ O ₄ /CuO ⁴⁸	2170	3 mA cm ⁻²	--
ZnCo ₂ O ₄ /NGN/CNT ⁴⁹	890	1 A g ⁻¹	--
flower- ZnCo ₂ O ₄ ⁵⁰	1802	1 A g ⁻¹	4000 (100%)
This work	1600	1 A g ⁻¹	3000 (96%)