

Electronic Supplementary Information (ESI)

A Low-cost Cementite (Fe₃C) Nanocrystals@N-doped Graphitic Carbon Electrocatalyst for Efficient Oxygen Reduction

Tianxing Wu,^a Haimin Zhang,^{*,a} Xian Zhang,^a Yunxia Zhang,^a Huijun Zhao^{a,b} and
Guozhong Wang^{*,a}

^a Key Laboratory of Materials Physics, Centre for Environmental and Energy Nanomaterials, Anhui Key Laboratory of Nanomaterials and Nanostructures, Institute of Solid State Physics, Chinese Academy of Sciences, Hefei 230031, P. R. China. E-mail: zhanghm@issp.ac.cn, gzhwang@issp.ac.cn.

^b Centre for Clean Environment and Energy, Gold Coast Campus, Griffith University, Queensland 4222, Australia.

Table S1. N₂ sorption-derived textural properties of the prepared carbon materials.

Sample	BET Surface Area (m ² g ⁻¹)	Pore Volume (cm ³ g ⁻¹)	Pore Size (nm)
CWMs-900	608.53	0.34	2.2
Fe ₃ C@NGC	313.73	0.31	4.0

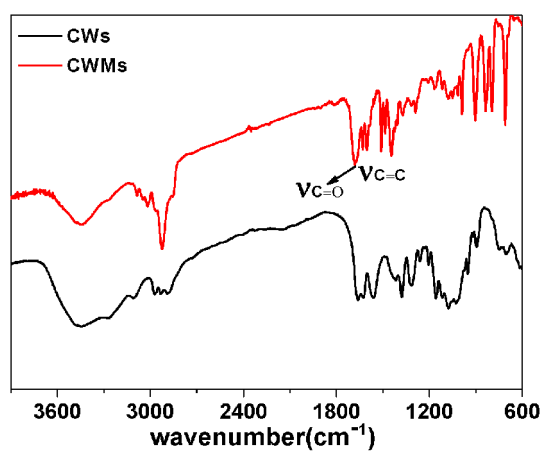


Fig. S1 FT-IR spectra of chitosan whiskers (CWs) and chitosan whisker microspheres (CWMs).

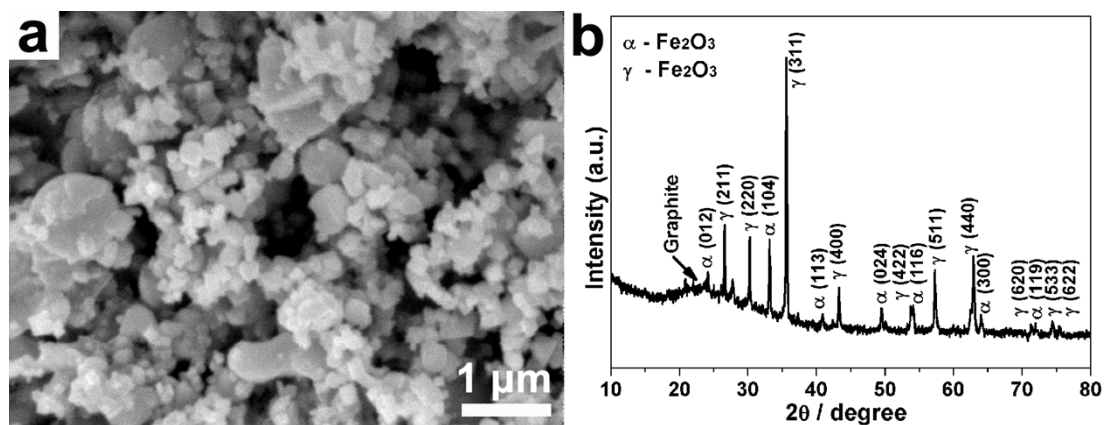


Fig. S2 The SEM image (a) and XRD pattern (b) of samples obtained by pyrolyzing chitosan whiskers adsorbed Fe(acac)₃ at 900 °C in N₂ for 4 h.