

ELECTRONIC SUPPLEMENTARY INFORMATION

A colorimetric detection strategy and micromotor-assisted photo-Fenton like degradation for hydroquinone based on the peroxidase-like activity of $\text{Co}_3\text{O}_4\text{-CeO}_2$ nanocages

Kaiyuan Hu^a, Jia Li^{*a}, Yang Han^a, Dickon H.L. Ng^b, Ningning Xing^a, Yangsai Lyu^{*c}

^aSchool of Material Science and Engineering, University of Jinan, Jinan, 250022, China. E-mail

address: mse_lj@ujn.edu.cn (Jia Li).

^bSchool of Science and Engineering, The Chinese University of Hong Kong (Shenzhen), Shenzhen,

China.

^cDepartment of Mathematics and Statistics, Queen's University. E-mail address: 21y136@queensu.ca

(Yangsai Lyu)

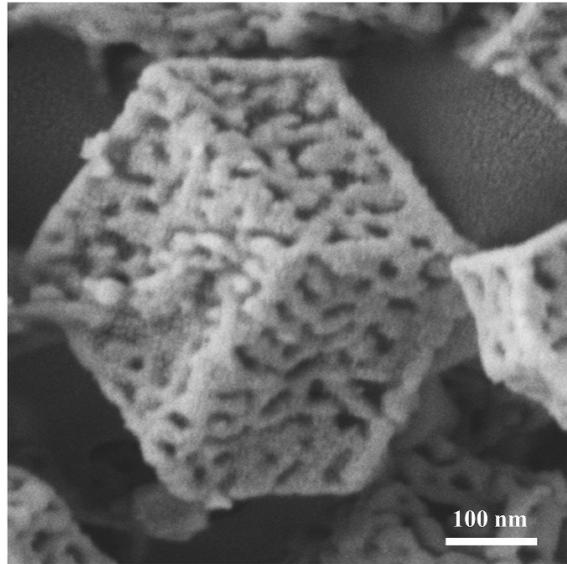


Fig. S1 SEM image of $\text{Co}_3\text{O}_4\text{-CeO}_2$ nanocages after reaction

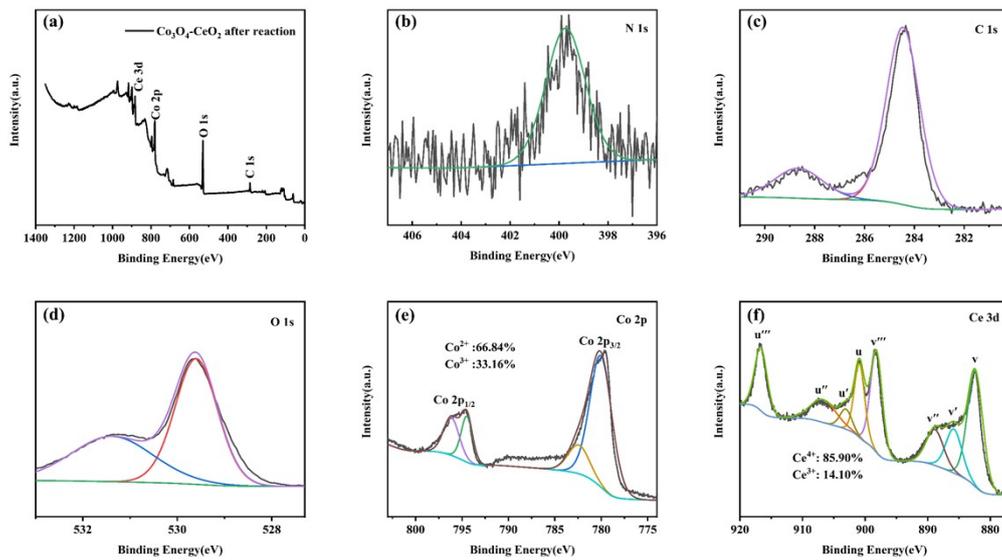


Fig. S2 Full scanned XPS spectra (a), high-resolution spectra N 1s (b), C 1s (c), O 1s (d), Co 2p (e), Ce 3d (f) of $\text{Co}_3\text{O}_4\text{-CeO}_2$ after reaction.

Table S1 Comparison of degradation performance for pollutants with other reported micromotors.

Micromotor	Pollutants	Degradation time(min)	Degradation rate (%)	Ref.
Pt NPs on Ag	Methylene blue	30	90.42	[1]
Ag-ZIF	Rhodamine b	150	93.1	[2]
Bi ₂ O ₃ /BiOCl-based hybrid	Rhodamine b	360	90	[3]
HRP-MIL-100(Fe)@TiO ₂ @Fe ₃ O ₄	HQ	80	90.1	[4]
Co ₃ O ₄ -CeO ₂ nanocages	HQ	210	98.21	This work

Notes and references

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