

Supplementary Information

Facile preparation of 3D ordered mesoporous CuO_x-CeO₂ with notable enhanced efficiency for heteroatom-contained volatile organic compounds low-temperature oxidation

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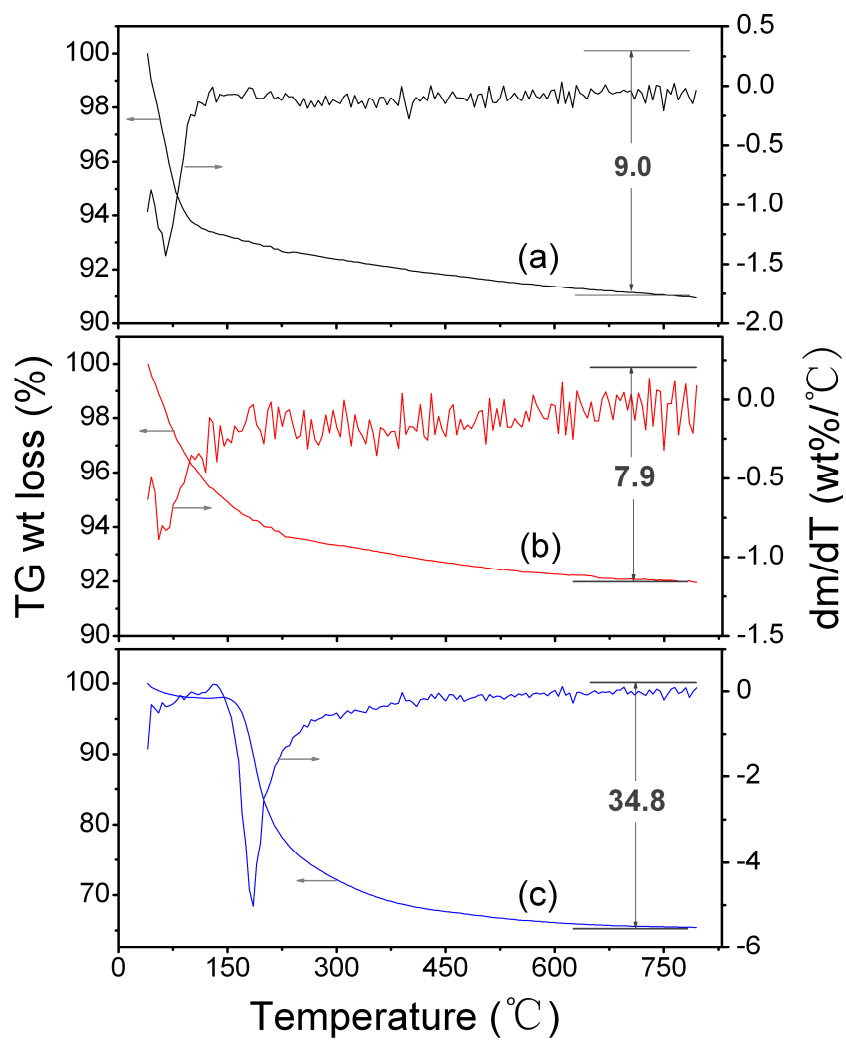
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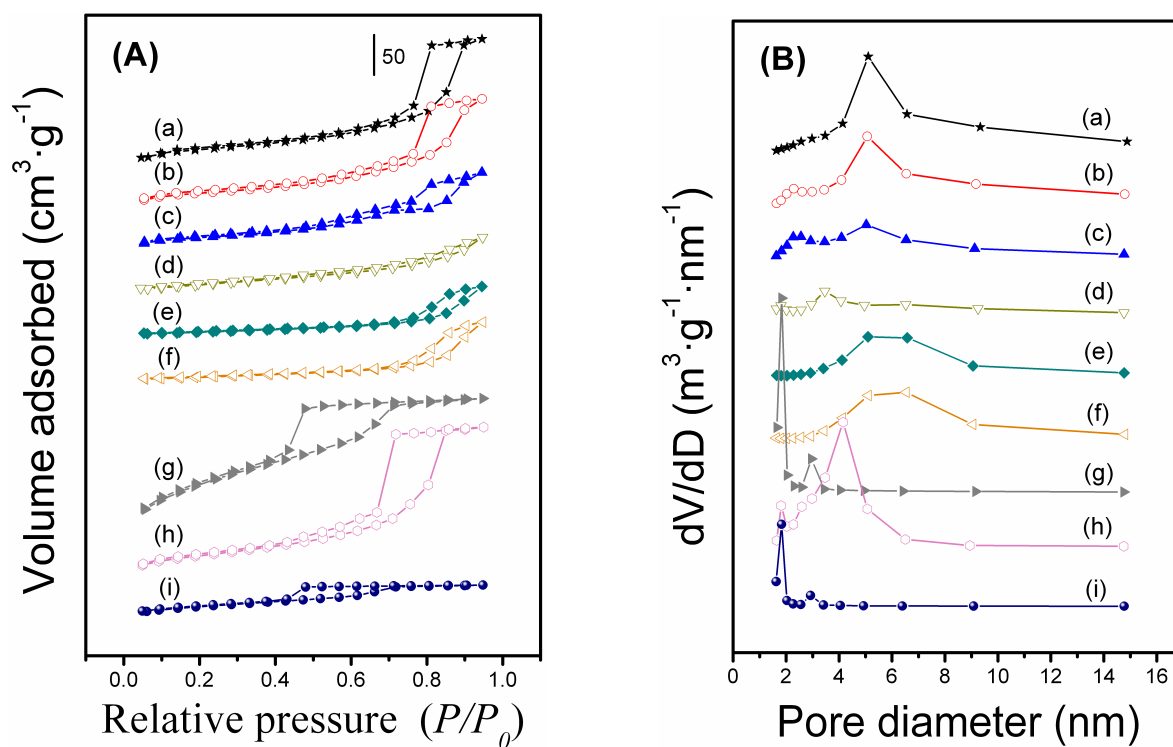
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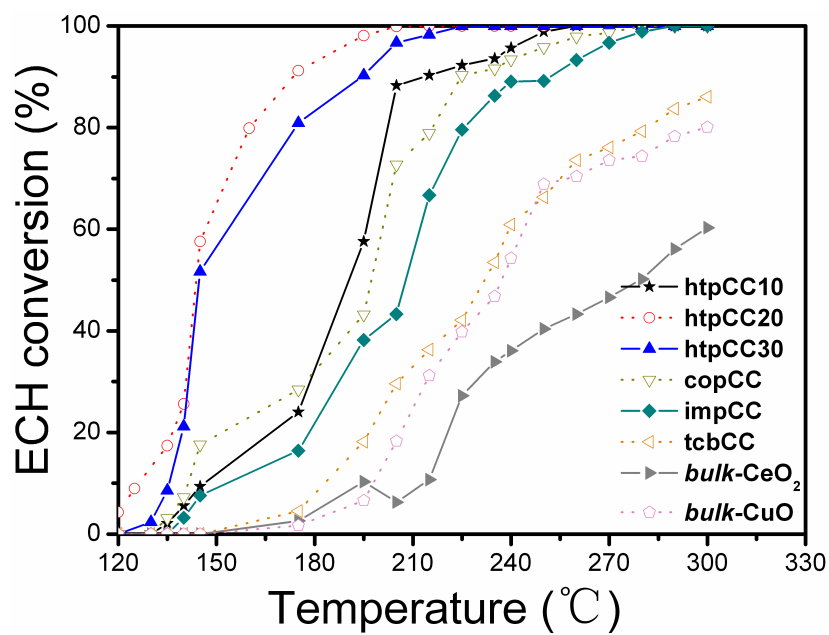
20 **Fig. S1** TG-DTG profiles of (a) FMA-SBA-16, (b) calcined SBA-16, and (c) as-SBA-16.

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22 **Fig. S2** N_2 adsorption/desorption isotherms (A) and pore size distribution (B) of (a) htpCC10,
23 (b) htpCC20, (c) htpCC30, (d) copCC, (e) impCC, (f) CeO_2 , (g) calcined SBA-16, (h)
24 FMA-SBA-16, and (i) as-SBA-16.

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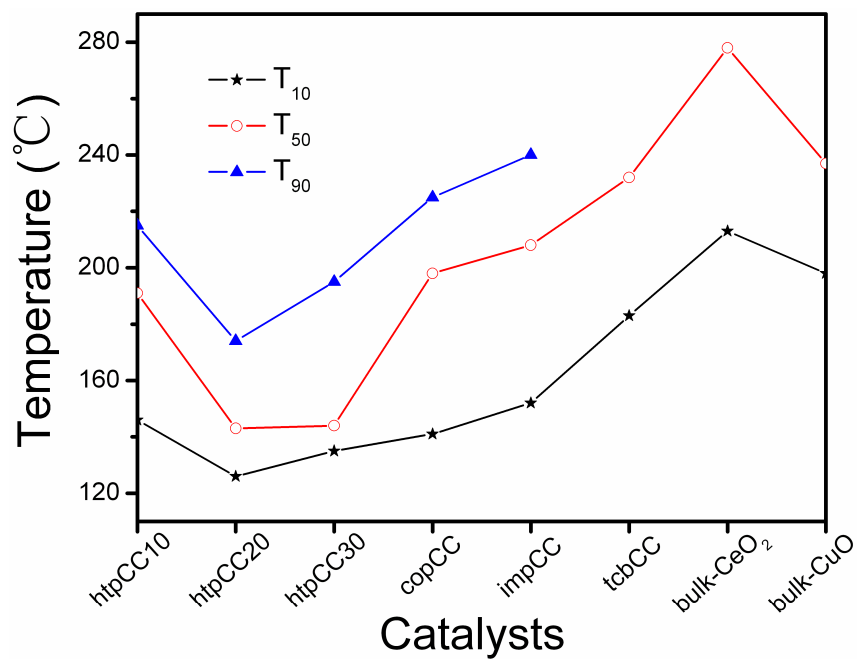


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27 **Fig. S3** Light-off curves of ECH oxidation over synthesized catalysts (300 mg catalyst, 300 ppm

28 ECH, 21% O₂, N₂ balance; GHSV = 18,400 h⁻¹)

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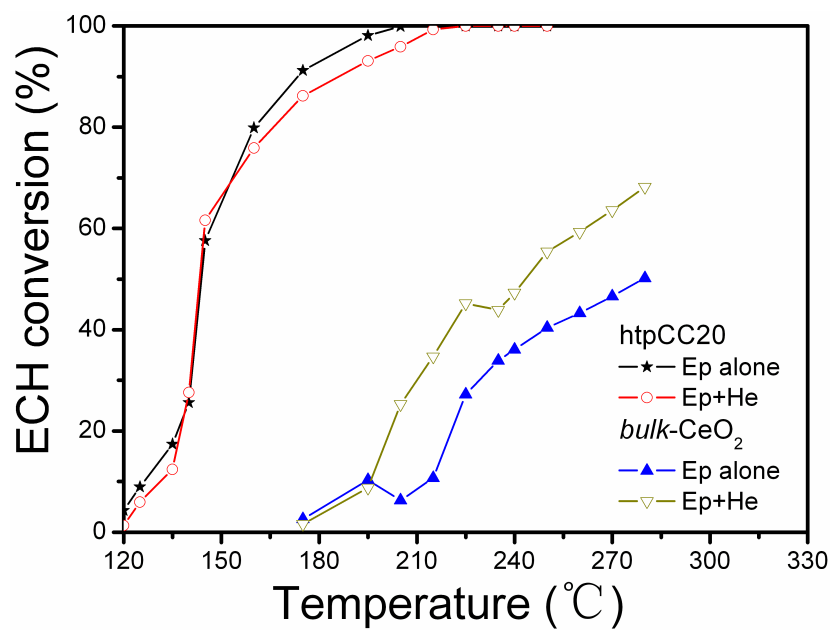


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31 **Fig. S4** T₁₀, T₅₀, and T₉₀ for ECH oxidation over synthesized catalysts (300 mg catalyst, 300 ppm

32 ECH, 21% O₂, N₂ balance; GHSV = 18,400 h⁻¹)

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35 **Fig. S5** Light-off curves of ECH oxidation over Pd-loaded catalysts (300 mg catalyst, 300 ppm

36 ECH, 1000 ppm n-hexane, 21% O₂, N₂ balance; GHSV = 18,400 h⁻¹)