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Supplementary Materials: Catalytic Combustion of Toluene over Highly Dispersed Cu-CeO_x Derived from Cu-Ce-MOF by EDTA Grafting Method

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Table S1. The inventory rating in the synthesis of Cu-Ce-MOF-n.

Cu-Ce-MOF-n	EDTA-2Na /g	$CuAc_2 \cdot H_2O$ /g
Cu-Ce-MOF-0.05	0.213	0.127
Cu-Ce-MOF-0.1	0.426	0.253
Cu-Ce-MOF-0.2	0.853	0.506
Cu-Ce-MOF-0.3	1.279	0.760
Cu-Ce-MOF-0.4	1.704	1.012

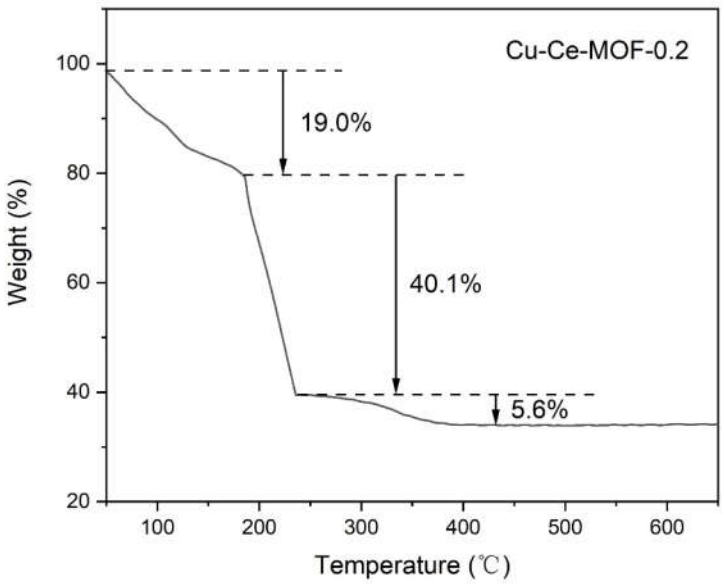


Figure S1. The thermogravimetry curves of Cu-Ce-MOF-0.2.

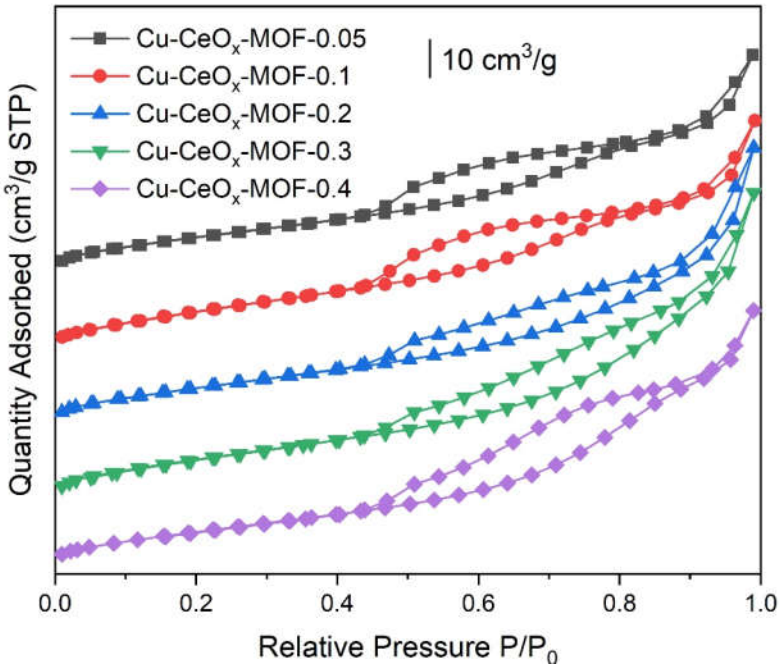
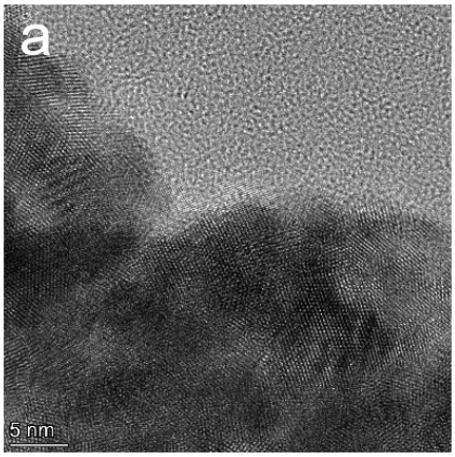
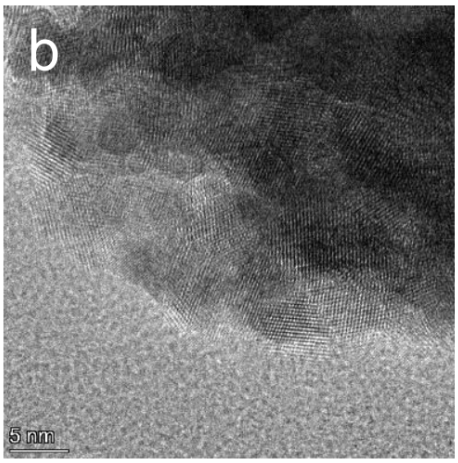


Figure S2. The N_2 adsorption and desorption isotherms of Cu-CeO_x-MOF-n.





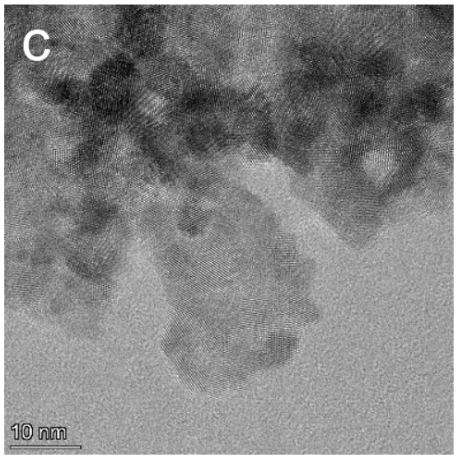


Figure S3. The HRTEM images of (**a**) Cu-CeO_x-MOF-0.05, (**b**) Cu-CeO_x-MOF-0.1, and (**c**) Cu-CeO_x-MOF-0.3.

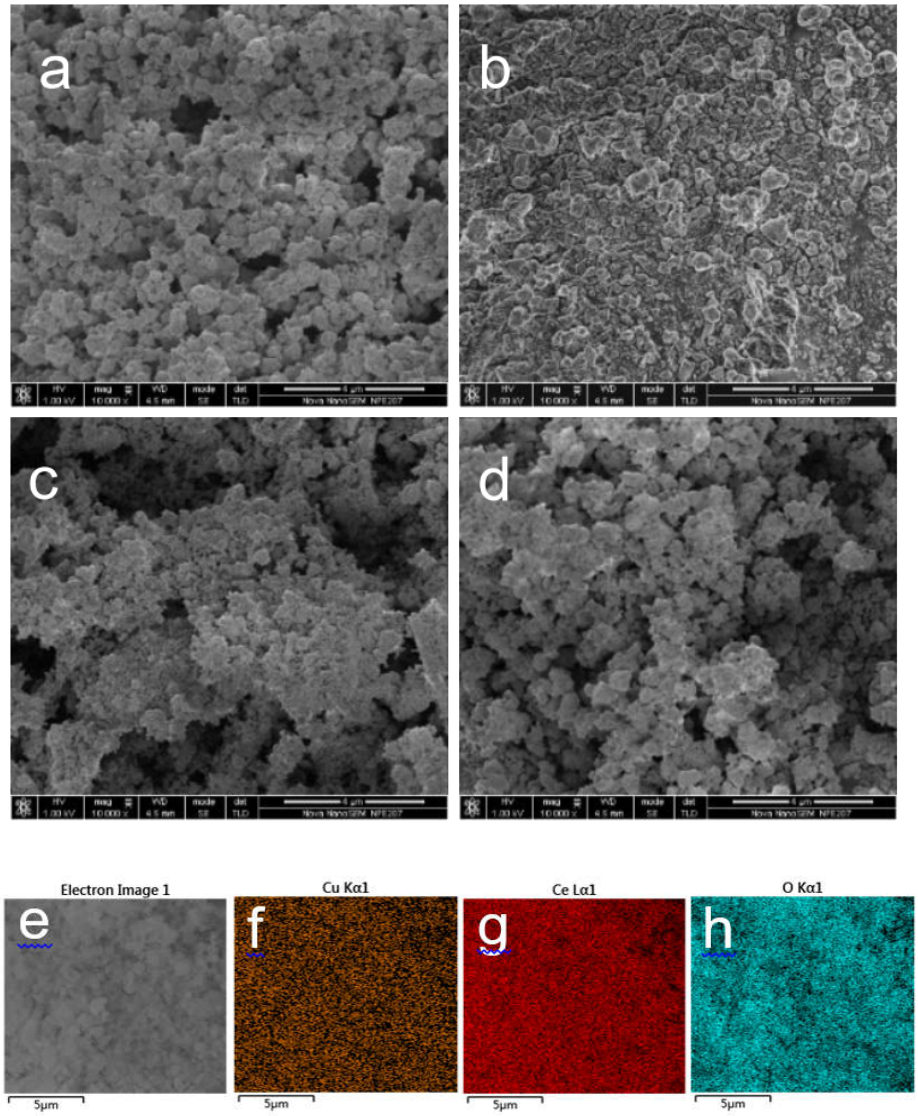


Figure S4. The FESEM images of (**a**) Cu-CeOx-MOF-0.05, (**b**) Cu-CeOx-MOF-0.1, (**c**) Cu-CeOx-MOF-0.3, (**d**) Cu-CeOx-MOF-0.4; (**e-h**) EDS mapping results of Cu-CeOx-MOF-0.2 ((f) Cu, (g) Ce, and (h) O).

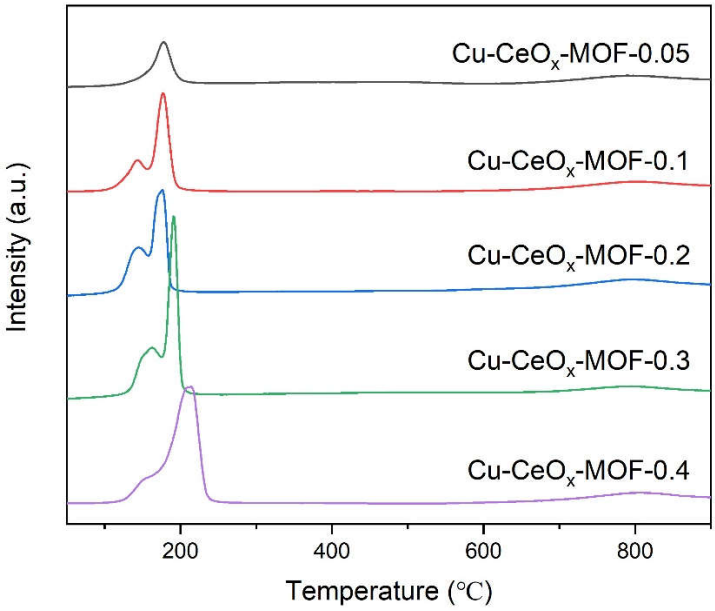


Figure S5. The whole H2-TPR profiles of Cu-CeOx-MOF-n.

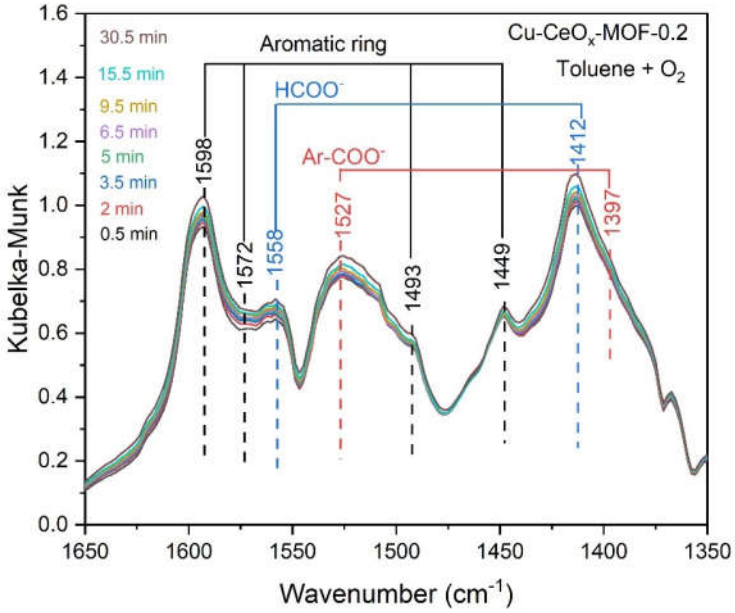


Figure S6. *In situ* DRIFTS results after O2 introduction over Cu-CeOx-MOF-0.2 at the range of 1650 cm^{-1} – 1350 cm^{-1}.