

Supporting Information

Boosting CO₂ electroreduction over layered zeolitic imidazolate framework decorated with Ag₂O nanoparticles

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Table S1 The loadings of Ag in different catalysts measured by ICP-OES.

Catalyst	Ag ₂ O/layered ZIF	Ag/layered ZIF	Ag/C
Ag loading (wt.%)	11.5	14.0	10.7

Table S2 The electrochemical surface areas (ESAs) of different catalysts.

Catalyst	ZIF-7	Layered ZIF	Ag/layered ZIF	Ag ₂ O/layered ZIF
ESA (m ² g ⁻¹)	2.17	4.42	4.40	4.80

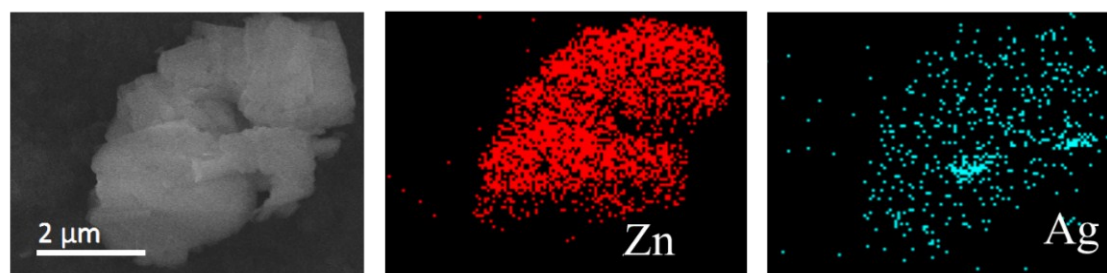


Fig. S1. SEM image with the corresponding EDS mappings of Zn and Ag elements in Ag₂O/layered ZIF catalyst.

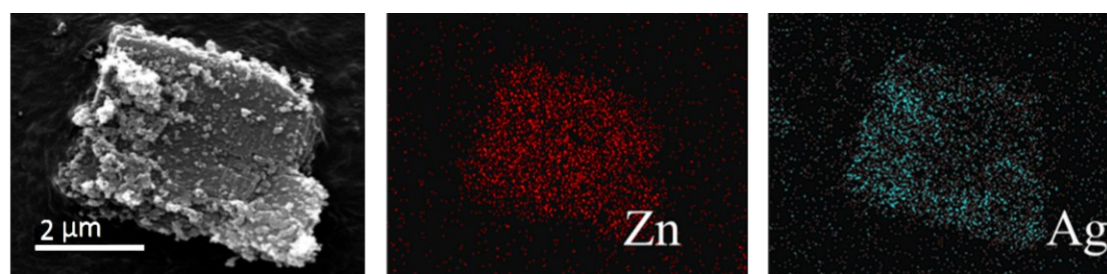


Fig. S2. SEM image with the corresponding EDS mappings of Zn and Ag elements in Ag/layered ZIF catalyst.

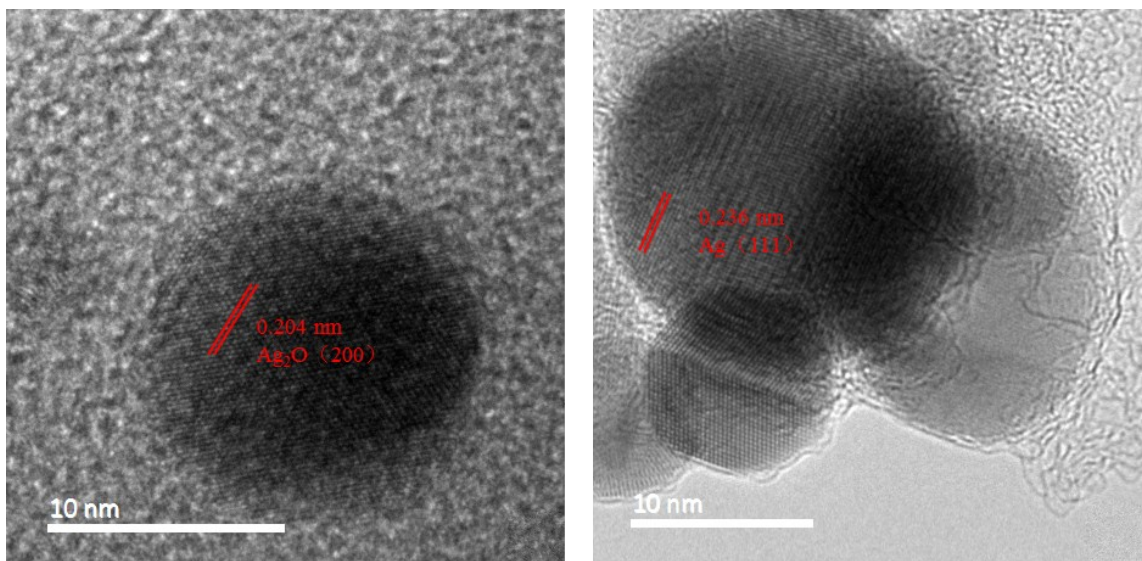


Fig. S3. HRTEM images of (a) Ag₂O/layered ZIF and (b) Ag/layered ZIF catalysts.

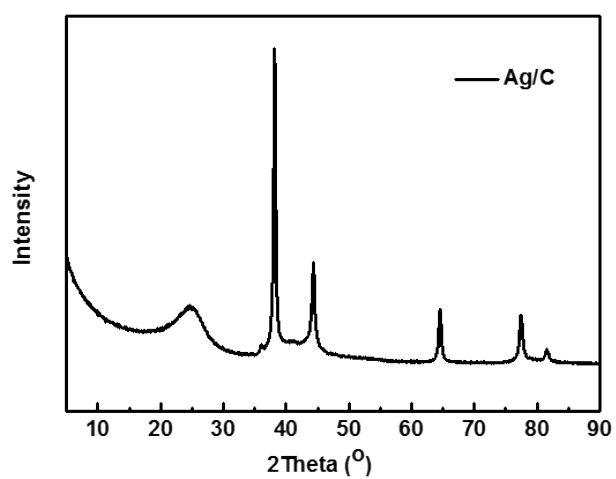


Fig. S4. XRD pattern of Ag/C catalyst.

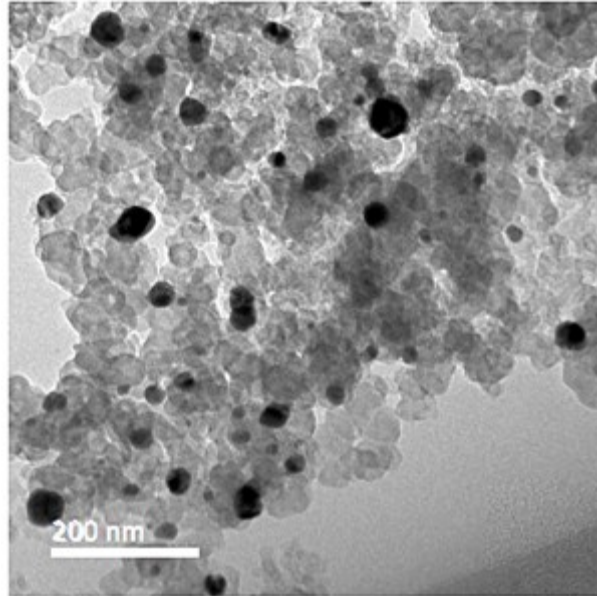


Fig. S5. TEM image of Ag/C catalyst.

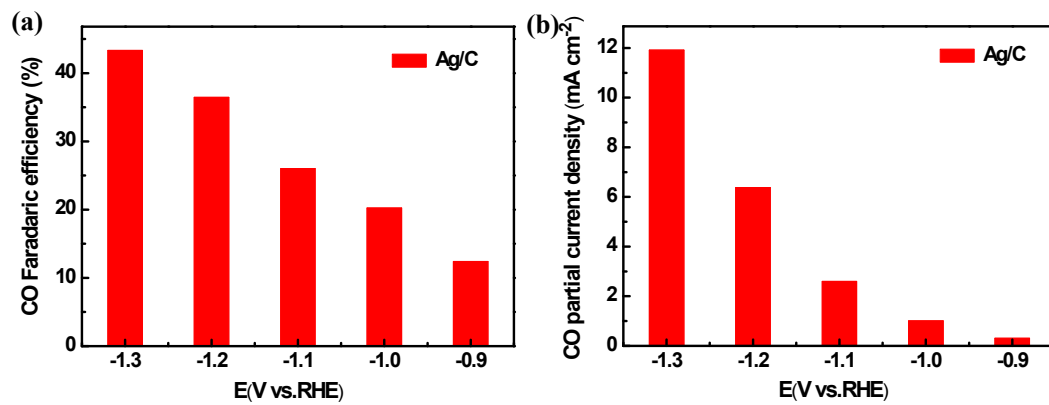


Fig. S6. The applied potential dependence of (a) Faradaic efficiency and (b) geometric partial current density for CO production over Ag/C catalyst in CO₂-saturated 0.25 M K₂SO₄ solution.