

## **CeO<sub>2</sub> 担载 Cu 纳米粒子电催化 CO<sub>2</sub> 还原产乙烯: CeO<sub>2</sub> 不同暴露晶面对催化性能的影响**

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## **Electrocatalytic CO<sub>2</sub> Reduction to Ethylene over Cu Nanoparticles Supported on CeO<sub>2</sub>: Effect of CeO<sub>2</sub> Exposed Facets**

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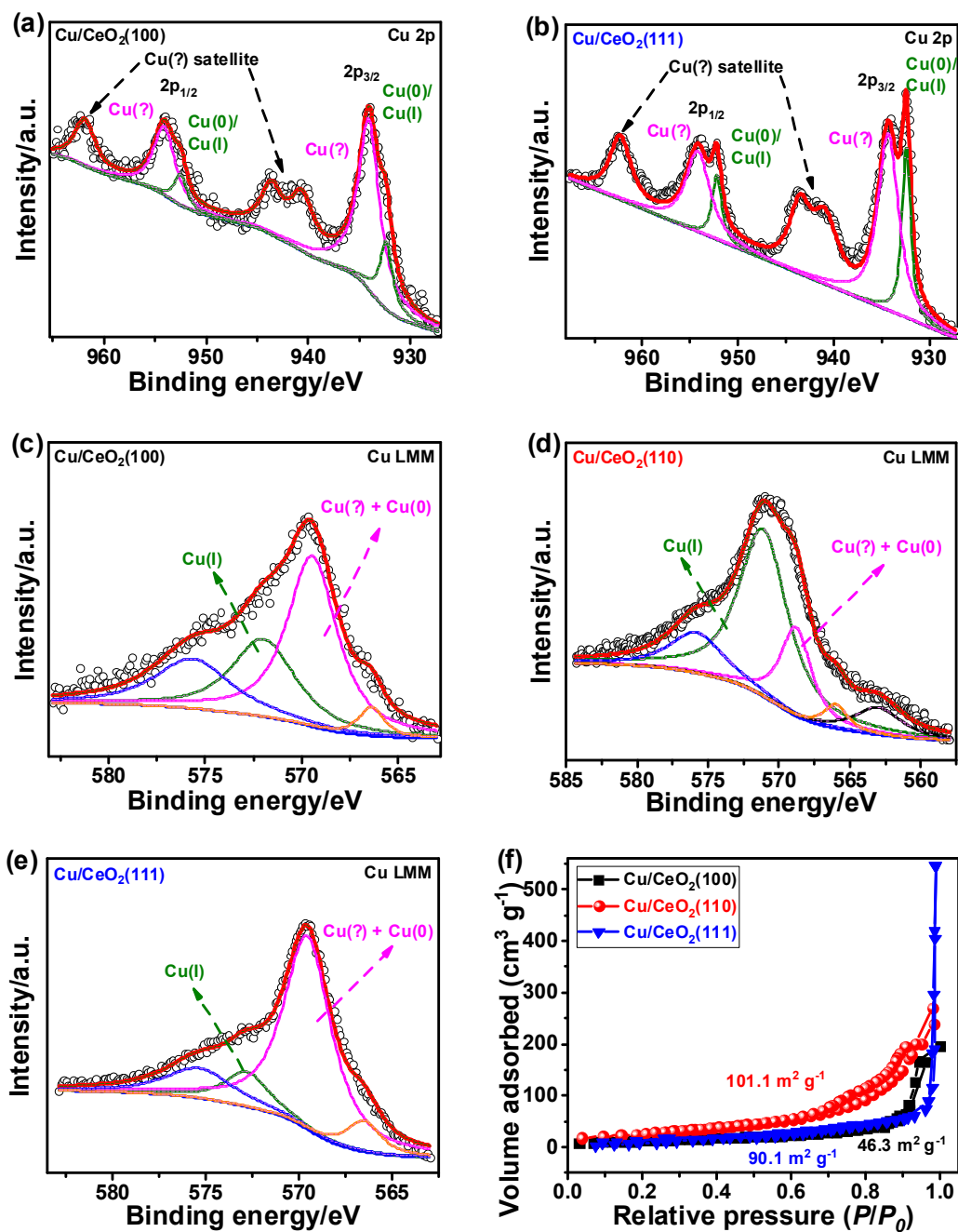


Fig. S1 Cu 2p XPS spectra of (a) Cu/CeO<sub>2</sub>(100) and (b) Cu/CeO<sub>2</sub>(100). Cu LMM Auger spectra of (c) Cu/CeO<sub>2</sub>(100), (d) Cu/CeO<sub>2</sub>(110), and (e) Cu/CeO<sub>2</sub>(111). (f) N<sub>2</sub> adsorption/desorption isotherms of Cu/CeO<sub>2</sub>(100), Cu/CeO<sub>2</sub>(110), and Cu/CeO<sub>2</sub>(111).

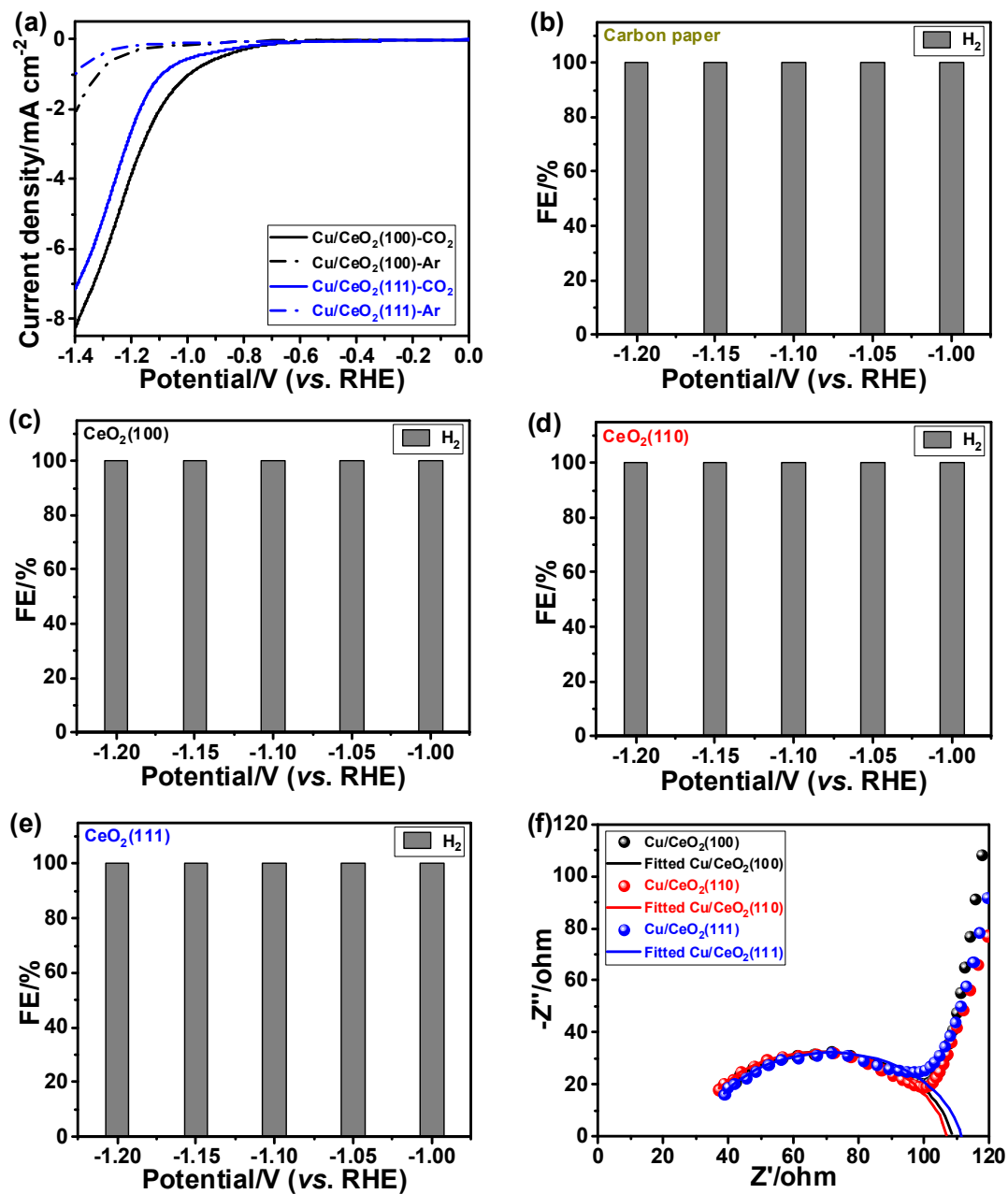


Fig. S2 (a) LSV results of Cu/CeO<sub>2</sub>(100) and Cu/CeO<sub>2</sub>(111) on a glassy carbon electrode in Ar- (dashed lines) or CO<sub>2</sub> (solid lines)-saturated 0.1 mol·L<sup>-1</sup> KHCO<sub>3</sub> at a scan rate of 5 mV·s<sup>-1</sup>. Overall Faradaic efficiencies over (b) pure carbon paper, (c) Cu/CeO<sub>2</sub>(100), (d) Cu/CeO<sub>2</sub>(110), and (e) Cu/CeO<sub>2</sub>(111) at various applied potentials. (f) Nyquist plots of Cu/CeO<sub>2</sub>(100), Cu/CeO<sub>2</sub>(110), and Cu/CeO<sub>2</sub>(111).