

Figure S1. Schematic of experimental set-up.

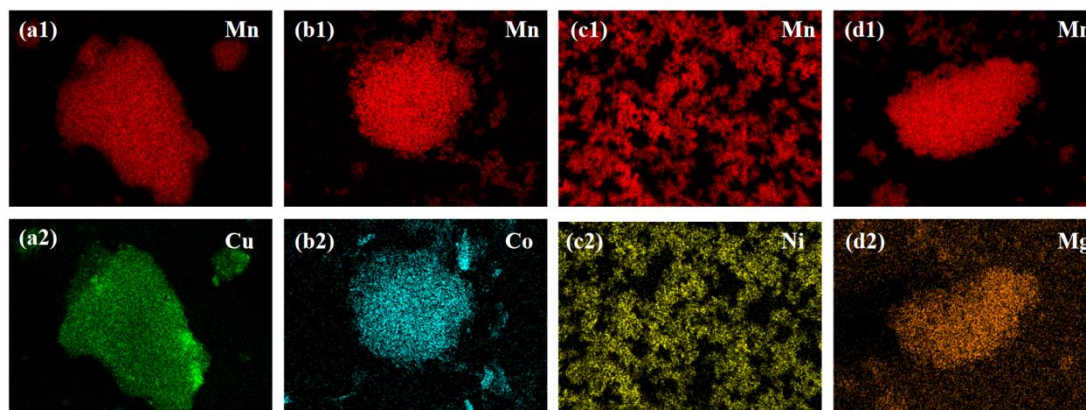


Figure S2. SEM images of (a1, a2): CuMn, (b1, b2): CoMn, (c1, c2): NiMn, and (d1, d2): MgMn.

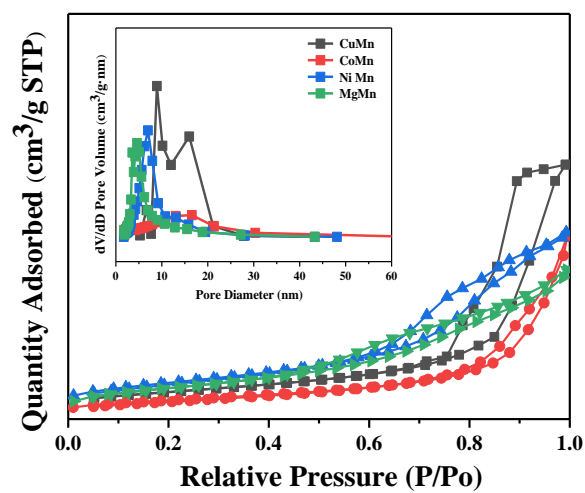


Figure S3. N_2 adsorption-desorption isotherms and pore size distribution curves of synthesized catalysts.

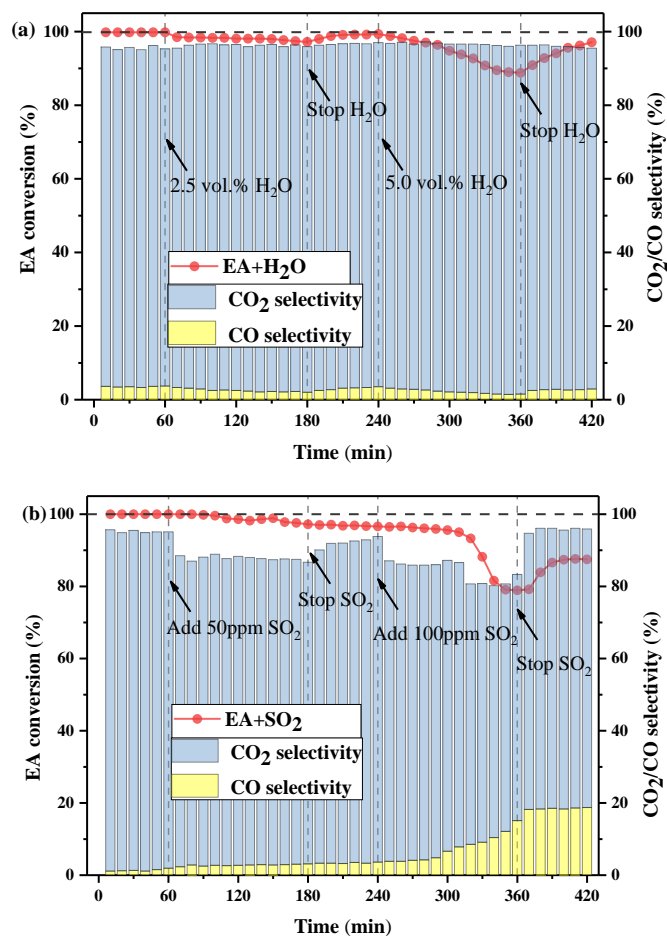


Figure S4. Effect of (a) H₂O and (b) SO₂ on EA conversion efficiency and outlet CO_x concentration over CuMn catalyst.

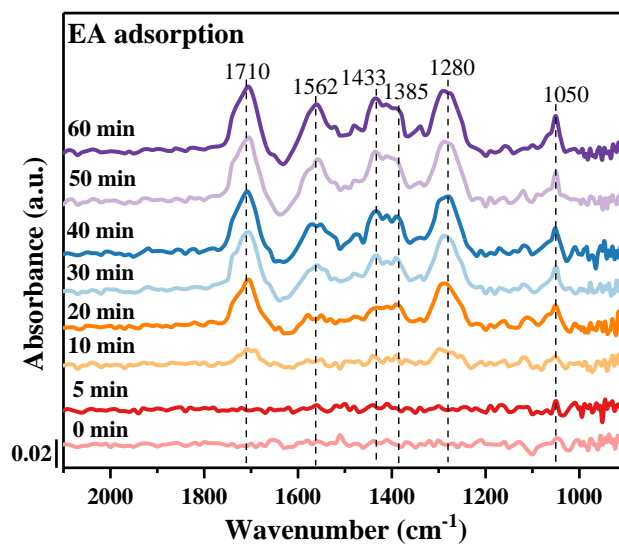


Figure S5. In-situ DRIFTS measurement over CuMn catalyst at 120 °C with 50 ppm EA.