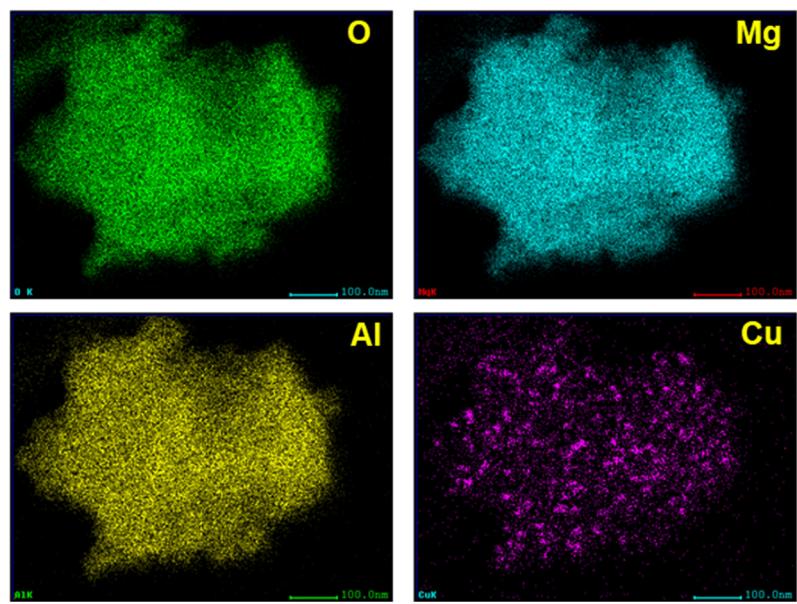
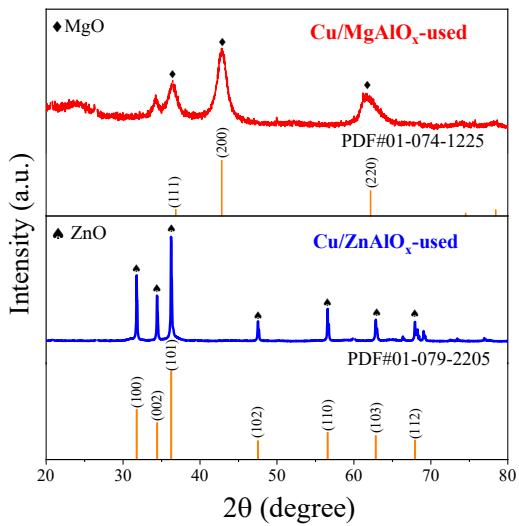


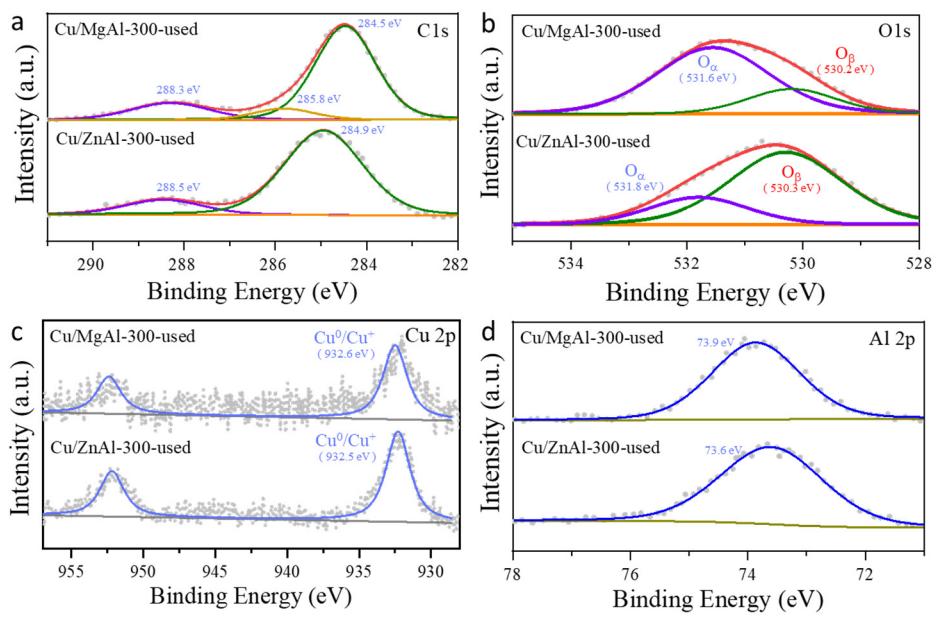
**Figure S1.** TEM and HRTEM images of different supported Cu catalysts after stability test: (a, c) Cu/MgAlO<sub>x</sub>-used; (b, d) Cu/ZnAlO<sub>x</sub>-used.



**Figure S2.** EDX-mapping of Cu/MgAlO<sub>x</sub> catalyst after stability test.



**Figure S3.** XRD patterns of supported Cu catalysts after stability test.



**Figure S4.** (a) C 1s; (b) O 1s; (c) Cu 2p and (d) Al 2p XPS spectra of supported Cu catalysts after stability test.