Supplementary materials

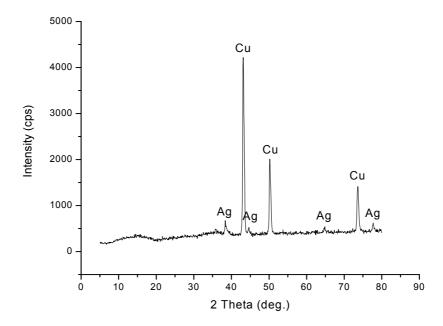


Fig. S1. XRD pattern of SZFC after being calcined at 400 °C for 2 h. It indicates that the Ag in the catalyst existed as the metallic silver after calcination. The diffraction peaks of zeolite film are indecipherable in the XRD pattern, probably because of the thin thickness of zeolite film on the Cu net with grid structure.

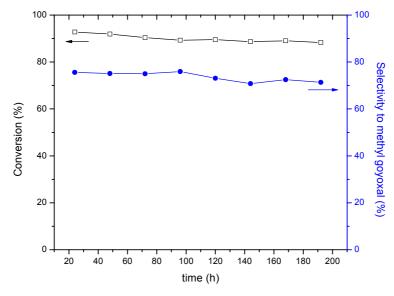


Fig. S2. Stability test of SZFC for the partial oxidation of 1, 2-propylene glycol to methyl glyoxal. Reaction temperature: 320 °C; LHSV: 3.2 g h⁻¹ g⁻¹; O₂ flow: 19 ml min⁻¹; amount of alcohol inlet: 3.2 g h⁻¹; O₂/alcohol: 1.2