

Supplemental material

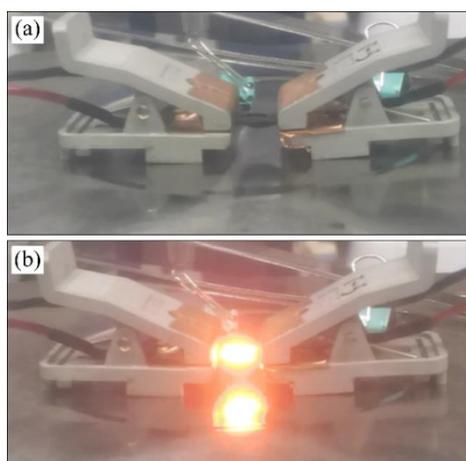


Figure S1 Optical photographs of the samples before (a) and during (b) thermal shock

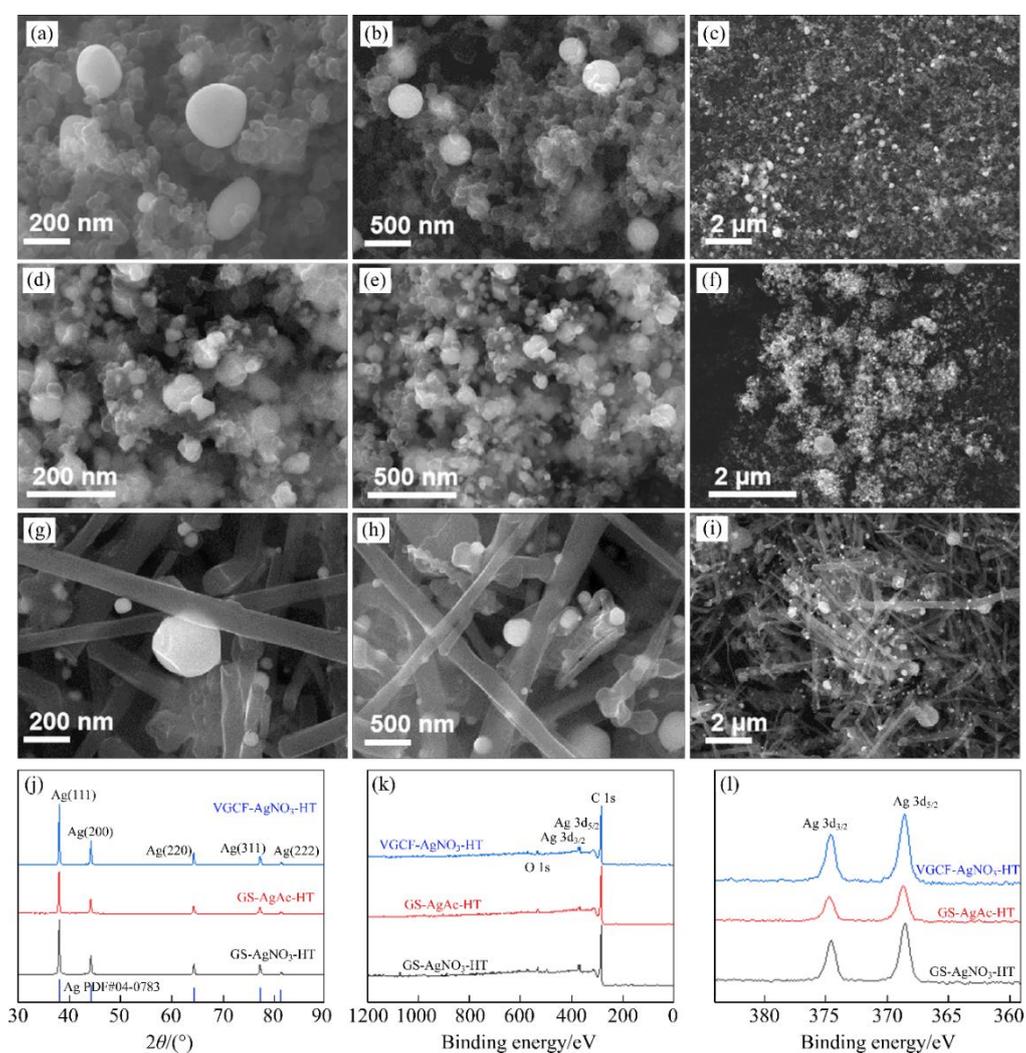


Figure S2 (a–c) SEM images of GS-AgNO₃-HT at different magnifications; (d–f) SEM images of GS-AgAc-HT at different magnifications; (g–i) SEM images of VGCF-AgNO₃-HT at different magnifications; (j) XRD diffraction patterns, (k) XPS gross spectra and (l) High-resolution Ag 3d XPS spectra of GS-AgNO₃-HT, GS-AgAc-HT and VGCF-AgNO₃-HT

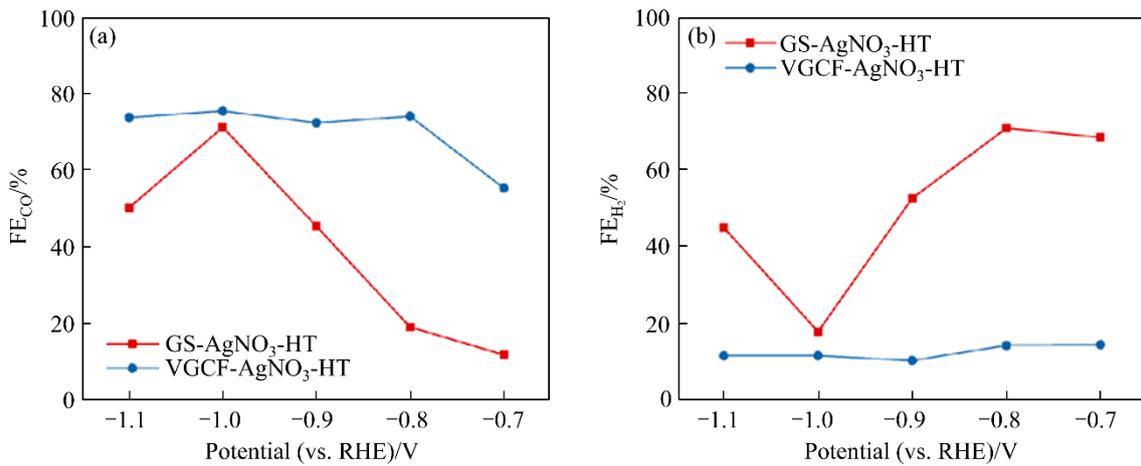


Figure S3 (a) FEs for CO production over GS-AgNO₃-HT and VGCF-AgNO₃-HT; (b) FEs for H₂ production over GS-AgNO₃-HT and VGCF-AgNO₃-HT

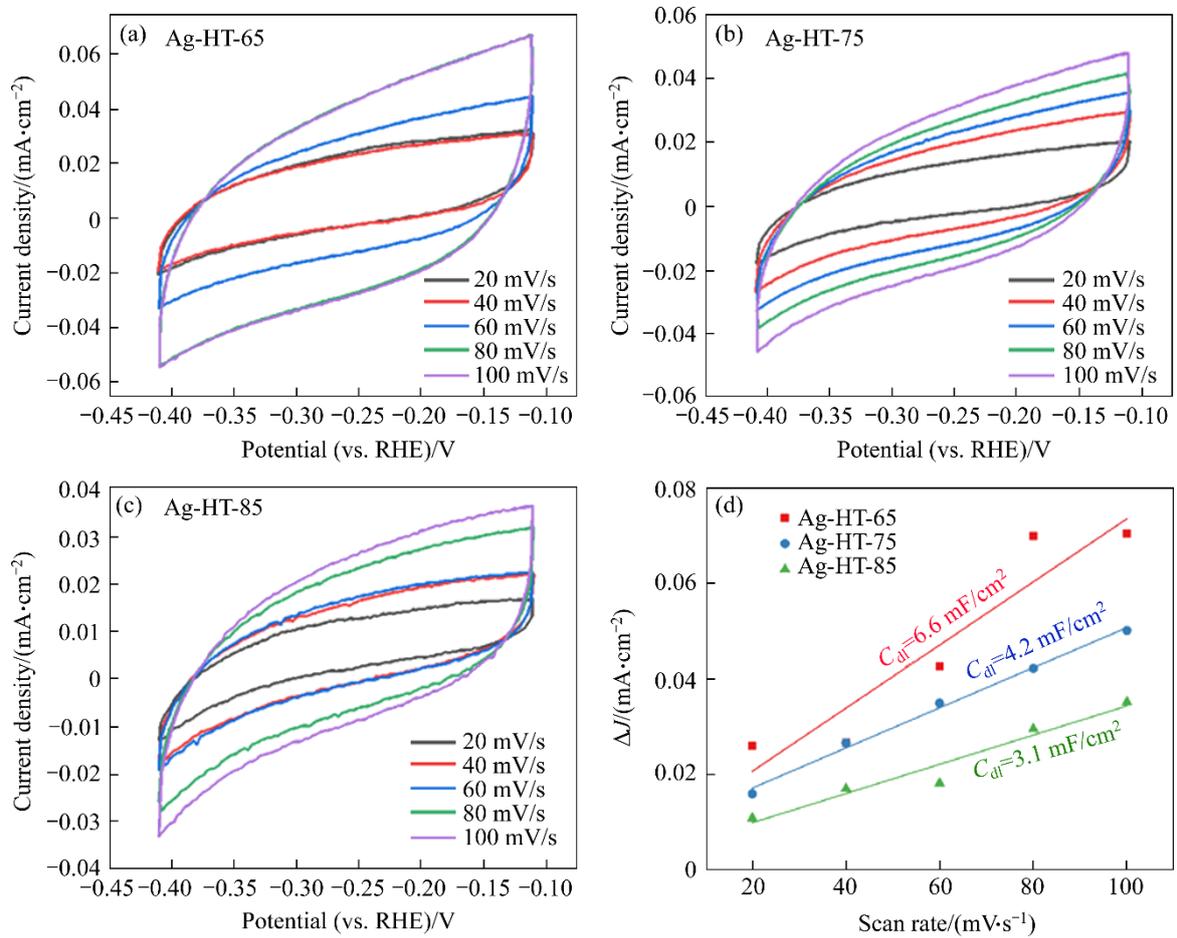


Figure S4 Cyclic voltammetry curves of (a) Ag-HT-65, (b) Ag-HT-75 and (c) Ag-HT-85 at different sweep rates; (d) Current density versus sweep rate at -0.25 V