

# **Tuning the catalytic activity of Ir@Pt nanoparticles through controlling Ir core size on cathode performance for PEM fuel cell application**

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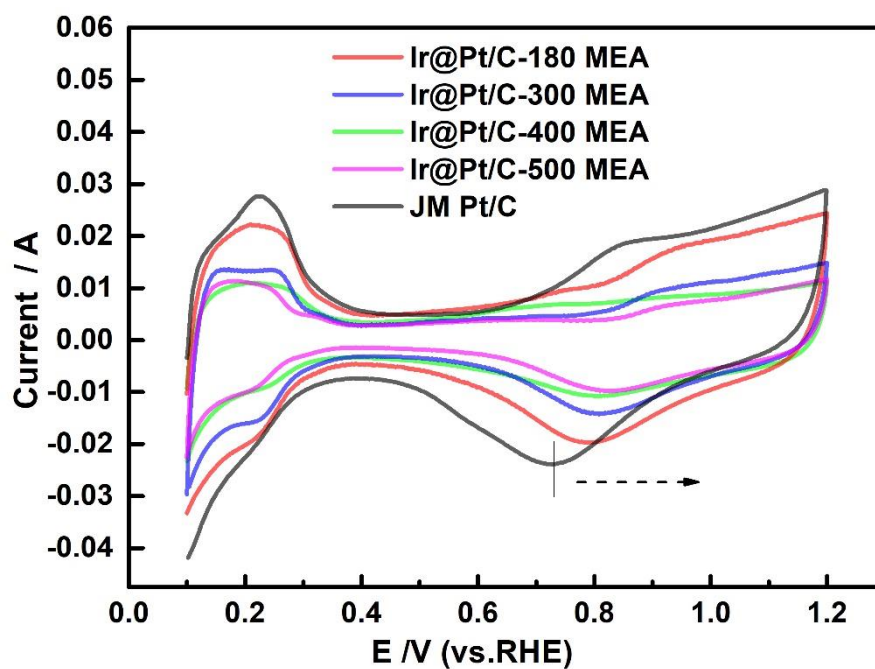
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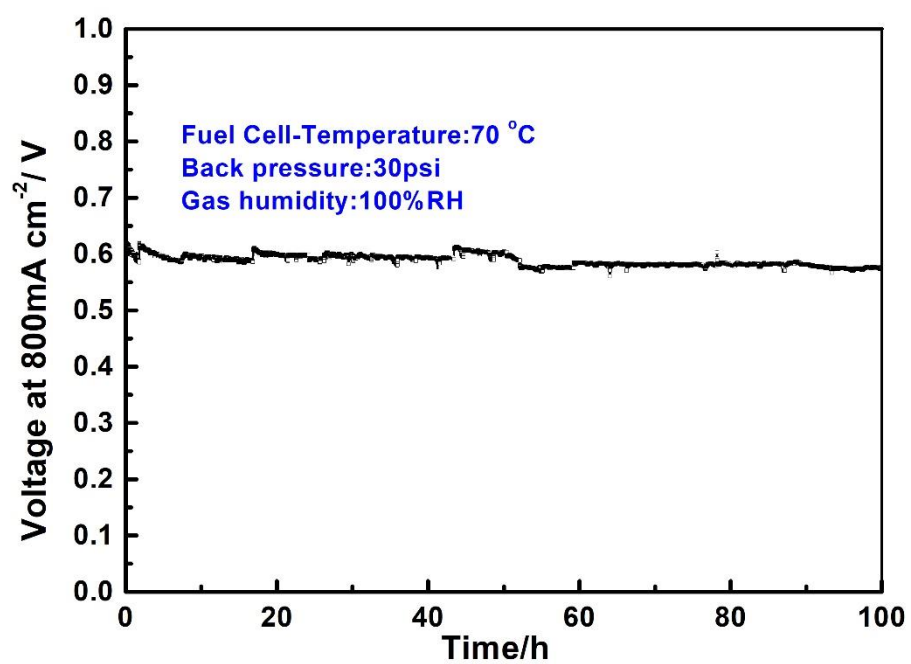
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**Figure. S1** Cyclic voltammograms of the MEAs with different cathodes. The experiments were conducted in a single cell at room temperature, using humidified  $N_2$  at the cathode (working electrode) and humidified  $H_2$  at the anode (counter electrode cum reference electrode). Scan rate:  $50 \text{ mV s}^{-1}$



**Figure. S2** Preliminary stability test of the Ir@Pt/C-300 MEA at 800 mA cm<sup>-2</sup> for 100 h