

Supporting Information:

Nanostructured Fe-Ag electrocatalysts for the oxygen reduction reaction in alkaline media

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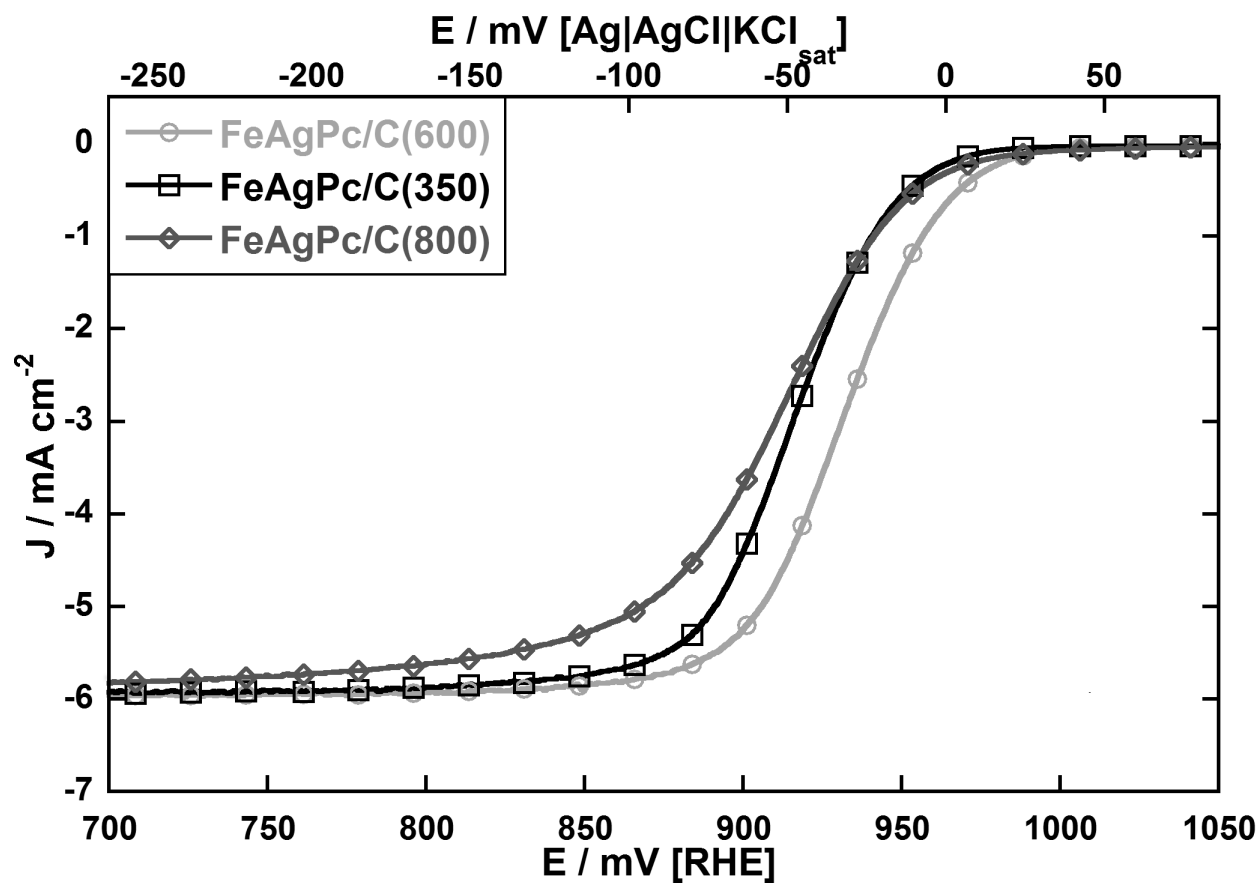


Fig. S1. Polarization curves for the ORR of FeAgPc/C(350), FeAgPc/C(600) and FeAgPc/C(800). Experimental conditions: KOH 0.1 M, O₂ saturated, RDE $\Omega = 1600$ rpm, linear sweep voltammetry 5 mVs⁻¹, ref. electrode AgCl|KCl_{sat} (all potentials are referred to RHE).

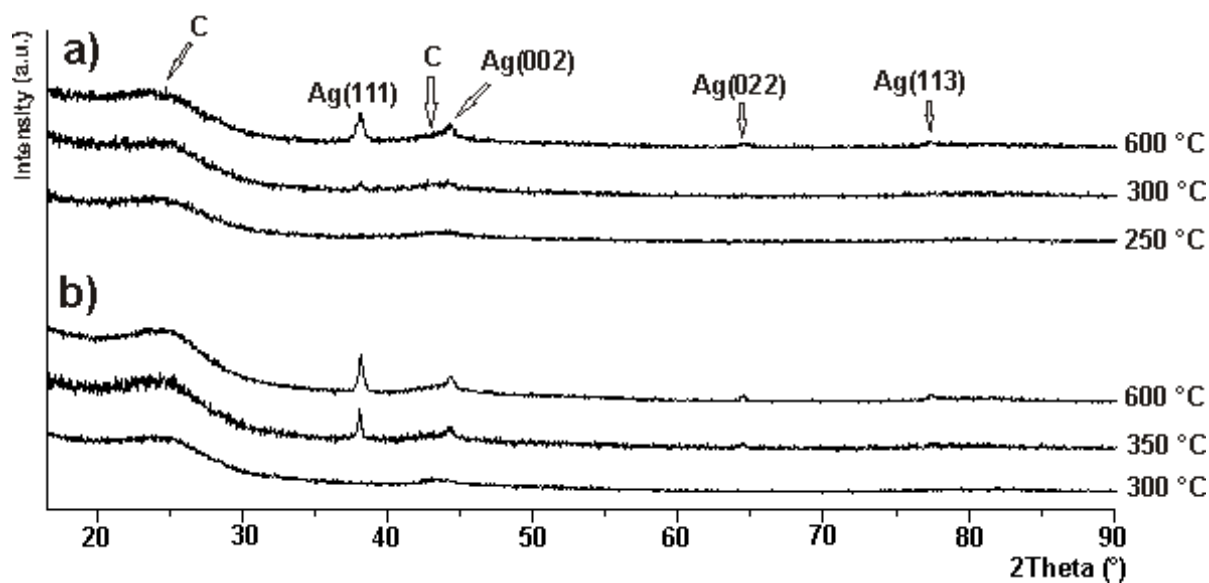


Fig. S2. XRPD traces acquired after heat treatment (2 h) of AgPc/C (a) and of FeAgPc/C (b) under Ar at different temperatures.

S3. Synthesis of Ag/C (3 wt%):

An aqueous solution of AgNO_3 (0.03 g in 20 mL) was added drop wise to a vigorously stirred suspension of 0.5 g of Ketjen Black in 100 mL of water. The pH was adjusted to 12 by the addition of KOH (1 M) and the mixture was stirred for 30 mins at room temperature. The resulting solid was collected by filtration, washed thoroughly with water until $\text{pH} = 7$, and dried to constant weight at 70 °C. This precursor was introduced into a quartz reactor and heated to 200 °C under a continuous flow of H_2 for 2 h. After cooling to room temperature under continued H_2 flow, the black powder was milled before use (rotary ball mill, 20 mins, 250 rpm). Yield 0.49 g, Analysis ICP-AES, Ag 3.1 wt%

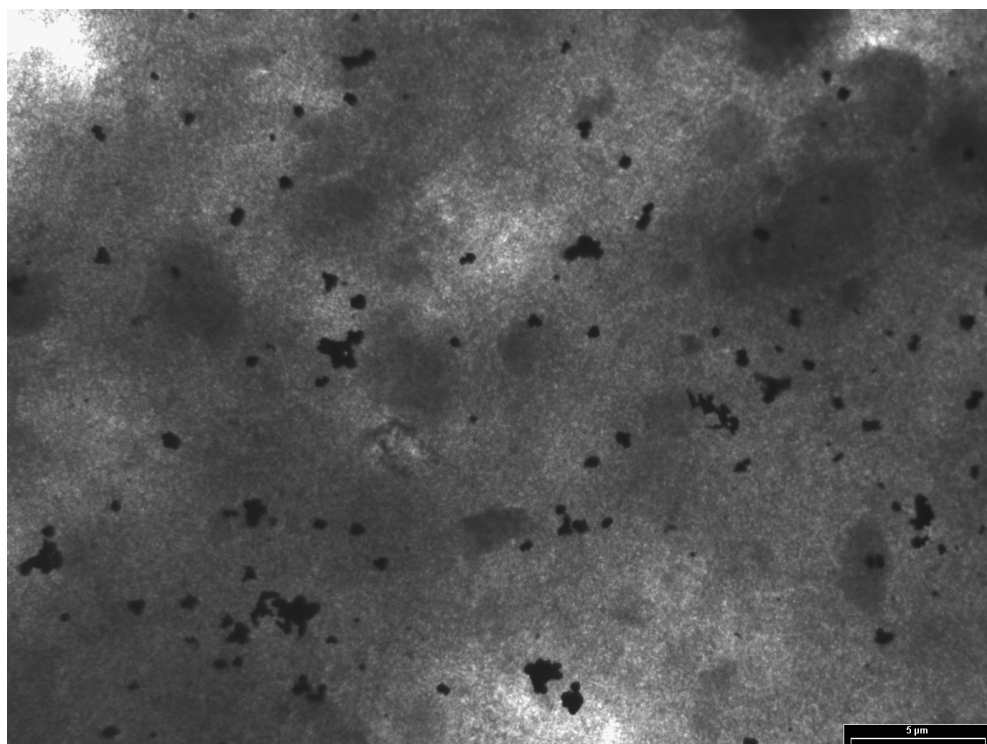


Fig. S3. TEM image of Ag/C (3.1 wt%), scale bar = 5 μm .

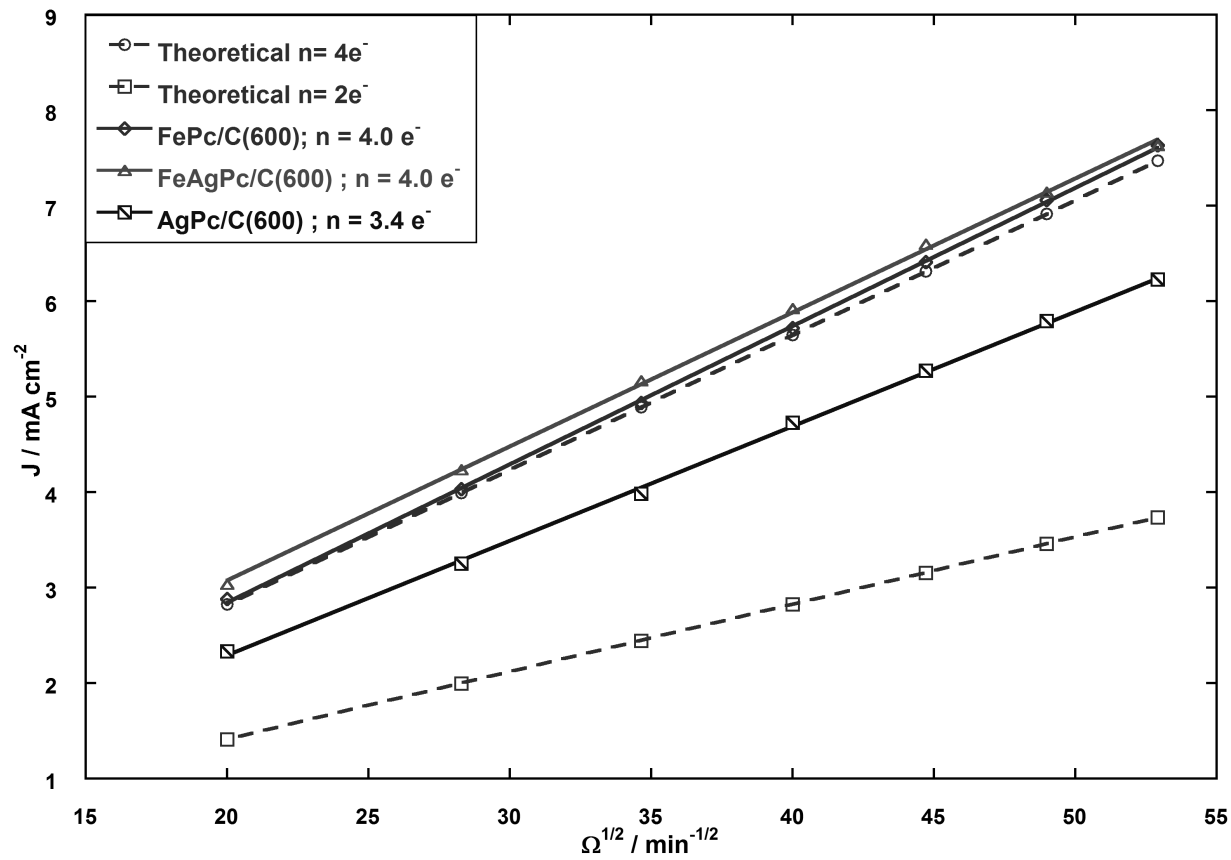


Fig. S4. Koutecky–Levich plots for FePc/C(600), AgPc/C(600) and FeAgPc/C(600).