

SUPPORTING INFORMATION

Iron oxide decorated N-doped carbon derived from Poly (ferrocene-urethane)
interconnects for oxygen reduction reaction

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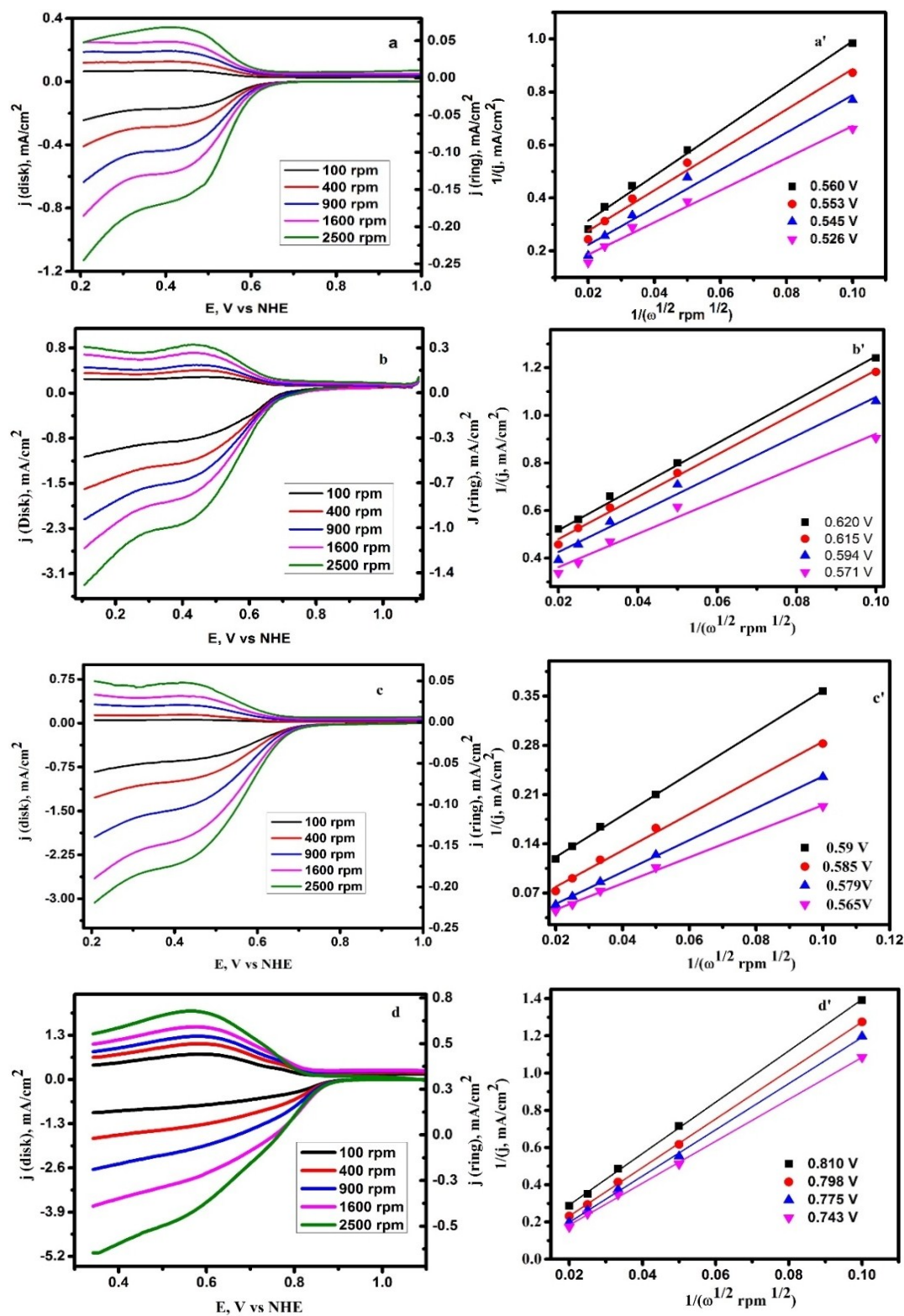


Figure S-1. Steady state LSV responses of RRDE at different rotation rates in the scan rate of 0.005 V/s in O₂ gas saturation 0.1 M KOH and its corresponding K-L plots for (a-a') PFU-600; (b-b') PFU-800; (c-c') PFU-1000 and (d-d') F-P-800

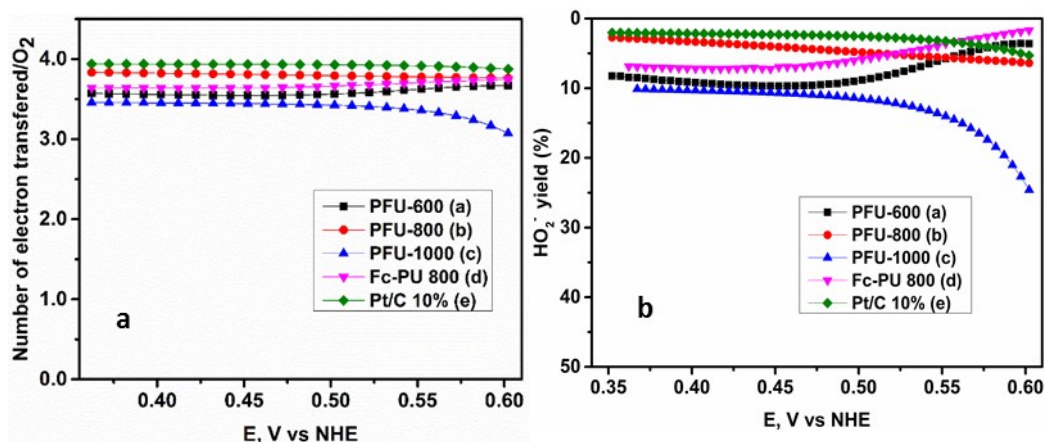


Figure-S-2. (a) Number of electron transferred per oxygen and (b) the HO_2^- yield (%) of PFU modified electrocatalysts on glassy carbon disk electrode synthesized at different temperatures (Calculated from LSV response from RRDE at 1600 rpm)

| Material | Number of electrons, n (calculated from B value) | % H_2O_2 at 0.45 V |
|------------|---|------------------------------------|
| PFU - 600 | 3.6 | 15.7 |
| PFU - 800 | 3.9 | 5.6 |
| PFU - 1000 | 3 | 41.5 |
| F - P- 800 | 3.2 | 37.8 |

Table-S1- Number of electrons (n) and % H_2O_2 generated for PFU pyrolyzed at different temperatures and F-P-800

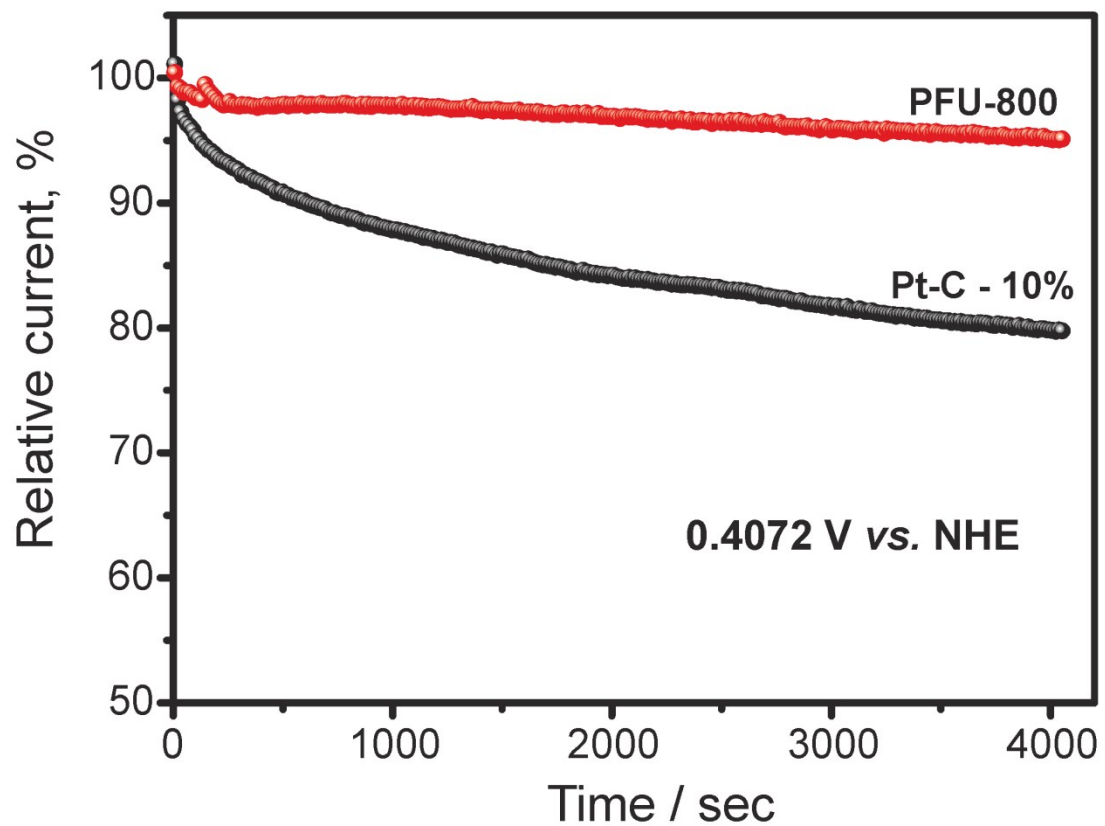


Figure S-3. Chronoamperometry of PFU-800 and Pt-C-10% stepped at a potential of 0.41 V vs. NHE in 0.1 M KOH.