Supporting information

Low Temperature Electrolysis for Iron Production

Qiang Wang, Yi Zhu, Qiuyang Wu, Eric Gratz, Yan Wang*

Department of Mechanical Engineering, Worcester Polytechnic Institute

100 Institute Road, Worcester, MA 01609

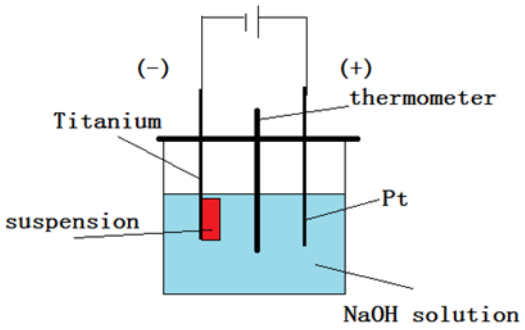

Figure S 1. The two-electrode electrolytic cell for Fe_2O_3 electrolysis.

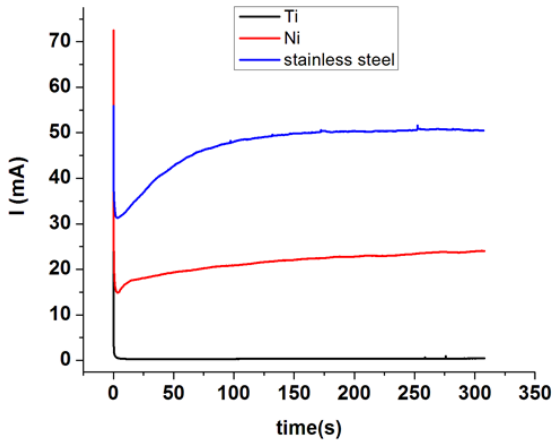

Figure S 2. The background current with of three kinds of current collector. Ti plate, Ni plate and stainless steel plate were immersed into NaOH solution separately, and 1.7 V of voltage was applied between the tested material and the Pt foil counter electrode.

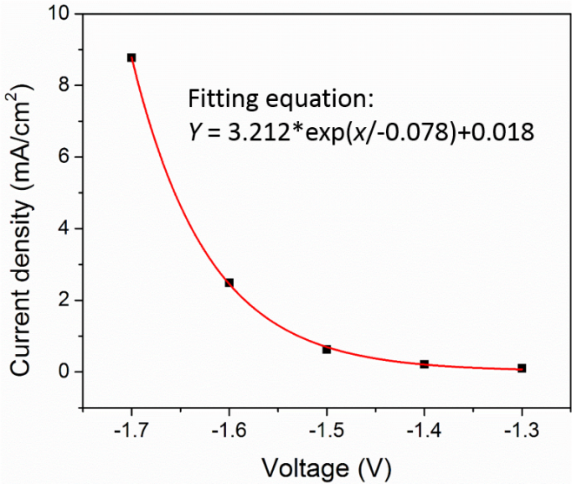

Figure S 3. The polarized current density with different voltages setting up in the two-electrodes cell for electrolyzing Fe_2O_3. The current density was recorded when electrolyzing carried on for half an hour.