

Supplementary Materials

Electrocatalytic Hydrogen Evolution Reaction from Acetic Acid over Gold Immobilized Glassy Carbon Surface

Basmah H. Alshammari ¹, Humayra Begum ², Fatma A. Ibrahim ³, Mohamed S. Hamdy ³, Tahamida A. Oyshi ², Nazia Khatun ⁴ and Mohammad A. Hasnat ^{2,*}

¹ Chemistry Department, Faculty of Science, University of Hail, Hail, P.O. Box 2440, Hail 81451, Saudi Arabia

² Electrochemistry & Catalysis Research Laboratory (ECRL), Department of Chemistry, School of Physical Sciences, Shahjalal University of Science and Technology, Sylhet 3114, Bangladesh

³ Catalysis Research Group (CRG), Department of Chemistry, College of Science, King Khalid University, P.O. Box 9004, Abha 61413, Saudi Arabia

⁴ Industrial Physics Division, Bangladesh Council of Scientific and Industrial Research (BCSIR), Dhaka 1205, Bangladesh

* Correspondence: mah-che@sust.edu (M.A.H.)

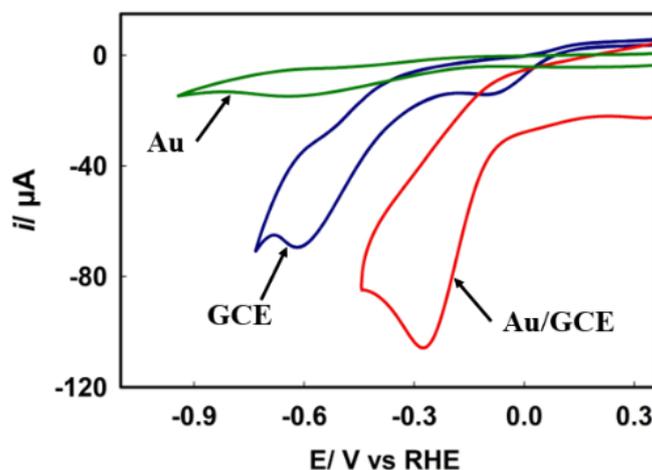


Figure S1. HER observation from 5mM acetic acid in 0.1M KCl using Au, GCE and Au/GCE electrodes obtained scan rate of 0.1 V s^{-1} .

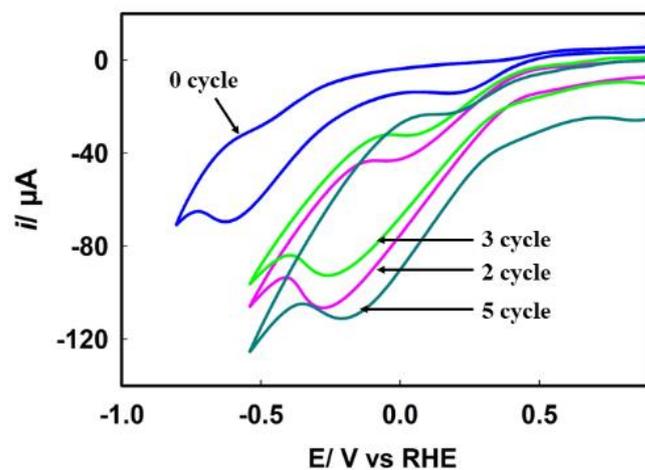


Figure S2. Optimization of Au deposition on GCE for HER from 5mM acetic acid in 0.1M KCl. The electrodes having different amount of Au deposition was executed by cycling the potential in 0.01 M HAuCl_4 solution from 0 V to -1.0 V with a scan rate of 0.1 V s^{-1} for different number of cycles.