

Supporting file

Protein-Aided Synthesis of Copper-Integrated Polyaniline Nanocomposite Encapsulated with Reduced Graphene Oxide for Highly Sensitive Electrochemical Detection of Dimetridazole in Real Samples

Kartik Behera ¹, Bhuvanenthiran Mutharani ¹, Yen-Hsiang Chang ², Monika Kumari ³ and Fang-Chyou Chiu ^{1,2,*}

¹ Department of Chemical and Materials Engineering, Chang Gung University, Taoyuan 333, Taiwan; b.kartik1991@gmail.com (K.B.); mutharani@gmail.com (B.M.)

² Department of General Dentistry, Chang Gung Memorial Hospital, Taoyuan 333, Taiwan; chy4d25@cgmh.org.tw

³ Institute of Cellular and Organismic Biology, Academia Sinica, Taipei 115, Taiwan; mkumari.biotech@gmail.com

* Correspondence: maxson@mail.cgu.edu.tw

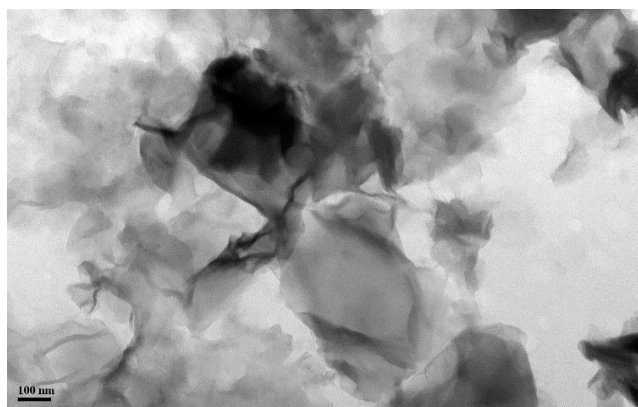


Figure S1. TEM image of rGO.

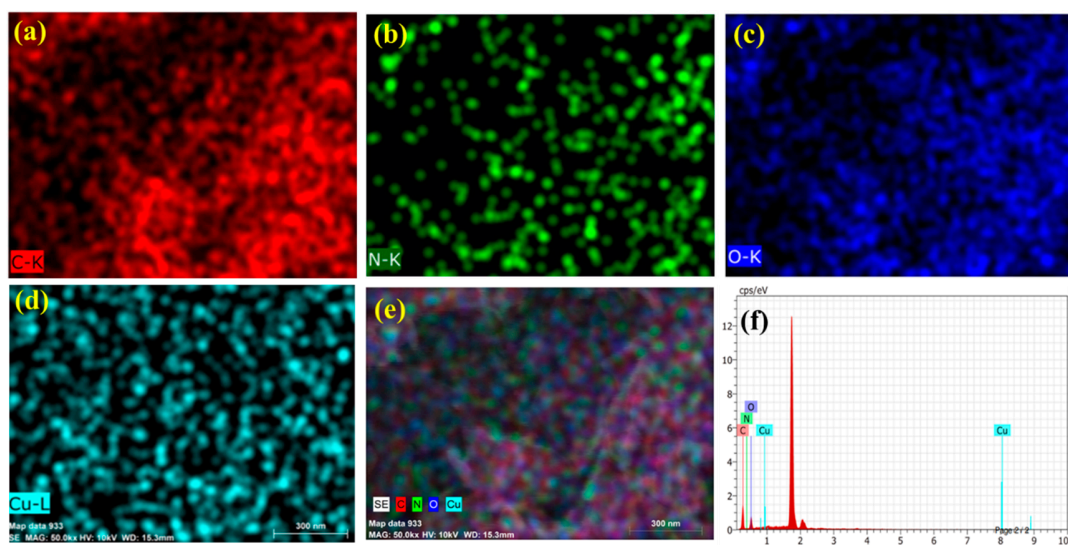


Figure S2. (a-e) Elemental mapping and (f) EDX image of PANI-Cu@BSA/rGO.

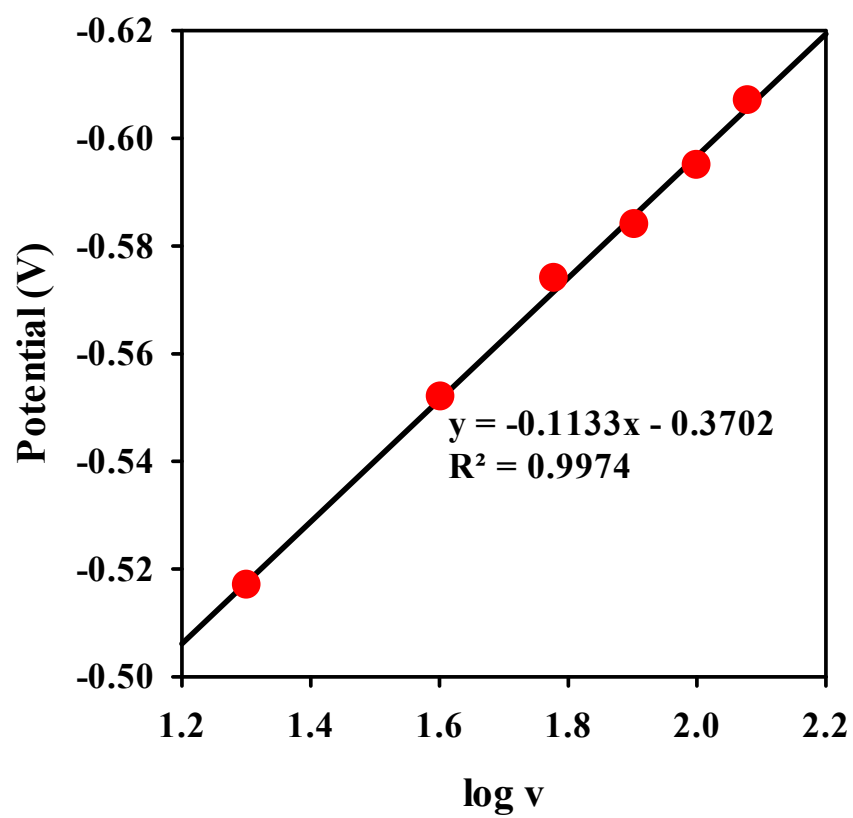


Figure S3. Plot of potential vs. log of scan rate.

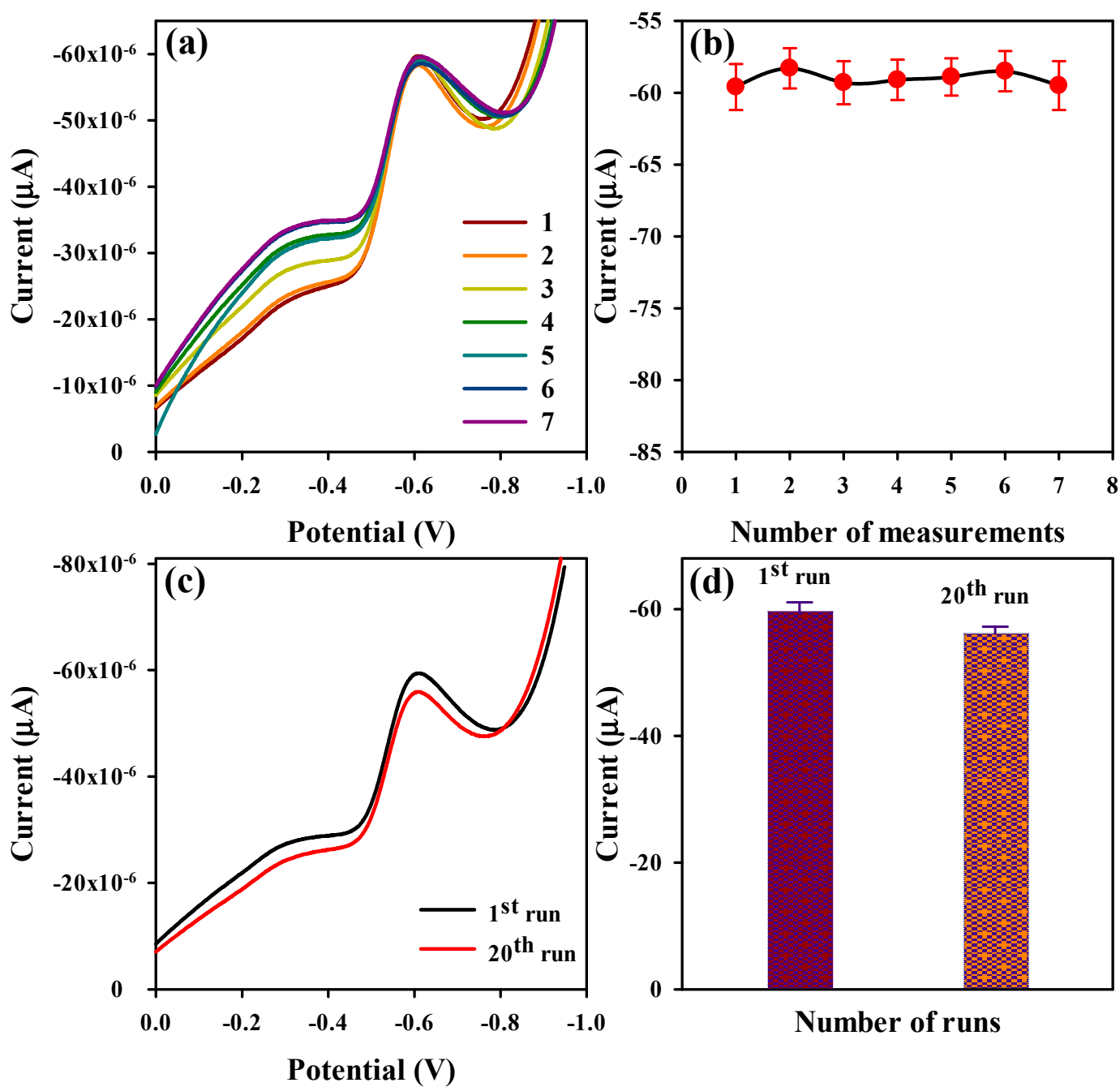


Figure S4. (a and b) LSV profile of repeatability of PANI-Cu@BSA/rGO/SPCE towards the detection of DMZ at 7 consecutive measurements and the corresponding plot of current vs. the number of measurements, (c and d) LSV profile of operational stability of PANI-Cu@BSA/rGO/SPCE on the detection of DMZ at 50 mV/s and plot of current vs. Number of runs.

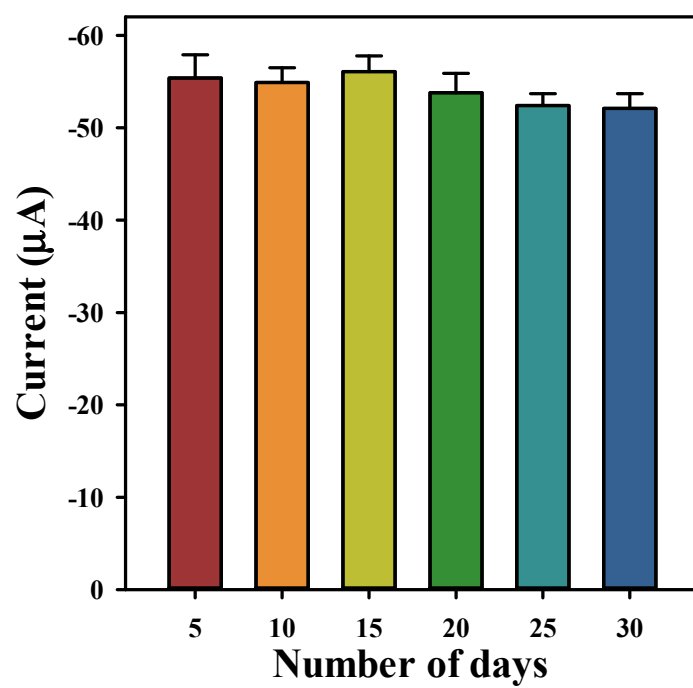


Figure S5. Storage stability of the sensor.