

Vertical Graphene-Based Printed Electrochemical Biosensor for Simultaneous Detection of Four Alzheimer's Disease Blood Biomarkers

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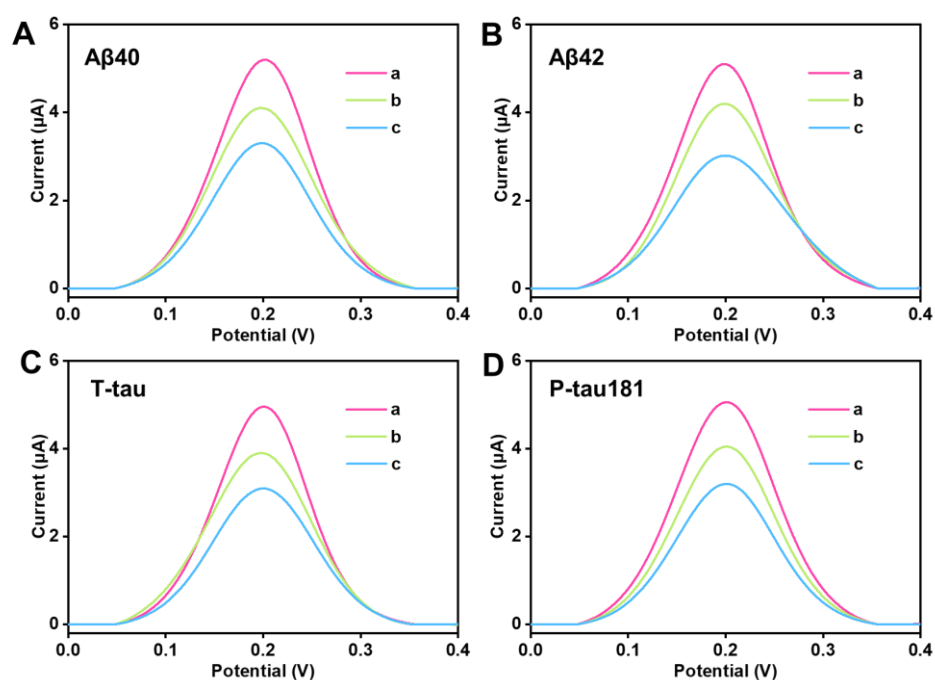


Figure S1. The characterization of modification processes of electrode surface. (A)DPV signals of the VG@nanoAu working electrode (curve a) modified with Aβ40 antibody (curve b), Aβ40 antibody + BSA (curve c). (B) DPV signals of the VG@nanoAu working electrode (curve a) modified with antibody of Aβ42 antibody (curve b), Aβ42 antibody + BSA (curve c). (C) DPV signals of the VG@nanoAu working electrode (curve a) modified with T-tau antibody (curve b), T-tau antibody + BSA (curve c). (D)DPV signals of the VG@nanoAu working electrode (curve a) modified with P-tau181 antibody (curve b), P-tau181 antibody + BSA (curve c). The DPVs are carried out in 5 mM [Fe(CN)₆]³⁻/[Fe(CN)₆]⁴⁻ solution containing 0.1 M KCl at 0.1 V/s.

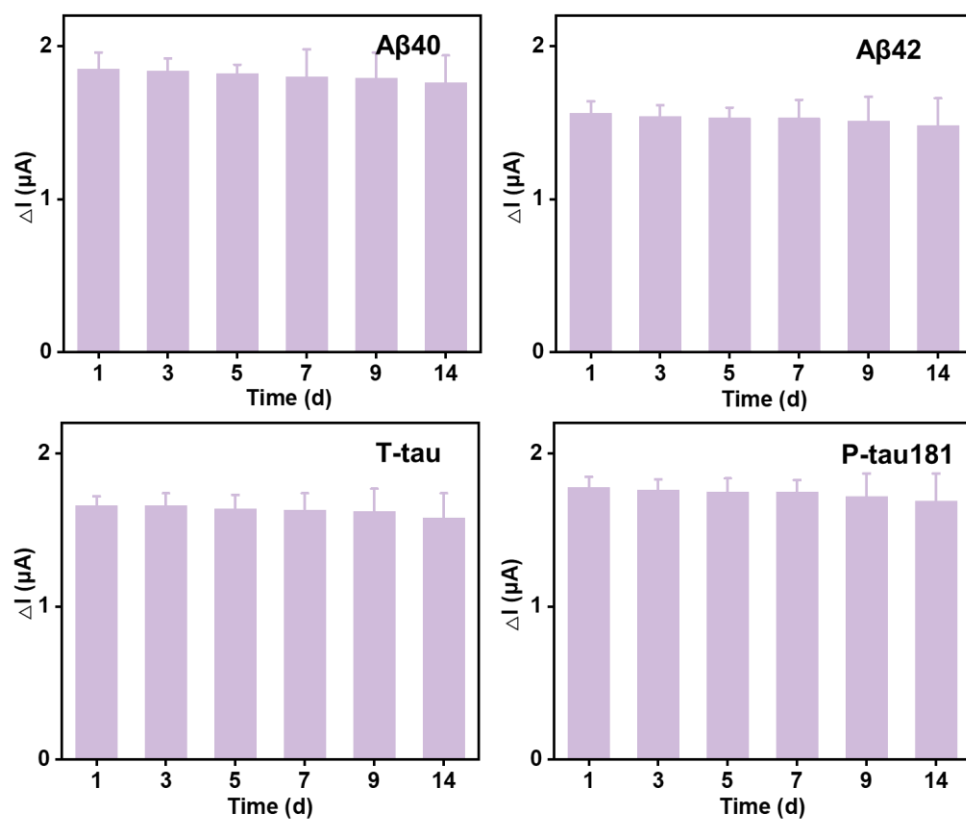


Figure S2. Stability of the printed electrochemical sensor for detecting four AD biomarkers.