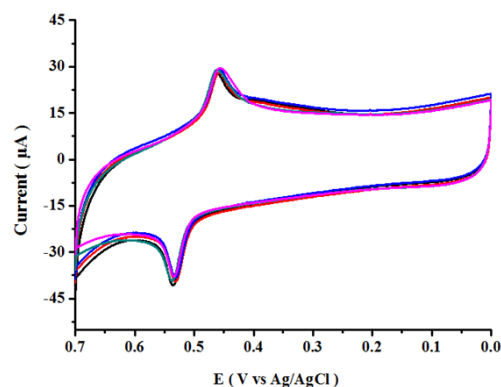


Electronic Supplementary Information (ESI) for  
Design and Preparation of Non-enzymatic Hydrogen Peroxide Sensor  
based on a Novel Rigid Chain Liquid Crystalline Polymer/Graphene  
Oxide Composite

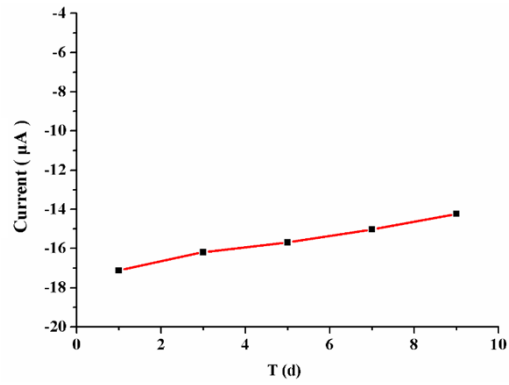
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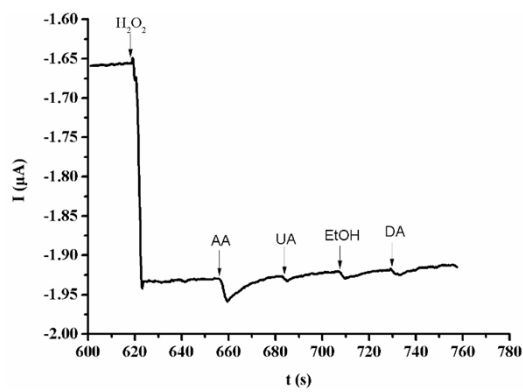
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S-Fig 1. The same electrode at 10 µM H<sub>2</sub>O<sub>2</sub> for five times cyclic voltammogram.



S-Fig 2. Cyclic voltammogram of PFECS/rGO/GCE response current of 10  $\mu\text{M}$   $\text{H}_2\text{O}_2$  every 3 days.



S-Fig 3. Amperometric responses of PFECS/rGO/GCE upon the successive addition of 50  $\mu\text{M}$   $\text{H}_2\text{O}_2$ , 5 mM dopamine (DA), 5 mM uric acid (UA), 5 mM ascorbic acid (AA) and 5 mM ethanol into  $\text{N}_2$ -saturated 0.2 M pH 7 PBS with an applied potential 0.4 V under a stirring condition.