Probing the unexpected behavior of AuNPs migrating through nanofibers: a new strategy for the fabrication of carbon nanofibers-noble metal nanocrystals hybrid nanostructures
Han Zhu\textsuperscript{a}, MingLiang Du\textsuperscript{a,b,*}, Ming Zhang\textsuperscript{a,b}, MeiLing Zou\textsuperscript{a}, TingTing Yang\textsuperscript{a}, LiNa Wang\textsuperscript{b}, JuMing Yao\textsuperscript{a,b}, BaoChun Guo\textsuperscript{c}

\textsuperscript{a} Department of Materials Engineering, College of Materials and Textiles, Zhejiang Sci-Tech University, Hangzhou 310018, P. R. China
\textsuperscript{b} Key Laboratory of Advanced Textile Materials and Manufacturing Technology, Zhejiang Sci-Tech University, Ministry of Education, Hangzhou 310018, P. R. China
\textsuperscript{c} Department of Polymer Materials and Engineering, South China University of Technology, Guangzhou 510640, P. R. China.

\textbf{Figure S1} Schematic of chemical reactions in the graphitization process.
**Figure S2** Amperometric response of the fabricated CNFs/GCE (1000 °C, 2 °C/min) sensor to successive addition of different concentration of $\text{H}_2\text{O}_2$ to 1.0 M PBS.

**Figure S3** The CVs cycles of the prepared Au-CNFs-1000 (2 °C/min) functionalized GCE with 5.0 mM HQ in 0.1 M PBS in the presence of 5.0 mM $\text{H}_2\text{O}_2$ (scan rate, 50 mV s$^{-1}$).