Electronic Supplementary Information

Graphene oxide as a nano-platform for ATP detection based on aptamer chemistry

Wen Dan Pu, ^a Li Zhang ^{a b} and Cheng Zhi Huang*^{a c}

^aEducation Ministry Key Laboratory on Luminescence and Real-Time Analysis, College of Chemistry and Chemical Engineering, Southwest University, Chongqing 400715, China

^bDepartment of Chemistry, Nanchang University, Nanchang 330031, China
^cCollege of Pharmaceutical Sciences, Southwest University, Chongqing 400715,
China

Fax: +86-23-68866796; Tel: +86-23-68254659; E-mail: chengzhi@swu.edu.cn (C. Z. Huang)

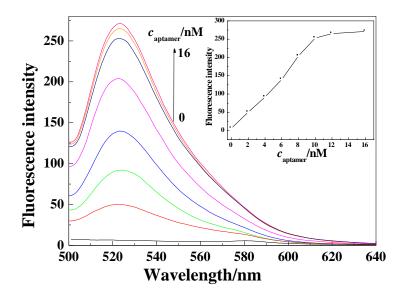


Fig. S1 Effect of different concentrations of aptamer on the fluorescence intensity of FAM-DNA in the presence of GO. Inset: fluorescence intensity versus concentration of aptamer. Concentrations: FAM-DNA, 10 nM; NaCl, 30 mM; GO, 8.2 μg mL⁻¹; Tris-HCl (pH 7.4).

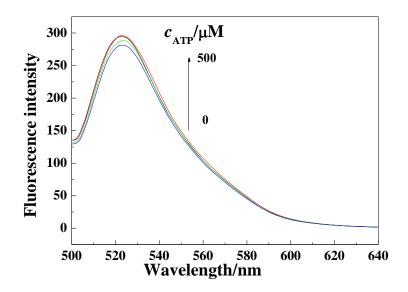


Fig. S2 Fluorescence emission spectra of FAM-DNA in the presence of different concentrations of ATP. Concentrations: FAM-DNA, 10 nM; NaCl, 30 mM; Tris-HCl (pH 7.4).

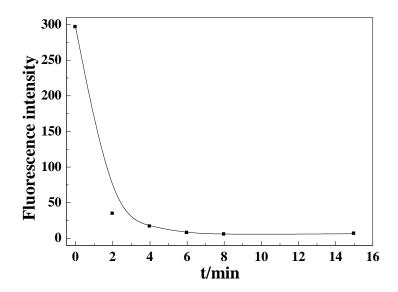


Fig. S3 Fluorescence quenching of FAM-DNA by GO as a function of time. Concentrations: FAM-DNA, 10 nM; NaCl, 30 mM; GO, 8.2 μg mL⁻¹. Tris-HCl (pH 7.4).