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## **Supplementary Materials**

## Facile preparation of N,S-graphene oxide nanosheets as fluorescence "off-on" sensing platform for sensitive detection of biothiols

Xiuxiu Zhao, Xin Lin, Jianhua Wang, Xuwei Chen\*

Department of Chemistry, College of Sciences, Northeastern University,

Shenyang, China, 110819.

E-mail: chenxuwei@mail.neu.edu.cn

Fax: +86 24 83676698; Tel: +86 24 83684533.



Figure S1 High-resolution C1s spectra (A); high-resolution O1s spectra (B); high-resolution N1s spectra (C) and high-resolution S2p spectra (D) of N,S-GO



Figure S2. Fluorescence behavior of N,S-GO under different pH (A); ionic strength(B); irradiation time (C) and storage time(D)



Figure S3. XRD pattern of AgNPs



Figure S4. Stern–Volmer plot for the quenching of N,S-GO by AgNP under 25°C(A),  $35^{\circ}C(B)$  and  $45^{\circ}C(C)$ 



Figure S5. The effect of system pH (A); reaction temperature (B) and reaction time(C) on the detection sensitivity.