Electronic Supplementary Information:

Ultra sensitive and wide-range pH sensor based on the BSA-capped Cu nanoclusters fabricated by fast synthesis through the use of hydrogen peroxide additive

Liao Xiaoqing,[a] Li Ruiyi[a] and Li Zaijun*[a,b]

[a] *School of Chemical and Material Engineering, Jiangnan University, Wuxi, 214122, China*

[b] *The University of Birmingham, Edgbaston, Birmingham, BI5 2TT, United Kingdom*

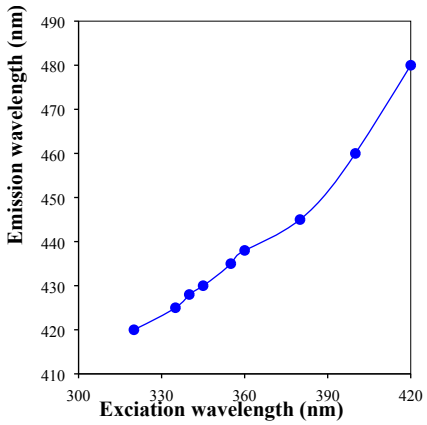

Fig.s1 The relationship curve of the excitation wavelength with the emission wavelength

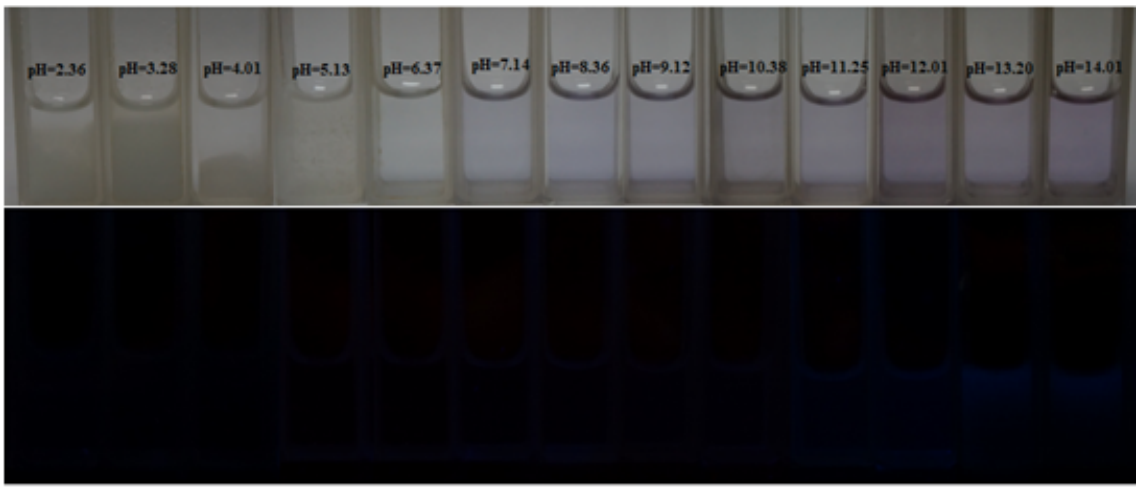

Fig.s2 Photographs for recording color changes of the CuNCs-c in the BR buffer at different pH value under visible light (upper) and UV light (under).

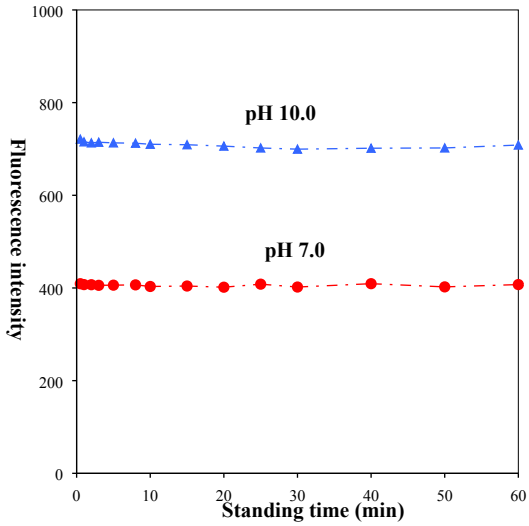

Fig.s3 The effect of standing time on the pH measurement

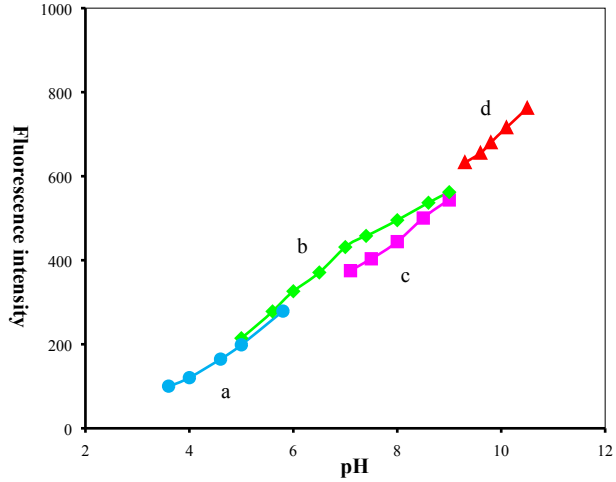

Fig.s4 Relationship curves of the fluorescence intensity with the pH values in the HAc-NaAc (a), PBS buffer (b) , Tris-HCl (c) and borax-HCl buffer (d).