

## Supplementary Information

### Peanut Shell Carbon Quantum Dots Modified with Citric Acid: Amplifying Visual Detection of Fluorescent Sensitivity for Cu<sup>2+</sup>

Huma Javeria<sup>a</sup>, Muhammad Qamer Abbas<sup>b</sup>, Shu-Huan Chen<sup>a</sup> and Zhen-xia Du <sup>\*aa</sup> *College of Chemistry, Beijing University of Chemical Technology, Beijing 100029, People's Republic of China*

#### Corresponding Authors

\* Zhenxia Du, e-mail: [duzx@mail.buct.edu](mailto:duzx@mail.buct.edu).

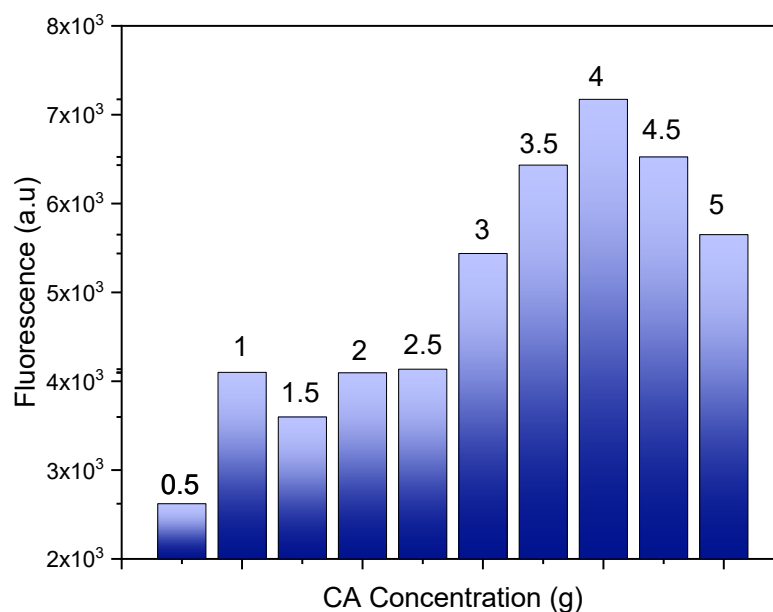


Fig. S1 CA concentration optimization

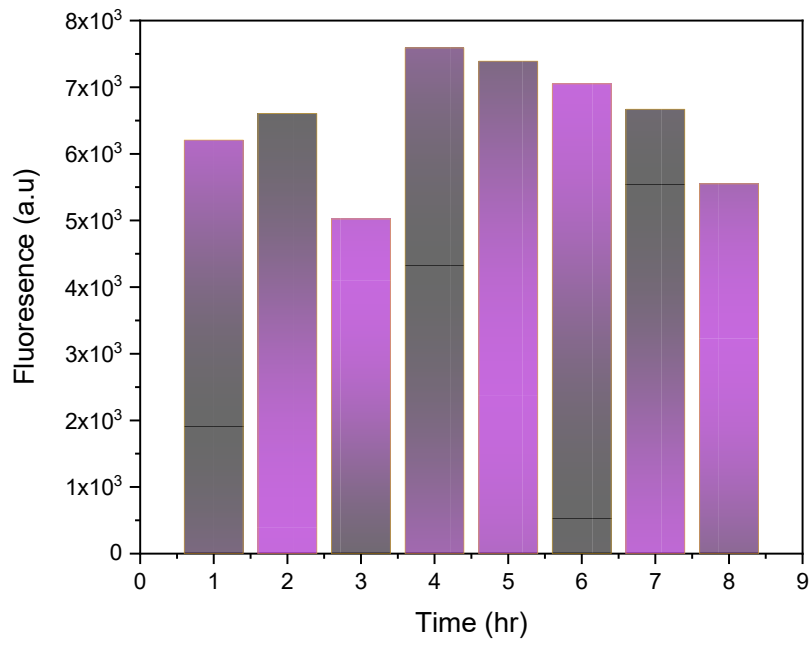


Fig. S2 Optimization of time for PSCA-CQD pyrolysis

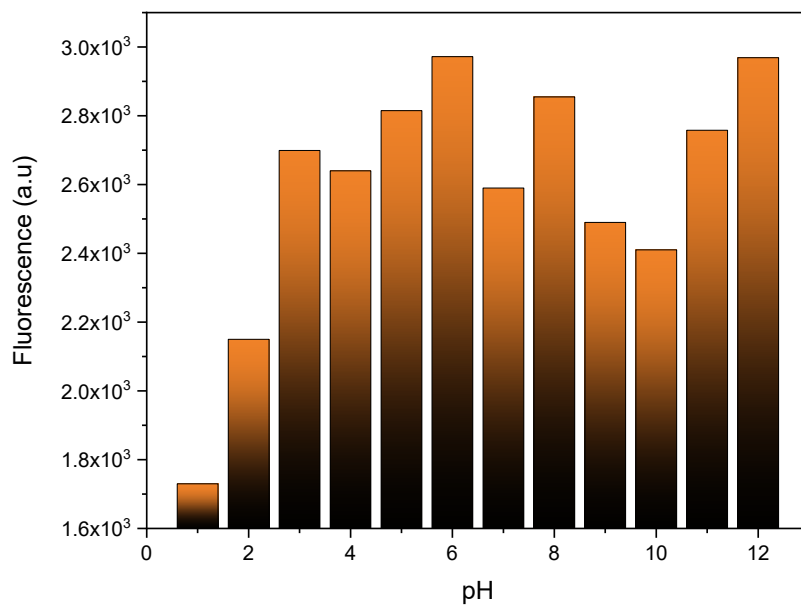


Fig. S3 Fluorescent stability of PSCA-CQD in pH ranging from 1-12

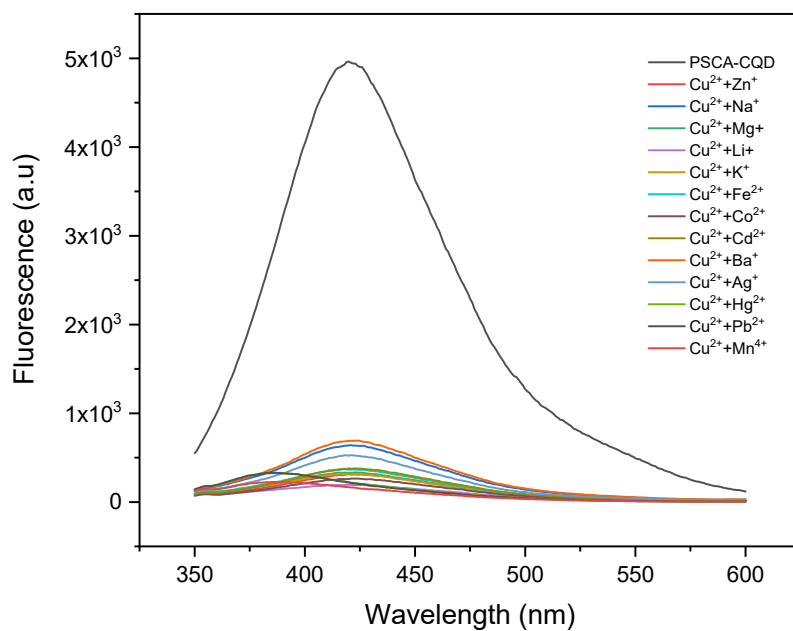


Fig. S4 Fluorescence Spectrum of metal interferences

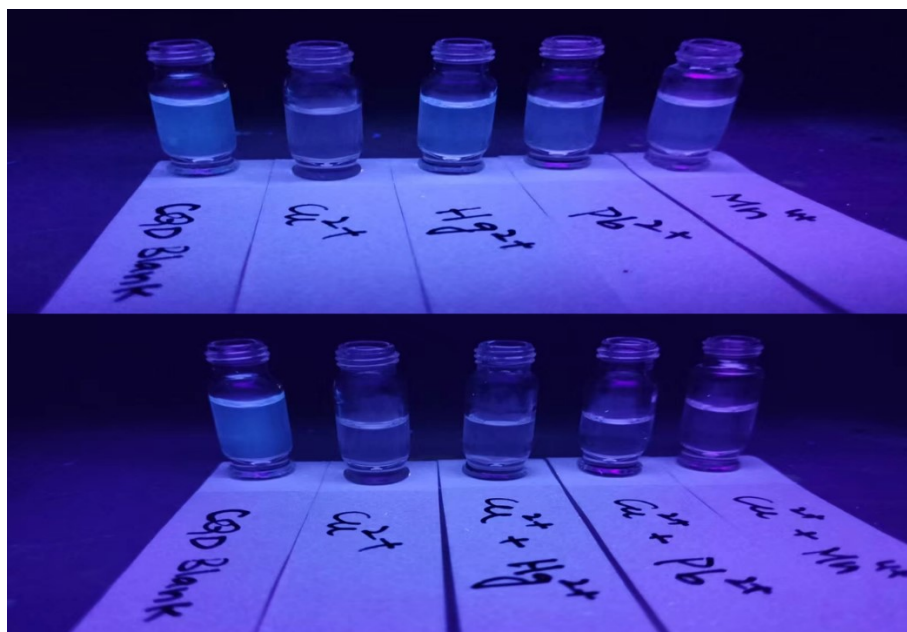


Fig. S5 Digital image of fluorescence sensitivity and selectivity of PSCA-CQD with Mn<sup>4+</sup>, Pb<sup>2+</sup>, and Hg<sup>2+</sup>