Synthesis optimization of rich-urea carbon-dots optical probe and its application in detection of H_2S in desulfurizer and wastewaters

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Fig. S1. The absorbance change of urea/CA-CDs under both aerobic and nonoxygen conditions (a) and effects of the standing time on the CDs color (b) and absorption spectrum (c).



Fig. S2. Correlation between urea/CA-CDs concentration and absorbance.



Fig. S3. Effects of temperature (a) and reaction time (b) as well as various surfactants (c-f) on the absorbance of urea/CA-CDs- S^{2-} reaction system.



Fig. S4. Effect of MDEA and DEA on colors of CDs and CDs-S $^{2\text{-}}$