

supplementary materials

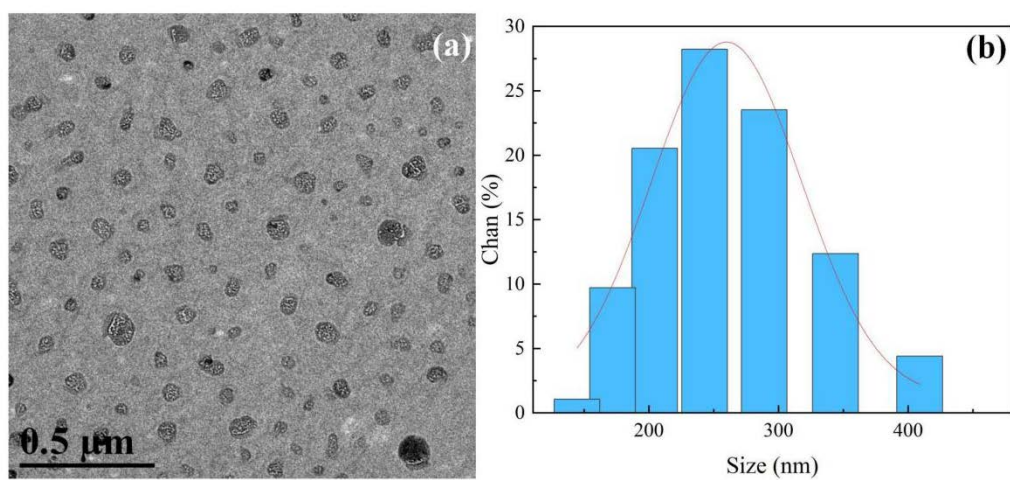


Figure S1. (a) TEM image of Cu NCs at pH 5.4; (b) Particle size distribution of copper nanoclusters.

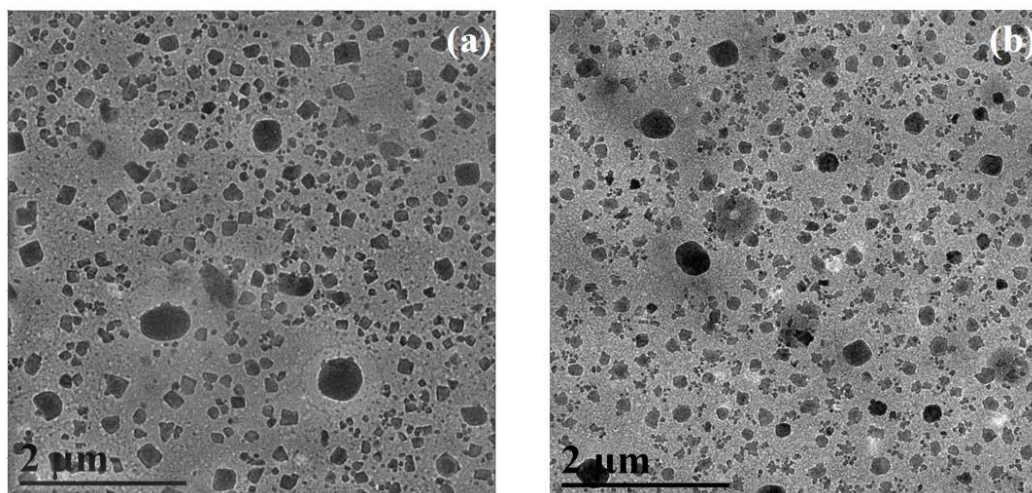


Figure S2. (a) TEM image under pH 10.3; (b) TEM image under pH 2.8.

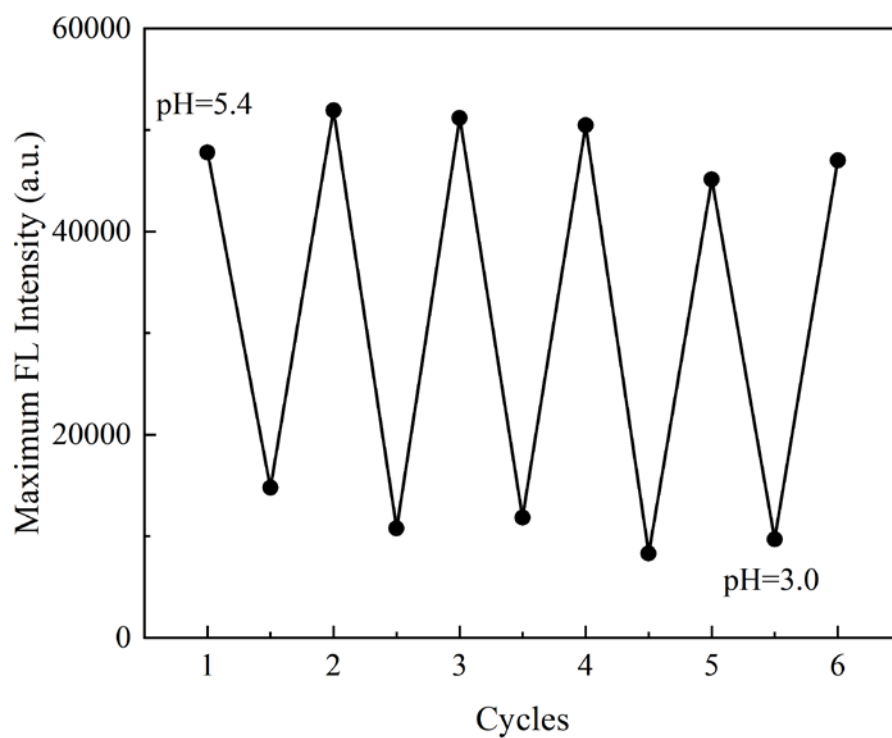


Figure S3. The reversibility of the fluorescence intensity of Cu NCs in the pH range of about 3.0 to 5.4 during continuous cycles. For an excitation wavelength of about 381 nm, the maximum fluorescence emission intensity is monitored at about 619 nm.

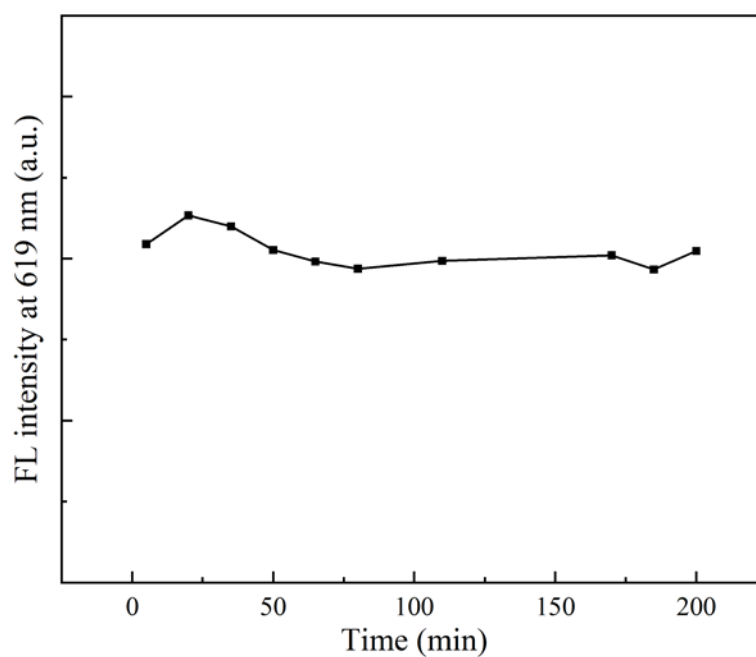


Figure S4. Fluorescence intensity of 619 nm change curve with time.

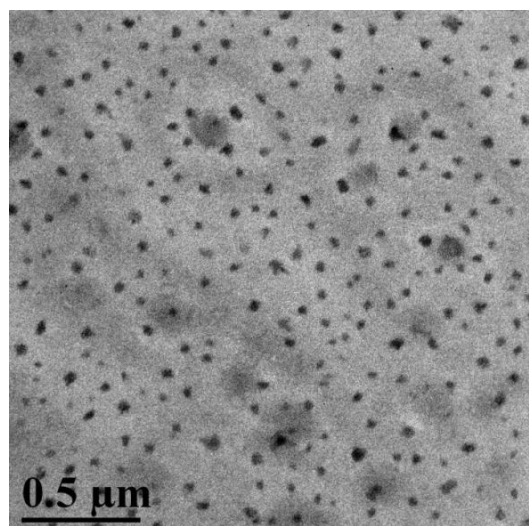


Figure S5. TEM image of Cu NCs with ascorbic acid.

Table S1. Comparison of AA sensors with other methods.

Method	Active material	Linear range (μM)	Detection limit (μM)	Reference
Colorimetry	Fe(II)-1,2ortho-phenanthroline complex	5.68-340.91	2.95	[1]
	Pd-Pt-Ir	25–800	11.7	[2]
Electrochemistry	Cu HC	5-40	1.66	[3]
	MWCNTs	18.72-1850	0.18	[4]
Fluorescence	LDH-GQDs	5-300	1.72	[5]
	F-NCDs	0-1000	2.6	[6]
	N, S-co-CDs	0-150	2.31	[7]
	Y-CDs/Cr-MOF@MIPs	25-425	10	[8]
	FFC-modified Cu NCs	0.1-1	0.075	This work

References

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