

Supporting Information

One-step synthesis of non-symmetric CuI nanoplates for high sensitive nonenzymatic glucose biosensor

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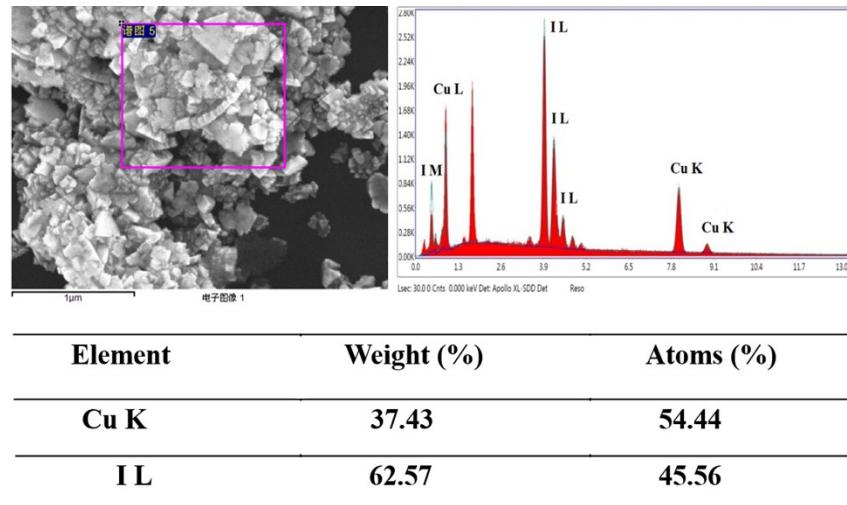


Figure S1. EDX analysis for CuI nanoplates.

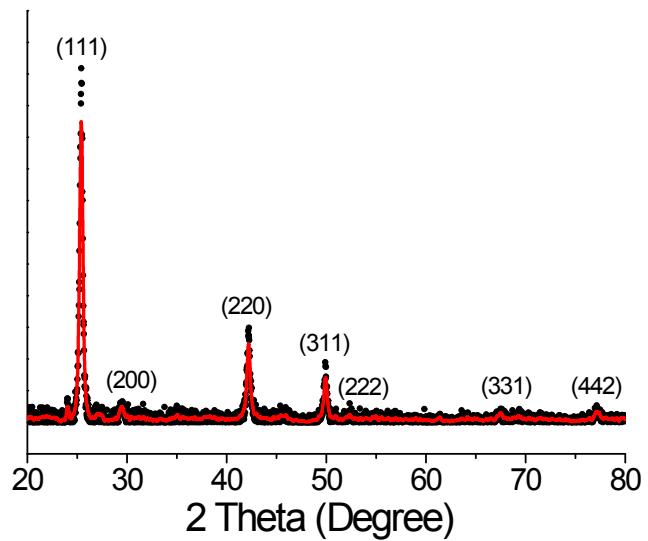


Figure S2. PXRD patterns of CuI nanoplates.

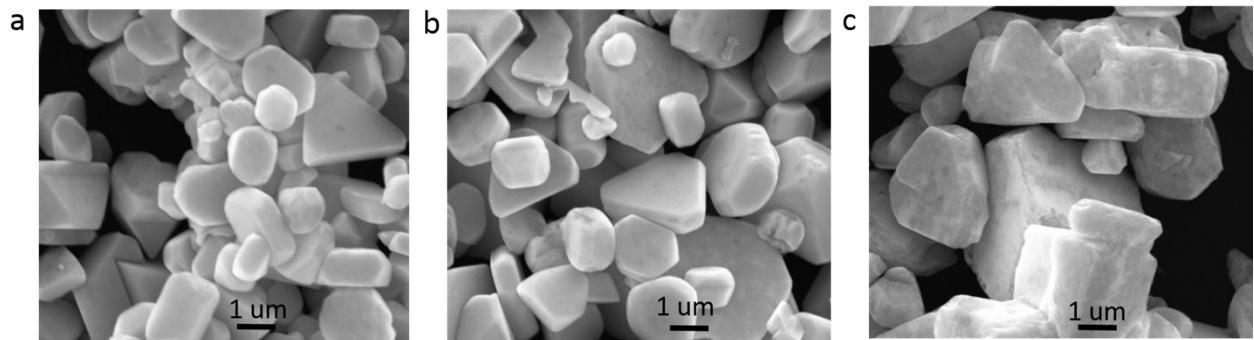
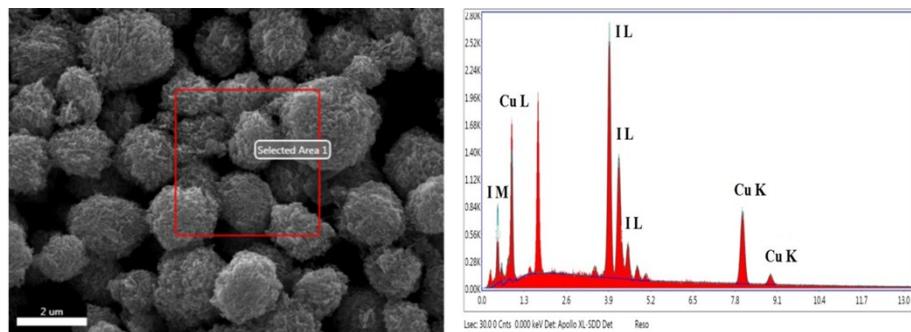
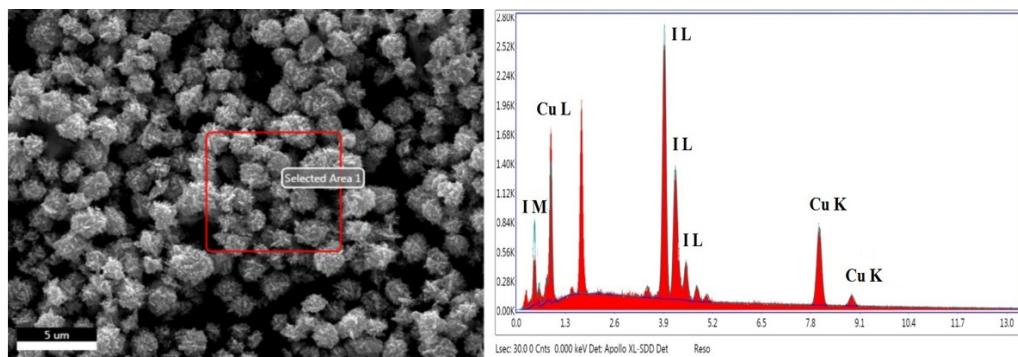


Figure S3. SEM images of CuI particles synthesized without PVP, and the concentrations of CuCl₂ are (a) 2 mM (b) 4 mM and (c) 6 mM.



Element	Weight (%)	Atoms (%)
Cu K	34.97	51.79
I L	65.03	48.21

Figure S4. EDX analysis for CuI nanoflowers.



Element	Weight (%)	Atoms (%)
Cu K	35.83	52.72
I L	64.17	47.28

Figure S5. EDX analysis for thick CuI-microparticles.

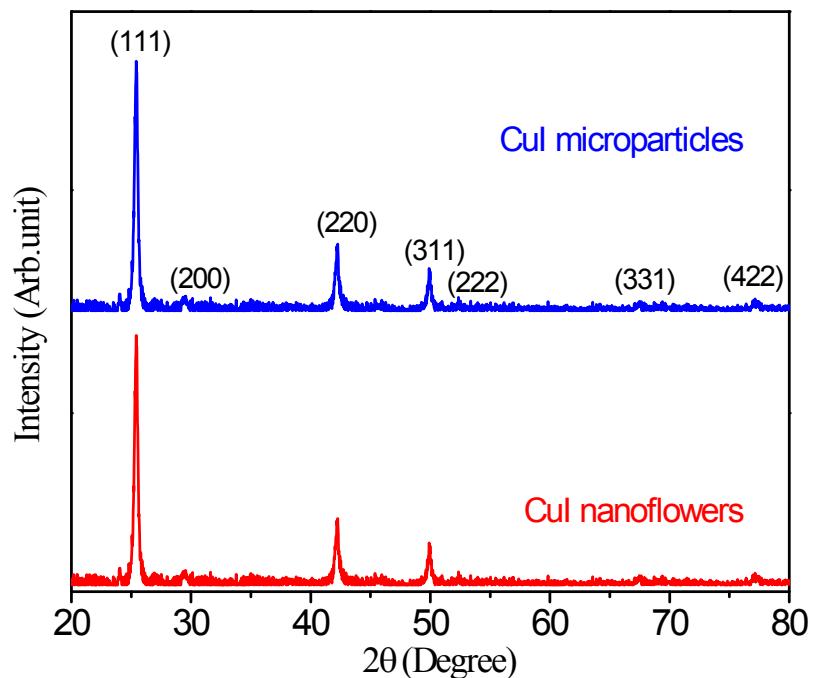


Figure S6. PXRD patterns of CuI nanoflowers and CuI microparticles.

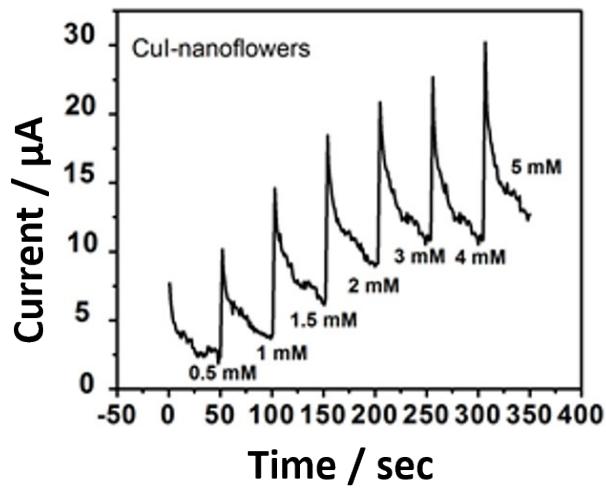


Figure S7. Amperometric current-time response of CuI-nanoflowers with the addition of different concentration of glucose ratios into 0.1 M KOH, with the applied potential 0.62 V vs Ag/AgCl.

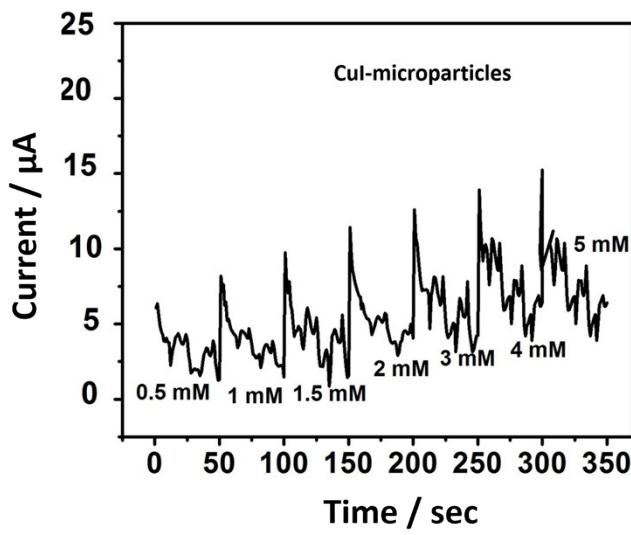


Figure S8. Amperometric current-time response of CuI microsparticles with the addition of different concentration of glucose ratios into 0.1 M KOH, with the applied potential 0.62 V vs Ag/AgCl.

Table S1. Analytical performance of CuI nanoplates with other nonenzymatic glucose biosensors.

Electrode material	Sensitivity ($\mu\text{AmM}^{-1}\text{cm}^2$)	Linear range	Response time (s)	References
CQDs/Cu ₂ O/Nafion/GCE	298	0.02-4.3	10	[1]
Cu nanowires	420.3	Up to 3	Not given	[2]
GO/CuO/GCE	262.52	Up to 2.03	Not given	[3]
5% NiO@Ag NWs	67.51	0-1.28	7	[4]
2-nm AuNWs/GCE	56	up to 12	< 10	[5]
Au _{glu} /GCE	153	0.1-12	< 5	[6]
Chitosan/cysteamine	8.91	1.5-27	< 10	[7]
Ag Polydopamine@CNT	3.1	0.05-1.1	Not given	[8]
GOD/AuNPs/G/CTs/GCE	29.72	0.005-0.175	Not given	[9]
Cu ₂ O/NiOx/GO/GCE	285	0.87-2.95	Not given	[10]
CuI-nanoplates/GCE	336.05	0.5-5	≤ 2	This work

References

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