

Supporting Information

Facile Cost Effective, Rapid Single-Step Synthesis of Ag-Cu Decorated ZnO Nanoflower like Composite (NFLC) for Electrochemical Sensing of Dopamine

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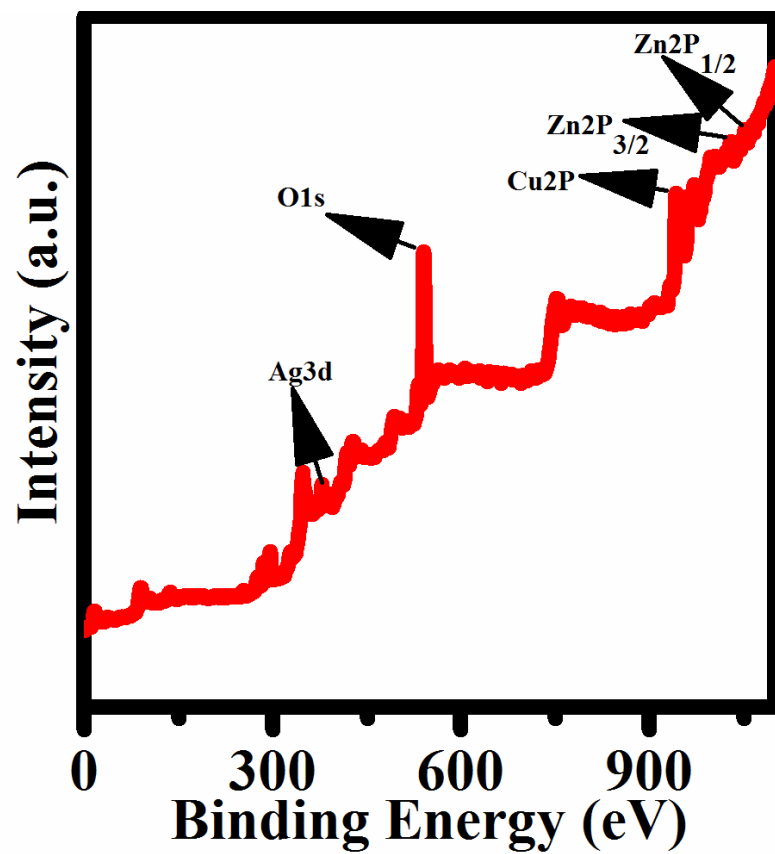


Fig. S1 XPS spectra of Ag-Cu@ZnO Nanoflower like composite.

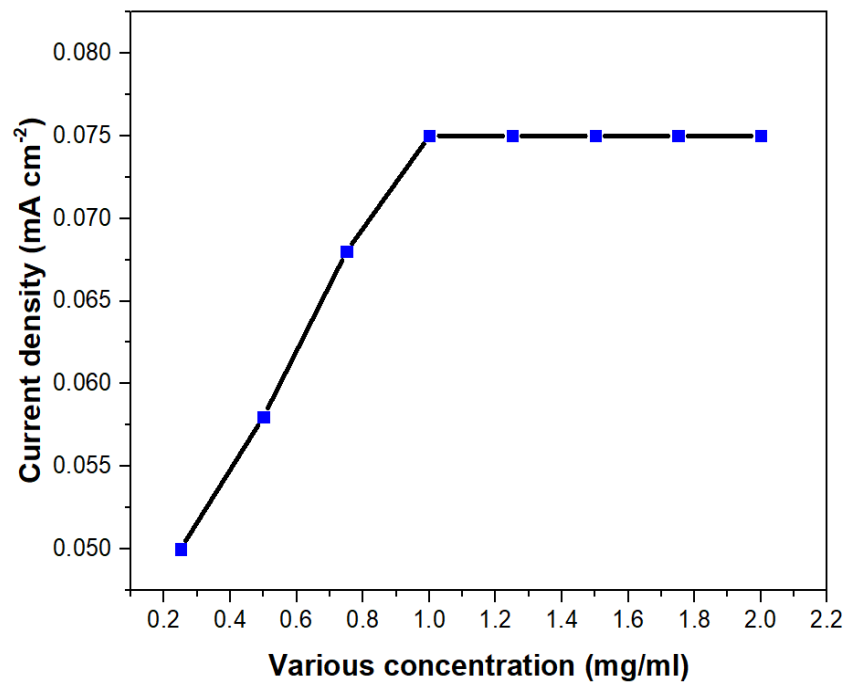


Fig. S2 Linear plot of concentration addition of DA versus sensitivity.

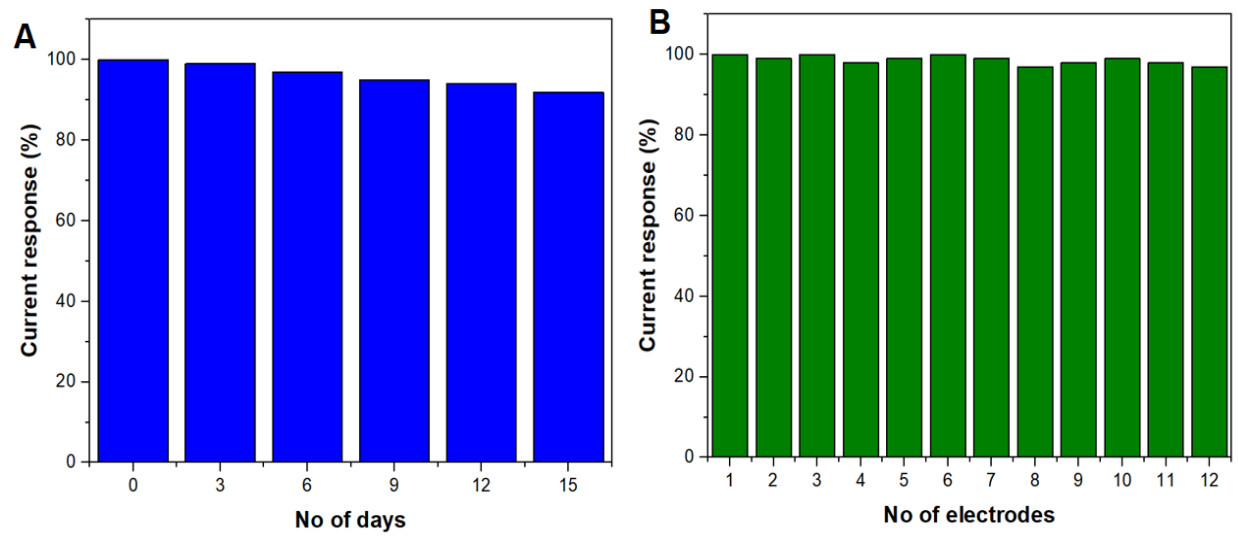


Fig. S4 The storage stability test of Ag-Cu Decorated/ZnO-NFLC material

Table-S1 Comparison of the previous reports of different nanomaterials for Electrochemical sensing of Dopamine

Sno.	Electrode/Nanomaterials	Analyte	LOD (μM) (S/N=3)	Sensitivity ($\mu\text{A}\text{mM}^{-1}\text{cm}^{-2}$)	Linear Range (μM)	Year	Ref.
1	Onion-like Carbons (OLC)	Dopamine	1.23	0.74	-	2019	S1
2	3-D nitrogen doped graphene	Dopamine	0.26	-	1-1000	2021	S2
3	Graphene oxide/tungsten trioxide (GO/WO ₃) nanocomposite/GCE	Dopamine	0.306	0.392	0.3 – 1245	2021	S3
4	Cylindrical gold nanoelectrode (CAuNE)	Dopamine	5.83	-	1-100	2018	S4
5	Ag-Cu Decorated/ZnO-NFLC material	Dopamine	0.21	0.68	0.1-10	This work	This work

Table -S2 Recovery rate and standard deviation of the Urine sample in the presence of 1 μM DA

Sample	DA added (μM)	Found (μM)	Recovery (%)	RSD (%)
Urine sample	1	1.030	103	1.906
		1.052	105.2	1.906
		1.070	107	1.906

$$\bar{x} = \frac{x_1 + x_2 + x_3}{3}$$

$$\text{Standard deviation, } S = \sqrt{\frac{(x_1 - \bar{x})^2 + (x_2 - \bar{x})^2 + (x_3 - \bar{x})^2}{n-1}}$$

$$\text{Relative standard deviation, RSD} = 100S/\bar{x}$$

References

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