

SUPPORTING INFORMATION

Solvothermal synthesis of organoclay/Cu-MOF composite and its application in film modified GCE for simultaneous electrochemical detection of deoxyepinephrine, acetaminophen and tyrosine

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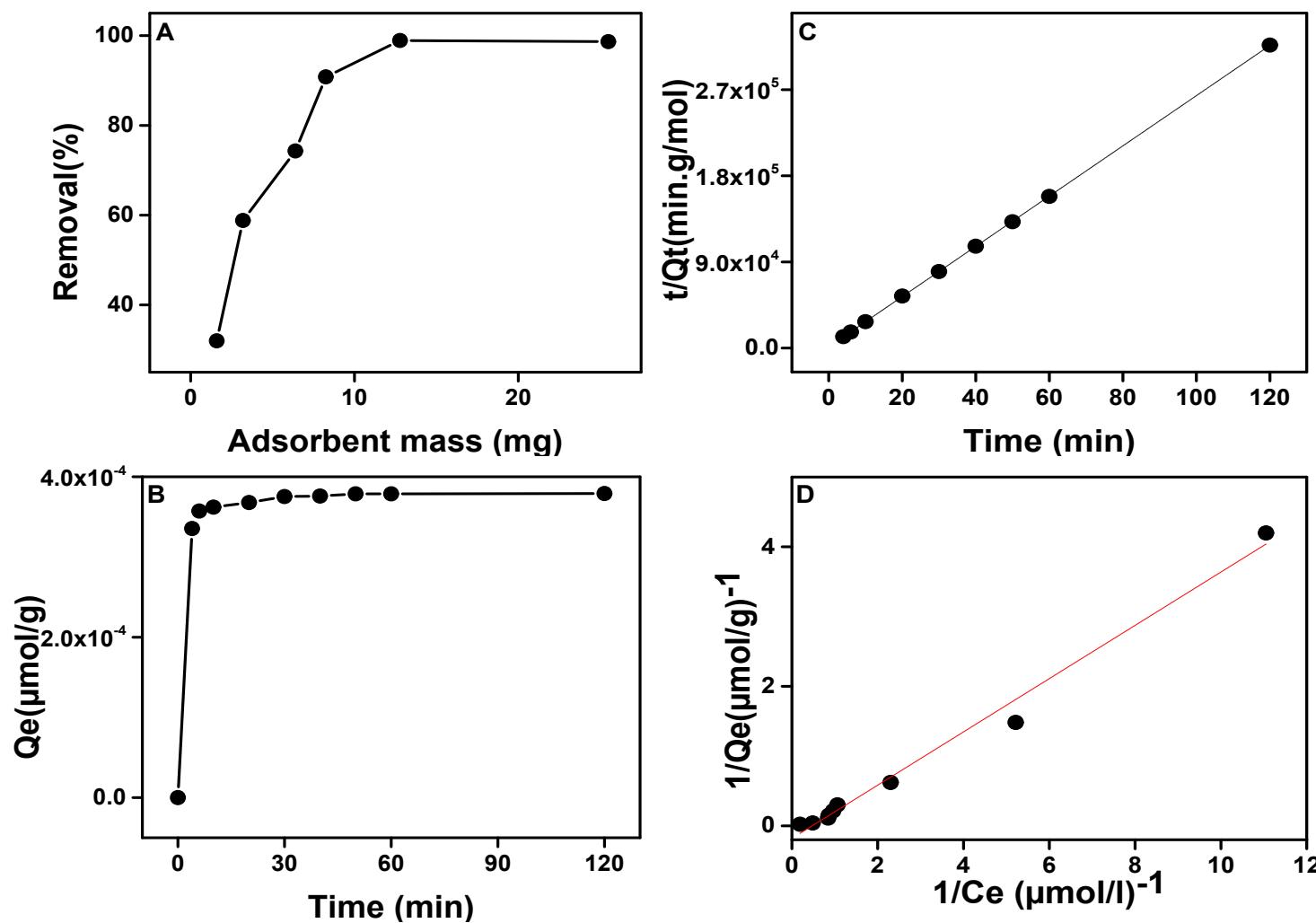


Fig. S1. Effect of the (A) mass of clay and (B) time on the dye adsorption, (C) Pseudo second order model and (D) Langmuir plots

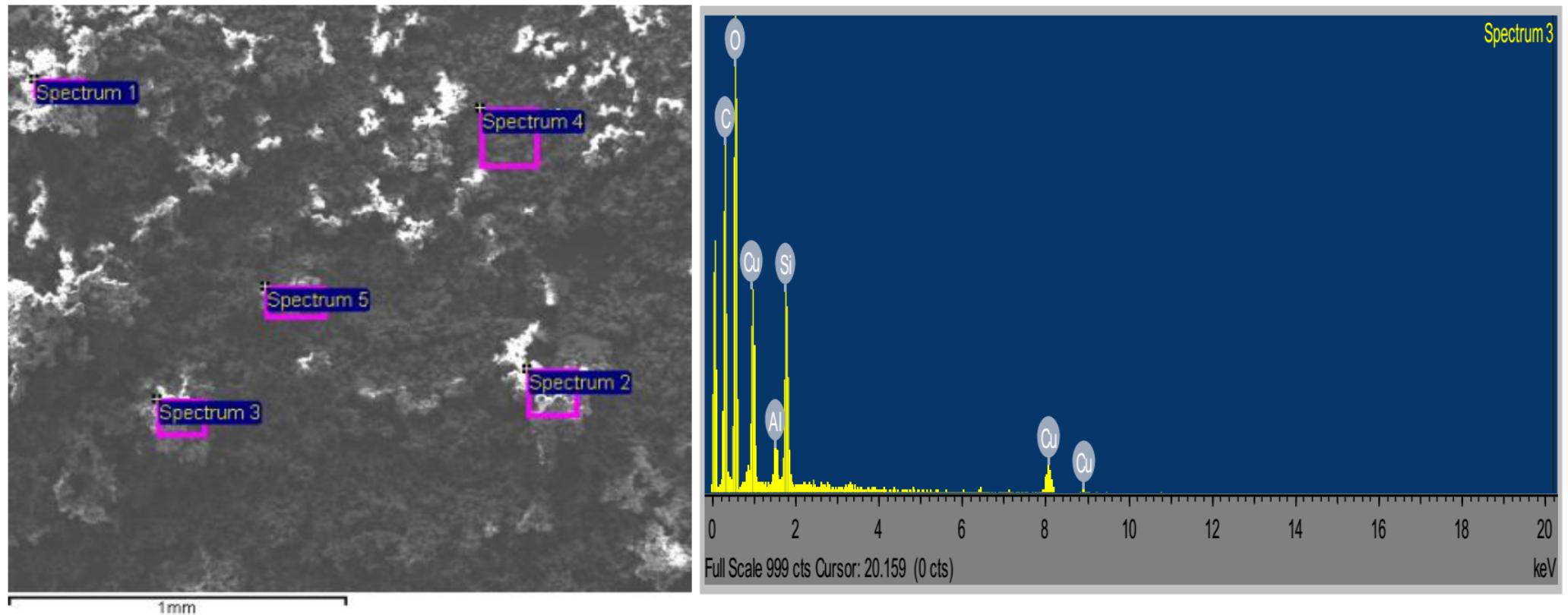


Fig. S2. EDS analysis and spectra of Sa-TN₁₀/Cu₃(BTC)₂

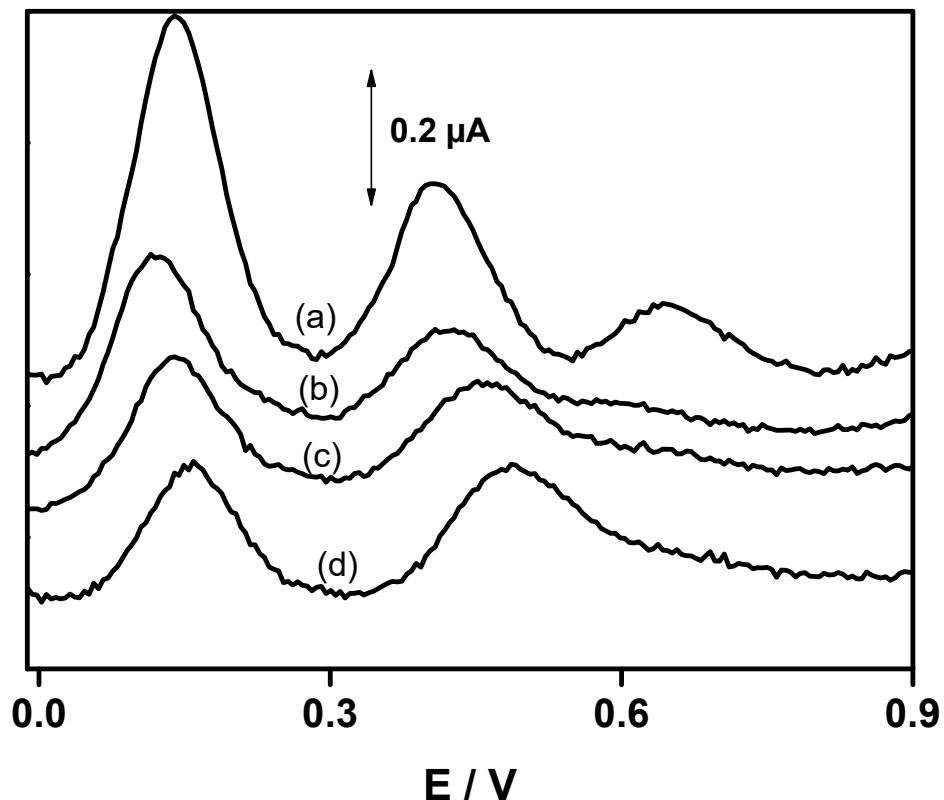


Fig. S3. DPVs recorded at different scan rates at $\text{Sa-TN}_5/\text{Cu}_3(\text{BTC})_2/\text{GCE}$ (a), $\text{Sa-TN}_{10}/\text{Cu}_3(\text{BTC})_2/\text{GCE}$, $\text{Sa-TN}_{25}/\text{Cu}_3(\text{BTC})_2/\text{GCE}$ and $\text{Sa-TN}_{50}/\text{Cu}_3(\text{BTC})_2/\text{GCE}$ in AcB pH 5 containing either: (A) $19.8 \mu\text{M}$ DXEP, (B) $23.8 \mu\text{M}$ AC or (C) $24.2 \mu\text{M}$ TYR.

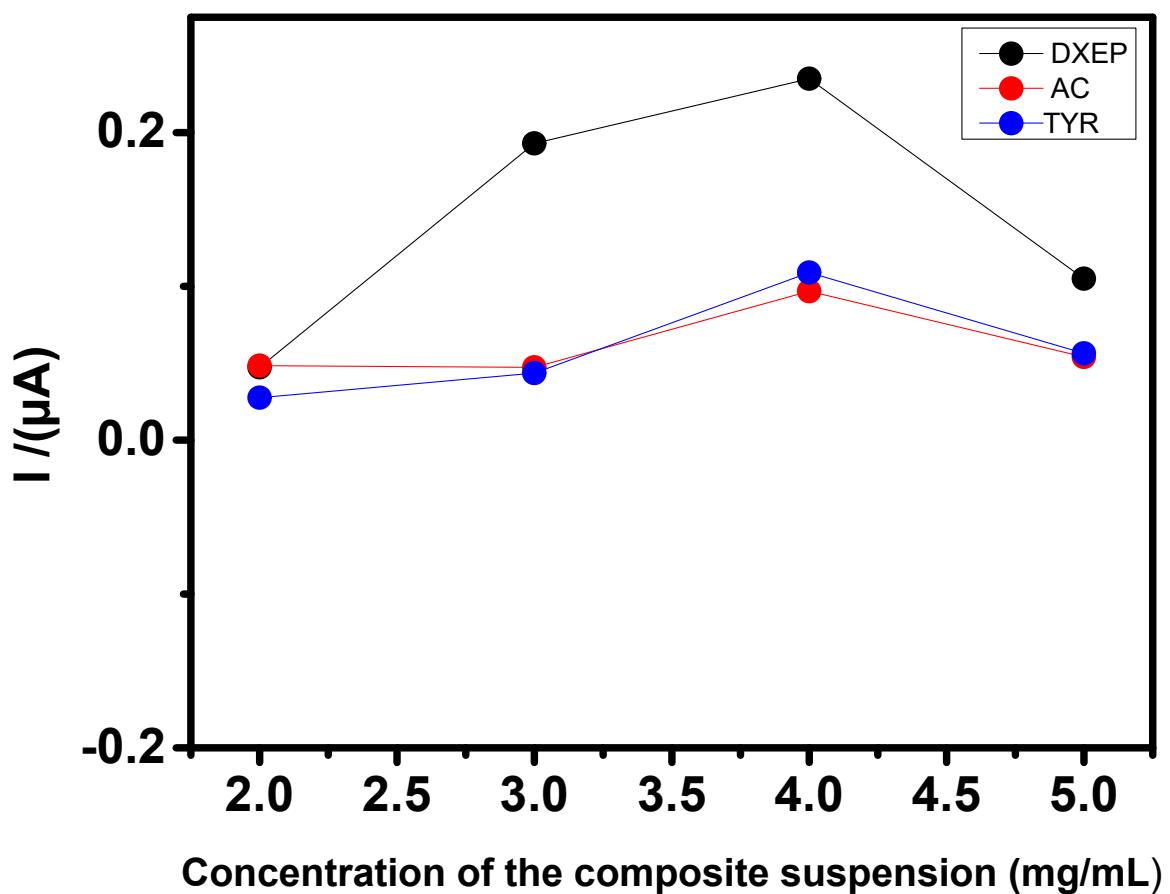


Fig. S4. Dependence of electrochemical response on suspension concentration of Sa-TN₅₀/Cu₃(BTC)₂ dropped coating on GCE

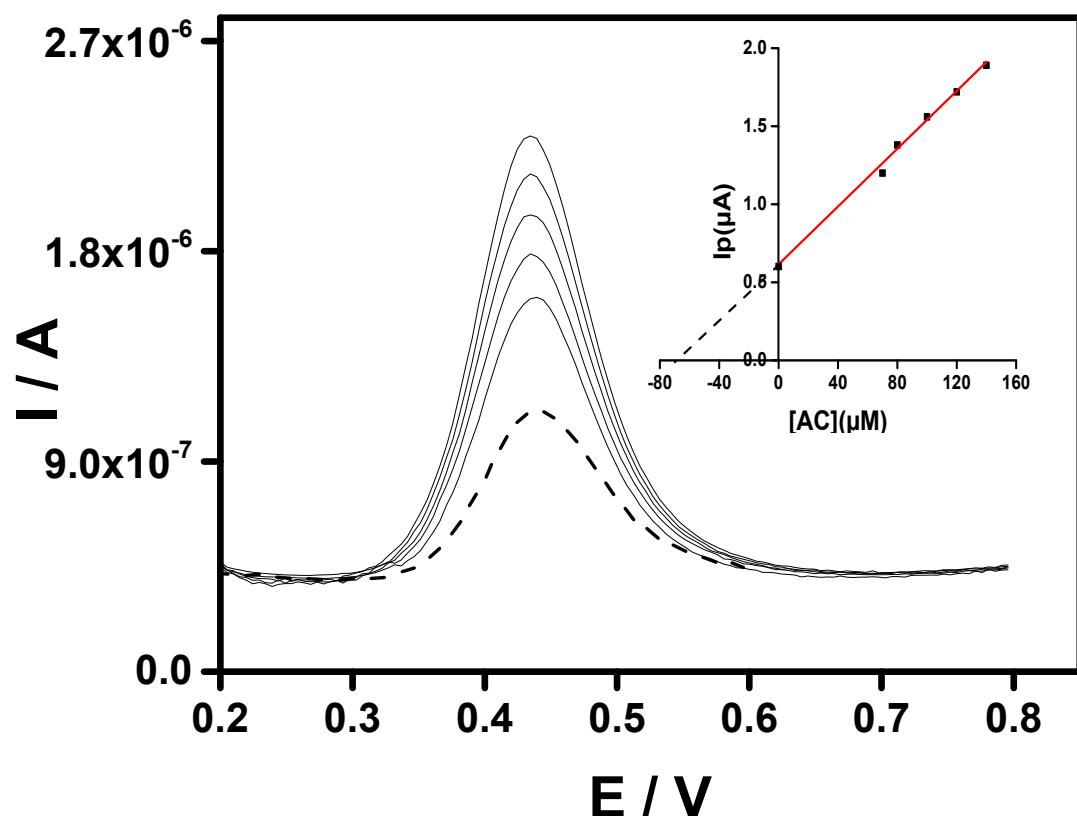


Fig. S5. DPVs recorded at Sa-TN₅₀/Cu₃(BTC)₂/GCE in Ac buffer solution with pH 5 in which AC sample was added (dashed line) followed by 5 successive additions of AC standards (solid lines). Inset shows plot of peak current vs. AC concentration.

Table S1. Thionin acetate kinetic parameters obtained from the pseudo-second order models

Experimental data	Value
$q_{e(\text{exp})}$	379.1 $\mu\text{mol/g}$
Pseudo second-order	
q_{e2}	381 $\mu\text{mol/g}$
h	776 $\mu\text{mol/g}\cdot\text{min}$
k_2	5344.295 g/mol.min
R^2	0.9999

Table S2. Determination of DXEP, AC and TYR contained in tap water.

Added ($\mu\text{mol/L}$)			Found ($\mu\text{mol/L}$)			Recovery %		
DXEP	AC	TYR	DXEP	AC	Tyr	DXEP	AC	TYR
2	1	2	1.95	0.90	1.95	97.5	90.0	97.5
4	2	4	4.33	1.99	3.65	108.2	99.5	91.3