

Electrochemically Amplified Nanozymatic Activity of Biolinker-based Synthesized Co-MOF for H₂O₂ and Dopamine Detection

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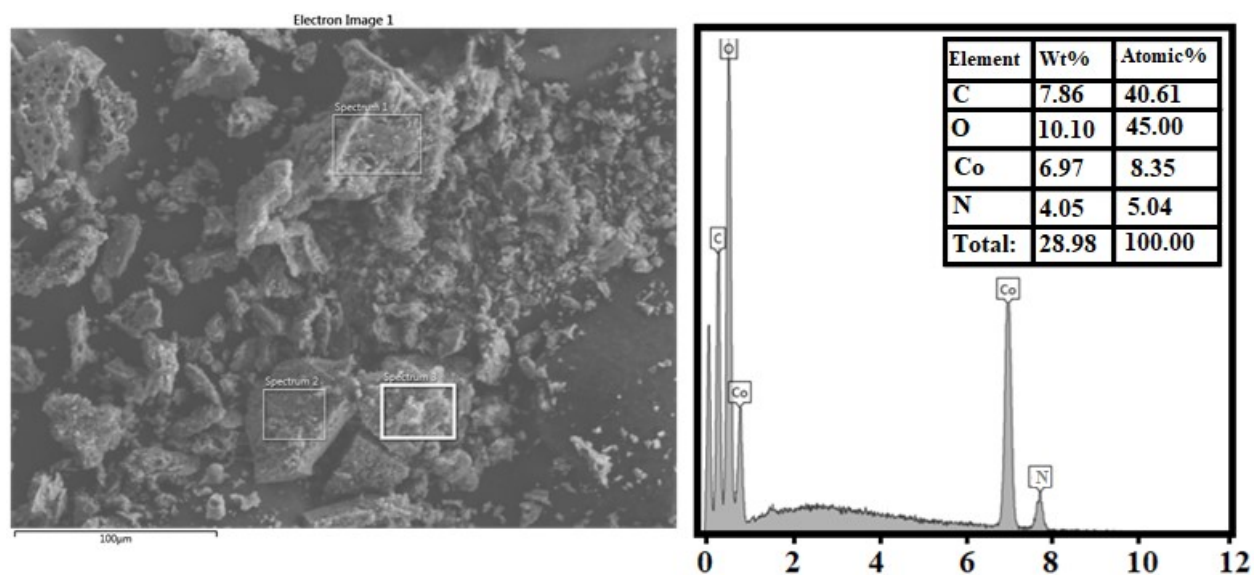


Figure S1: EDX analysis for Co-MOF nanoparticles.

Table S1: Comparison study of K_m and V_{max} values for present work with others reported using H_2O_2 and TMB as substrates in peroxidase and peroxidase-like enzymatic activity.

Nanomaterial	H_2O_2		TMB		Ref.
	K_m (μM)	V_{max} ($\mu M/s$)	K_m (μM)	V_{max} ($\mu M/s$)	
HRP	3.7×10^3	8.71×10^{-2}	4.34×10^2	1×10^{-1}	[1]
PtPdNPs/GNs	3.450×10^3	1.224×10^{-1}	40	4.267×10^{-1}	[2]
Ni-MOF	2.490×10^3	1.3	3.65×10^2	6.53×10^{-2}	[3]
WS ₂ /rGO	1.0×10^4	9.332×10^{-3}	2.2406×10^3	9.606×10^{-2}	[4]

Co-MOF	1.31	2.2×10^{-4}	0.74	1.3×10^{-3}	This work.
Co-MOF	1.02×10^4	1.5×10^{-2}	1.6×10^2	1.3×10^{-3}	Elelctronanozyme Conventional

References

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