

Supplementary File

Flow injection amperometric sensing of hydroxylamine at Cu(II)-neocuproine functionalized multiwalled carbon nanotube/screen printed carbon electrode

Selen Ayaz¹, Yusuf Dilgin^{1,*} and Reşat Apak²

¹Department of Chemistry, Faculty of Science and Arts, Çanakkale Onsekiz Mart University 17100, Çanakkale, Turkey

²Department of Chemistry Faculty of Engineering, Istanbul University-Cerrahpasa, Avcılar, 34320 Istanbul, Turkey

E mail: ydilgin@yahoo.com and ydilgin@comu.edu.tr

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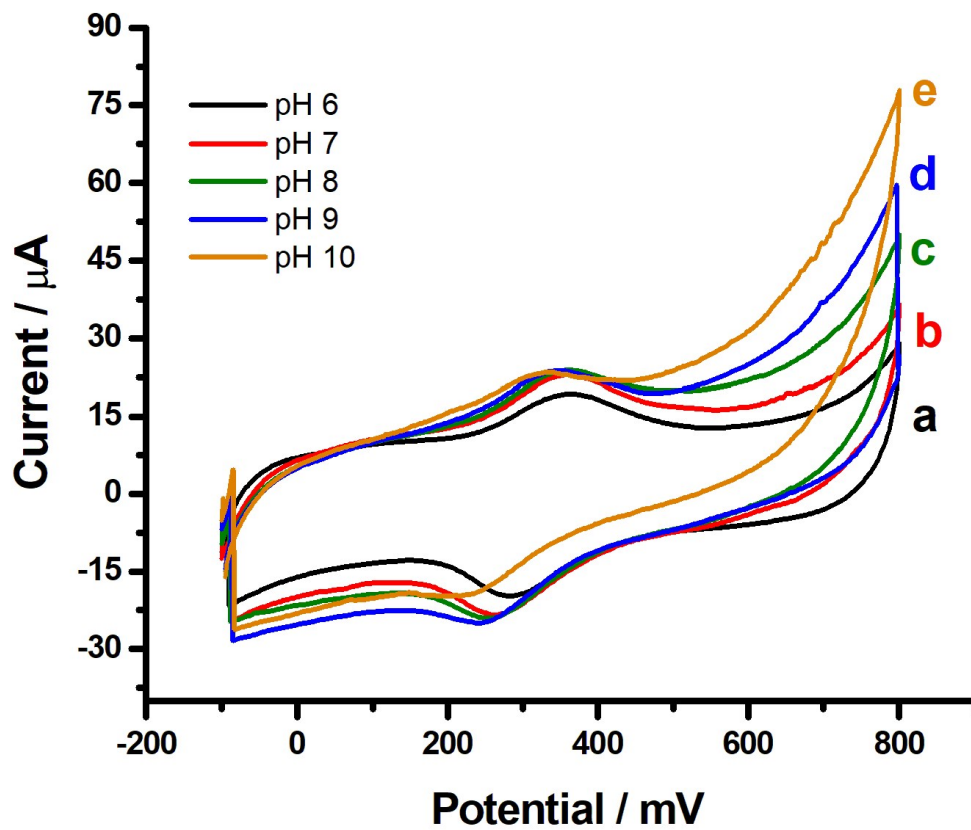
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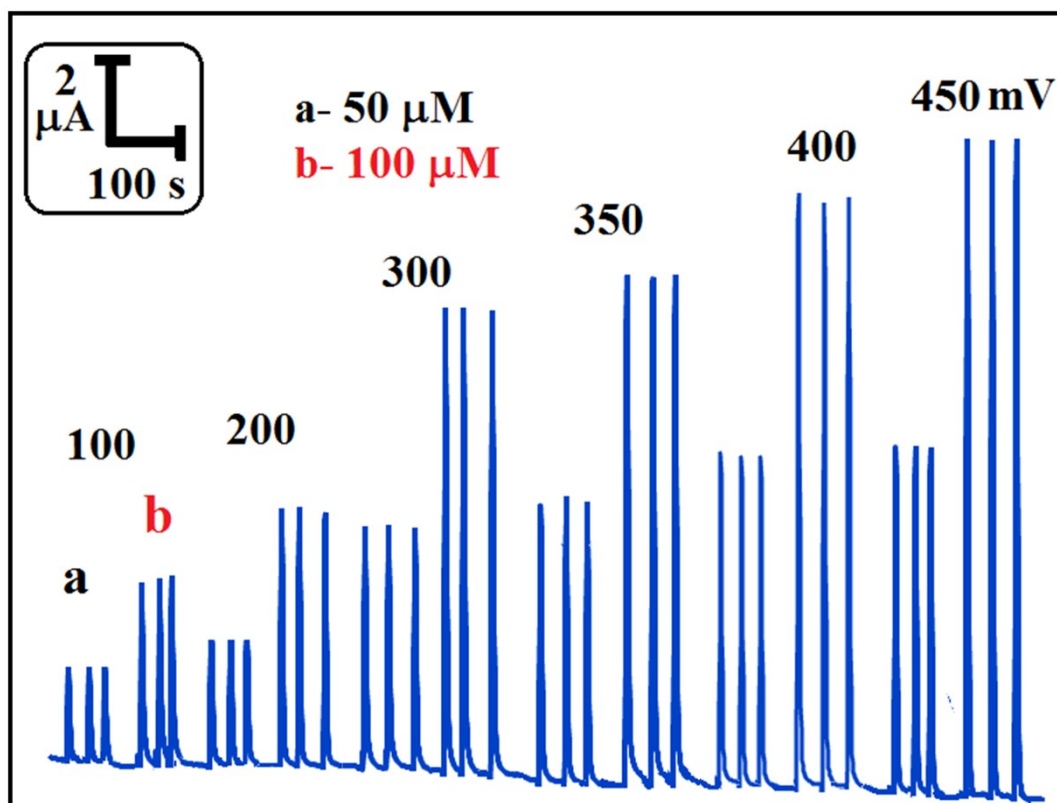
Fig. S11. FI amperometric i-t curves obtained from determination of hydroxyurea in Hydrea capsule by standard addition method under optimized conditions given in Fig. S5A. (a: Diluted hydroxyurea solution explained in experimental section; b) a + 5.0; c) a + 10.0; d) a + 15.0; e) a + 25.0; and f) a + 30.0 μM NH₂OH). **B.** Obtained standard addition curve 13

Fig. S1

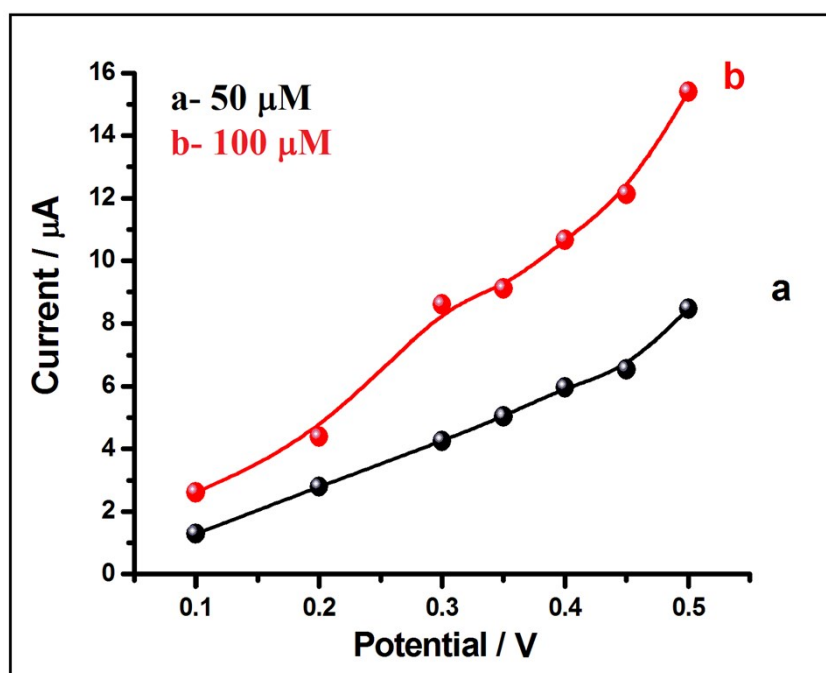


CVs of Cu(Ncp)₂]²⁺/Nf-MWCNT/SPCE in the BR buffer solutions with varying pH values at 50 mV s⁻¹.

Fig. S2

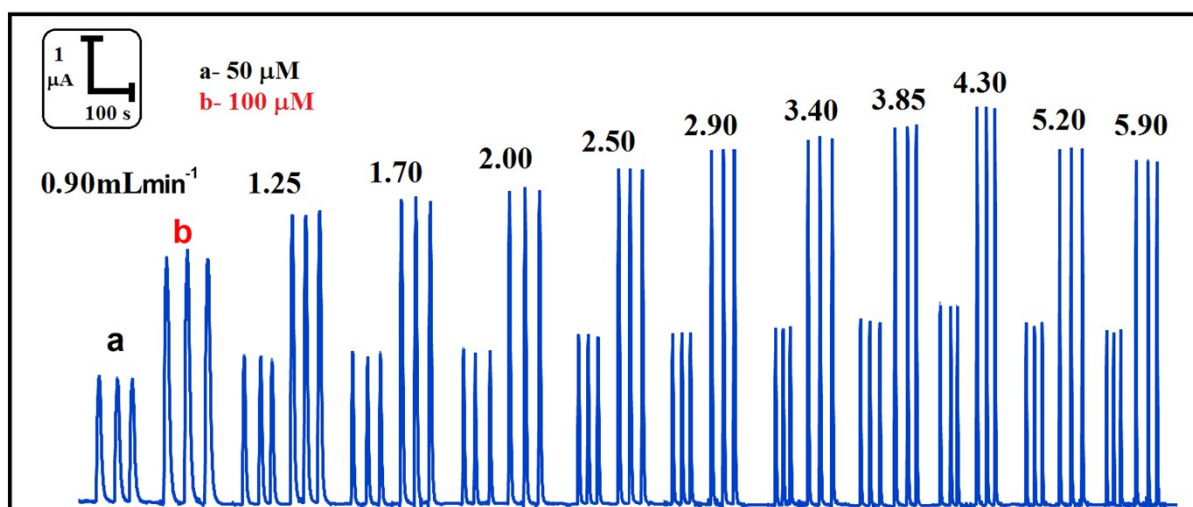


A. The FI amperometric *i-t* curves of $\text{Cu}(\text{Ncp})_2]^{2+}/\text{Nf-MWCNT}/\text{SPCE}$ recorded by injection of 5.0×10^{-5} and $1.0 \times 10^{-4} \text{ M}$ NH_2OH at various applied potentials (F_r : 4.30 mLmin^{-1} ; carrier steam: pH 10.0 BR buffer solution containing 0.10 M KCl; sample loop: $100 \mu\text{L}$; tubing length: 10 cm)

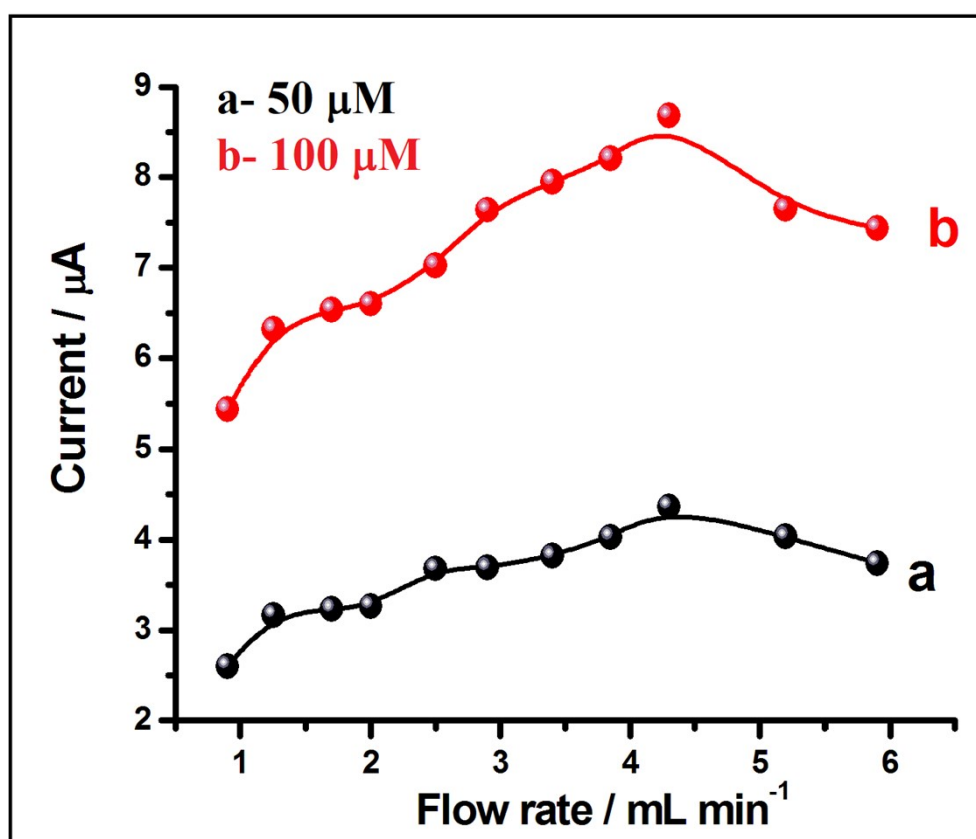


B) The plot of peak current of NH_2OH vs. applied potential

Fig. S3

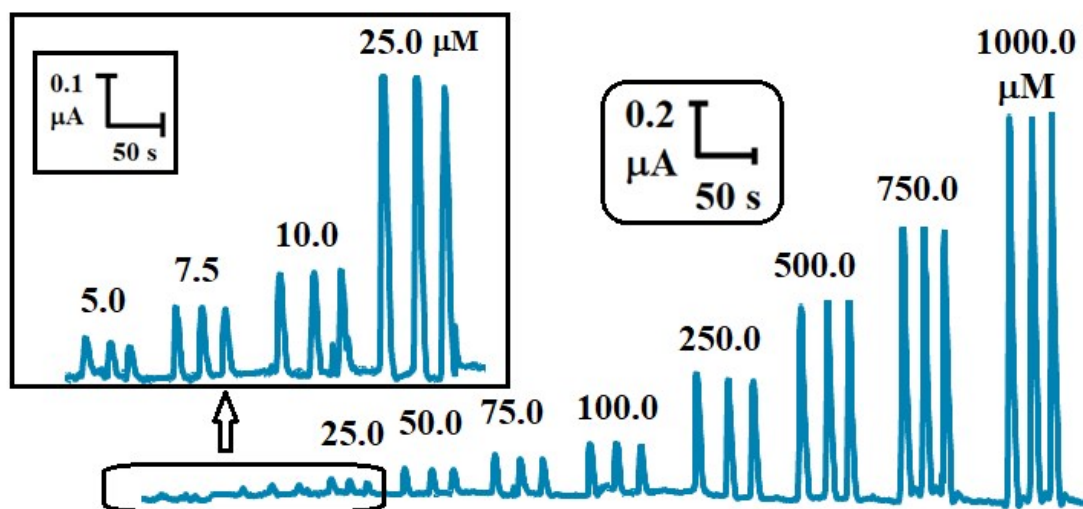


A. The FI amperometric i-t curves of $\text{Cu}(\text{Ncp})_2]^{2+}/\text{Nf-MWCNT}/\text{SPCE}$ recorded by injection of 5.0×10^{-5} and 1.0×10^{-4} M NH_2OH at various flow rates (E_{app} : +0.30 V; carrier stream: pH 10.0 BR buffer solution containing 0.10 M KCl; sample loop: 100 μL ; tubing length: 10 cm)

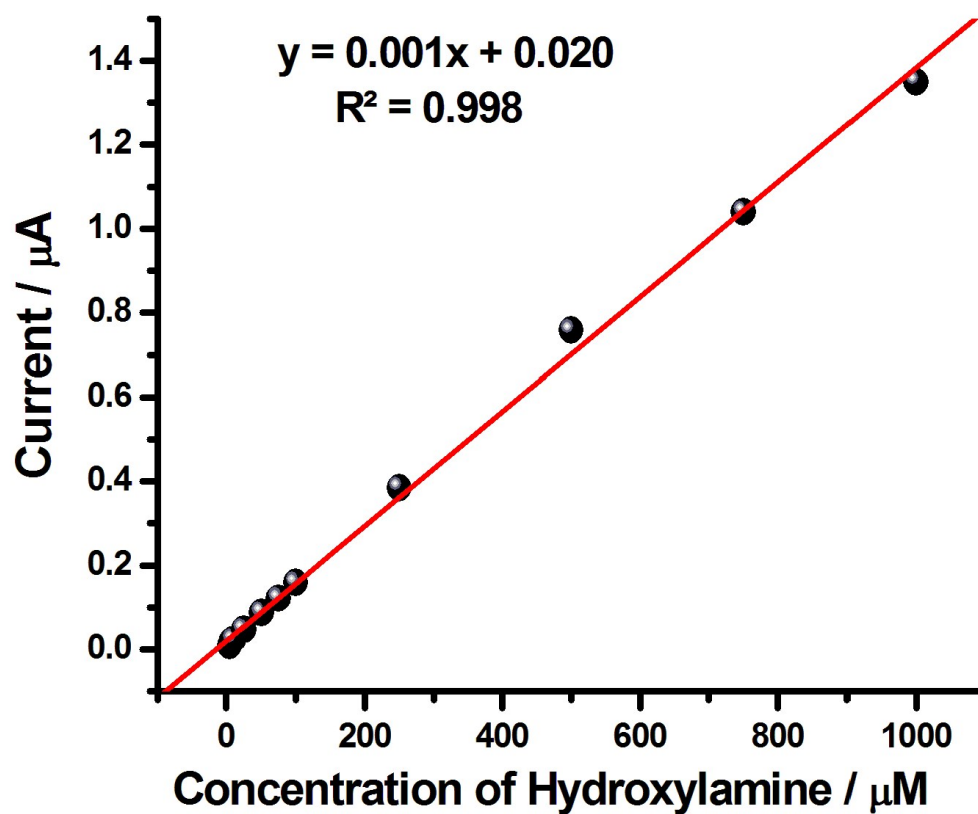


B. The plot of peak current of NH_2OH vs. flow rate

Fig. S4

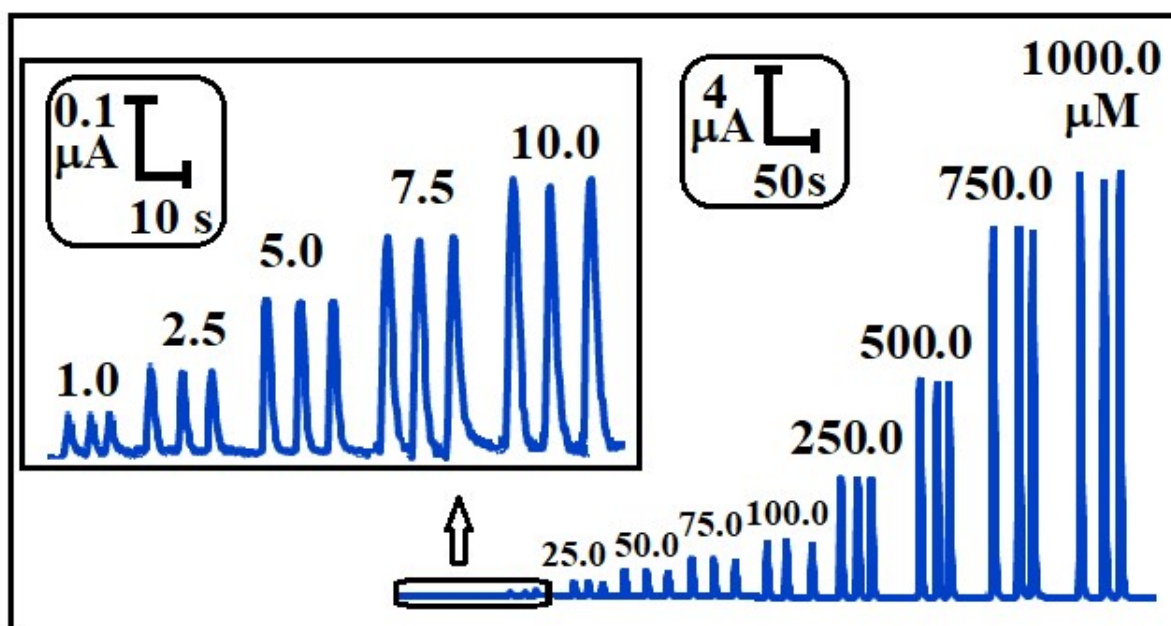


A. FI amperometric i-t curves of NH₂OH in the range from 5.0 to 1000.0 μM at bare SPCE under optimized conditions (E_{app} : +0.30 V; F_r : 4.30 mL min⁻¹ carrier steam: pH 10.0 BR buffer solution containing 1.0 M KCl; sample loop: 100 μL; tubing length: 10 cm).

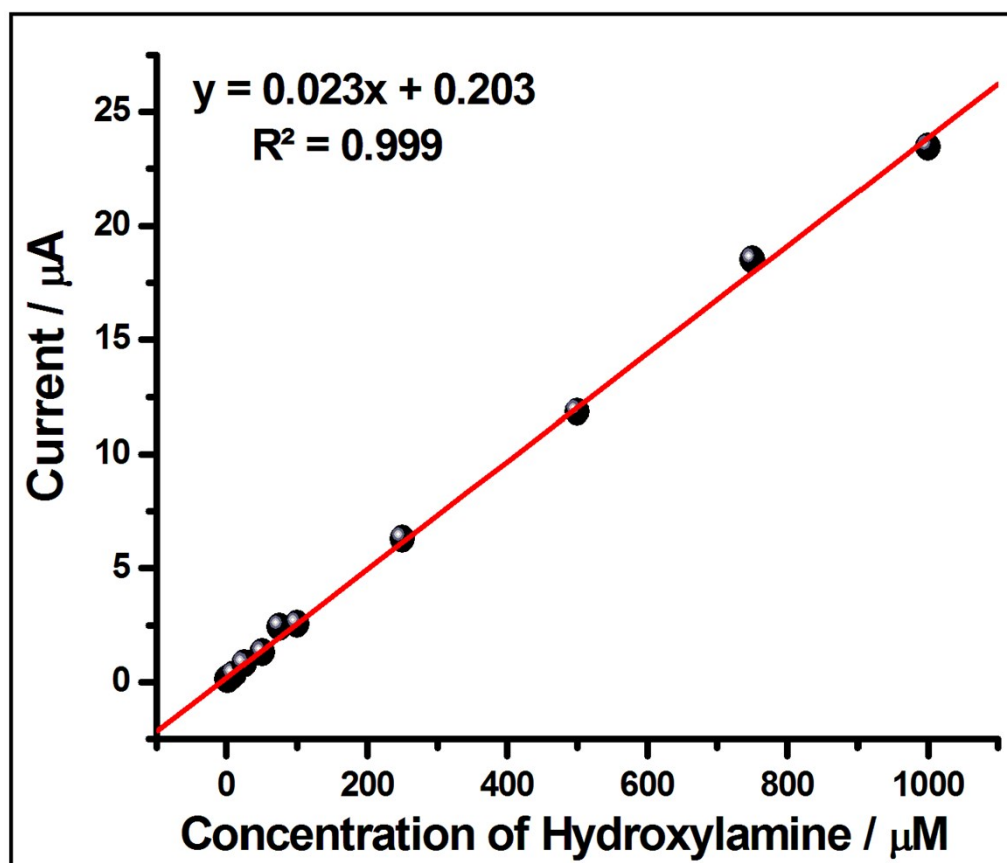


B. Calibration curve of NH₂OH obtained from bare SPCE.

Fig. S5

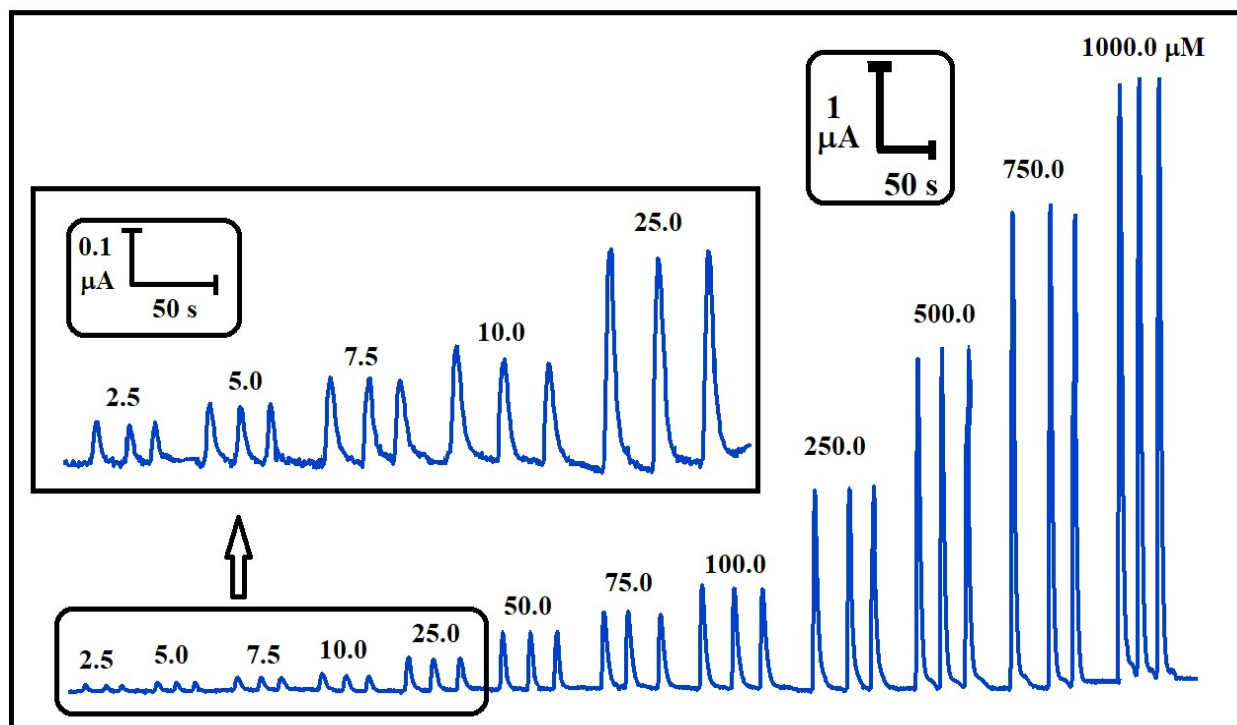


A. FI amperometric i-t curves of NH₂OH in the range from 5.0 to 1000.0 μM at MWCNT/SPCE under optimized conditions given in Fig. S5A.

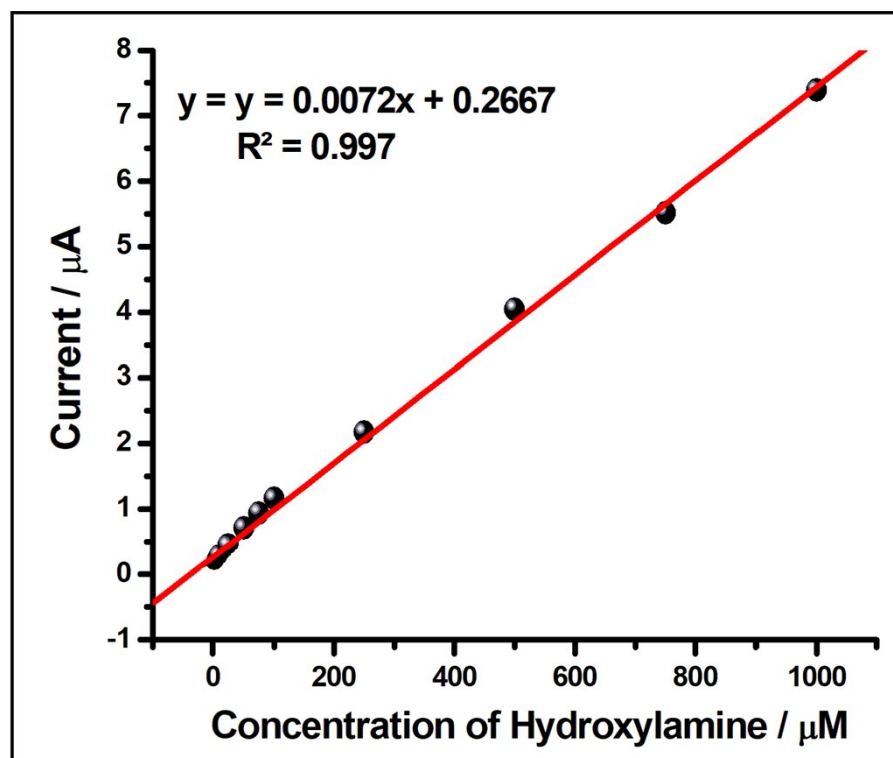


B. Calibration curve of NH_2OH obtained from MWCNT/SPCE.

Fig. S6

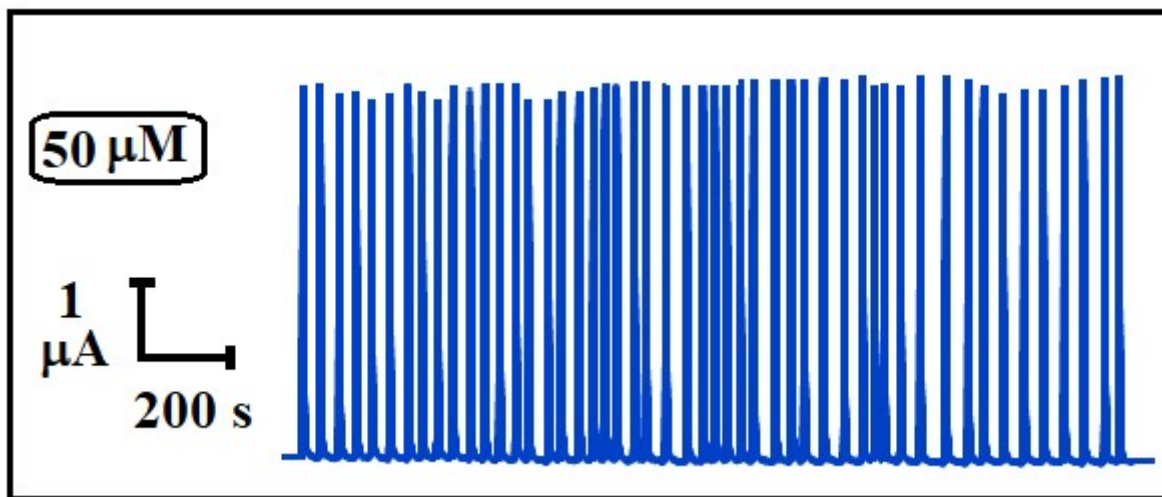


A. FI amperometric *i-t* curves of NH_2OH in the range from 5.0 to 1000.0 μM at Nf-MWCNT/SPCE under optimized conditions given in Fig. S5A.



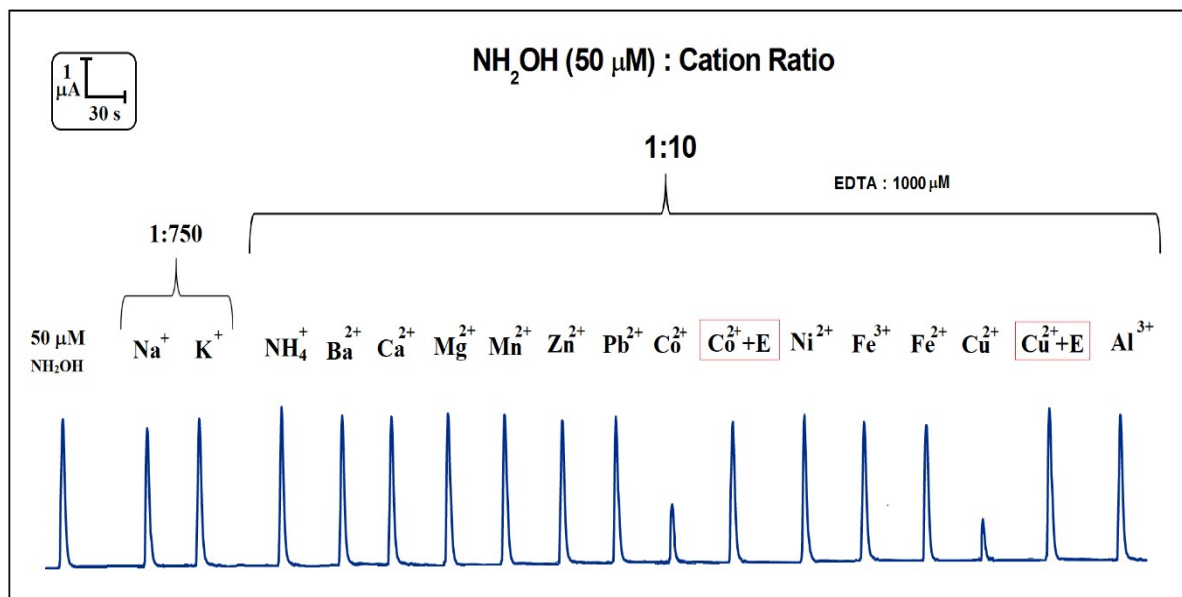
B. Calibration curve of NH_2OH obtained from Nf-MWCNT/SPCE.

Fig. S7

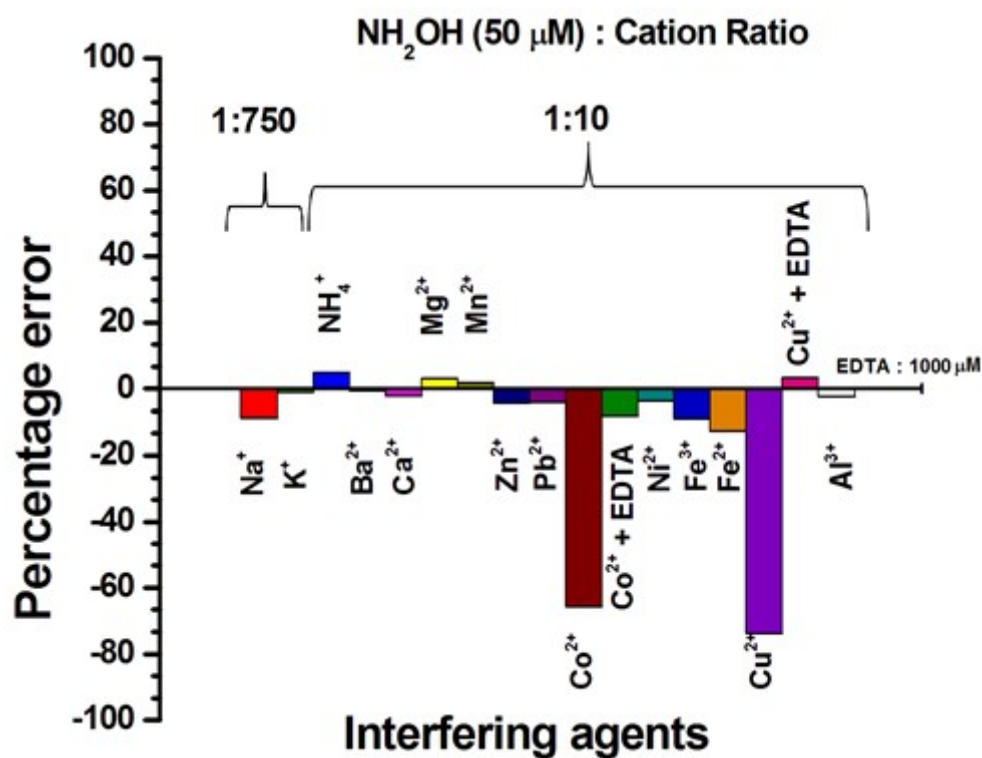


FI amperometric *i-t* curves of $5.0 \times 10^{-5} \text{ mol L}^{-1} \text{ NH}_2\text{OH}$ by 50 sequential injections at $\text{Cu}(\text{Ncp})_2]^{2+}/\text{Nf-MWCNT/SPCE}$ under optimized conditions given in Fig. S5A.

Fig. S8

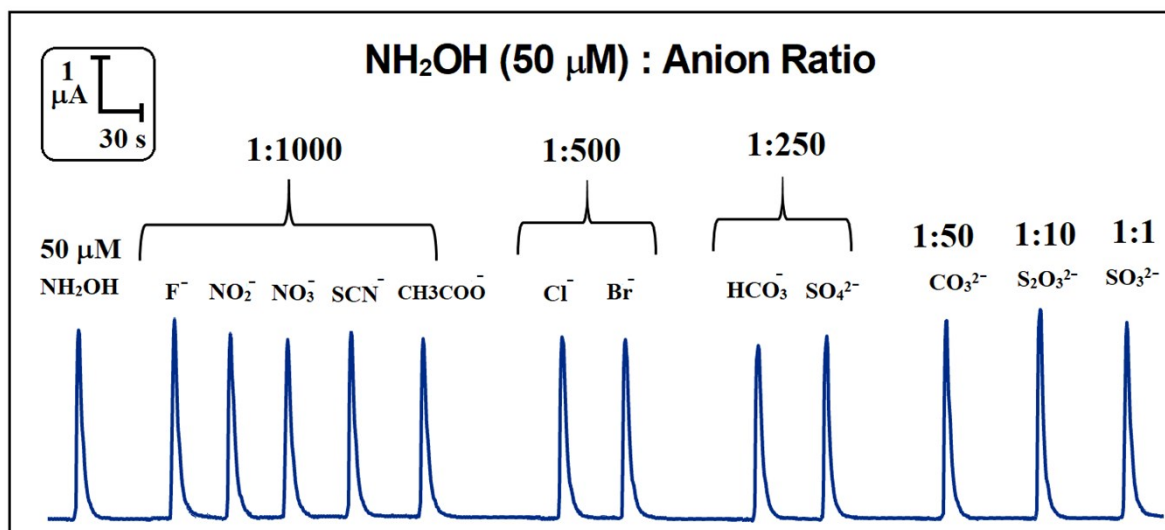


A. FI amperometric *i-t* curves of interference effect of some cations on NH_2OH determination at $[\text{Cu}(\text{Ncp})_2]^{2+}/\text{Nf-MWCNT}/\text{SPCE}$ under optimized conditions given in Fig. S5A.

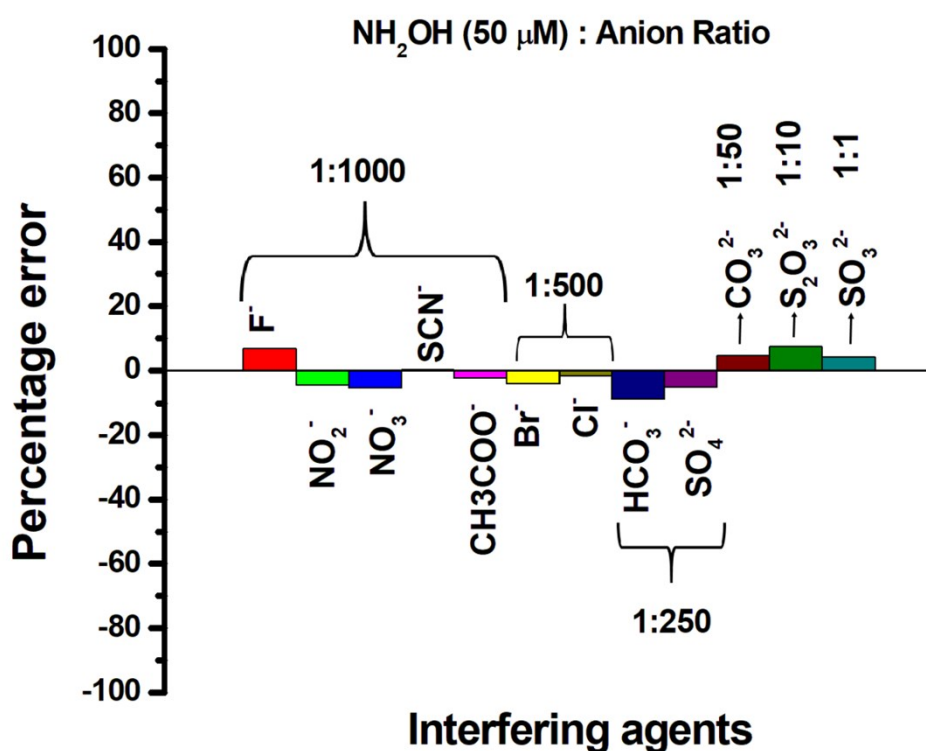


B. The percentage error of some cations on NH_2OH determination

Fig. S9

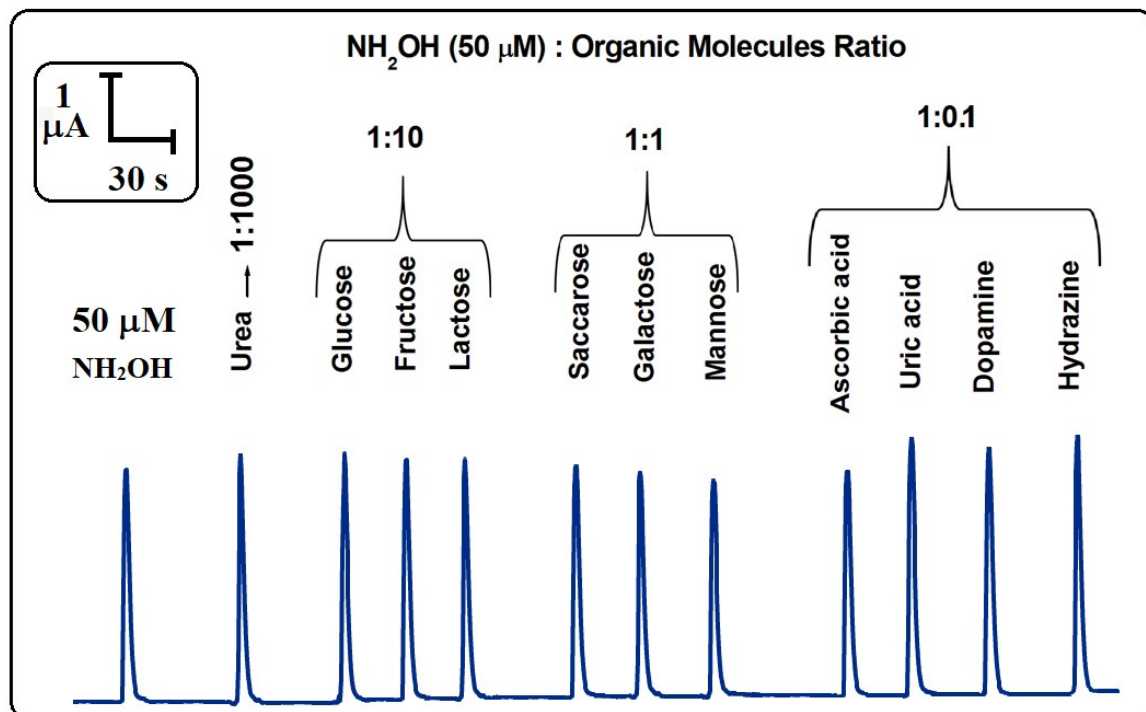


A. FI amperometric *i-t* curves of interference effect of some anions on NH_2OH determination at $[\text{Cu}(\text{Ncp})_2]^{2+}/\text{Nf-MWCNT}/\text{SPCE}$ under optimized conditions given in Fig. S5A.

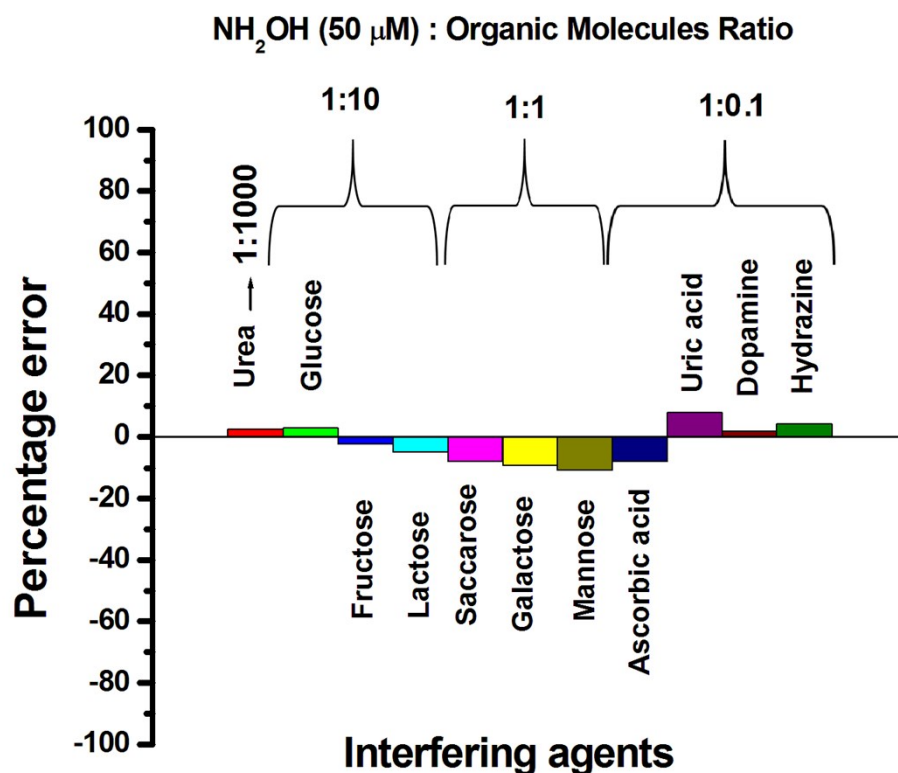


B. The percentage error of some anions on NH_2OH determination

Fig. S10

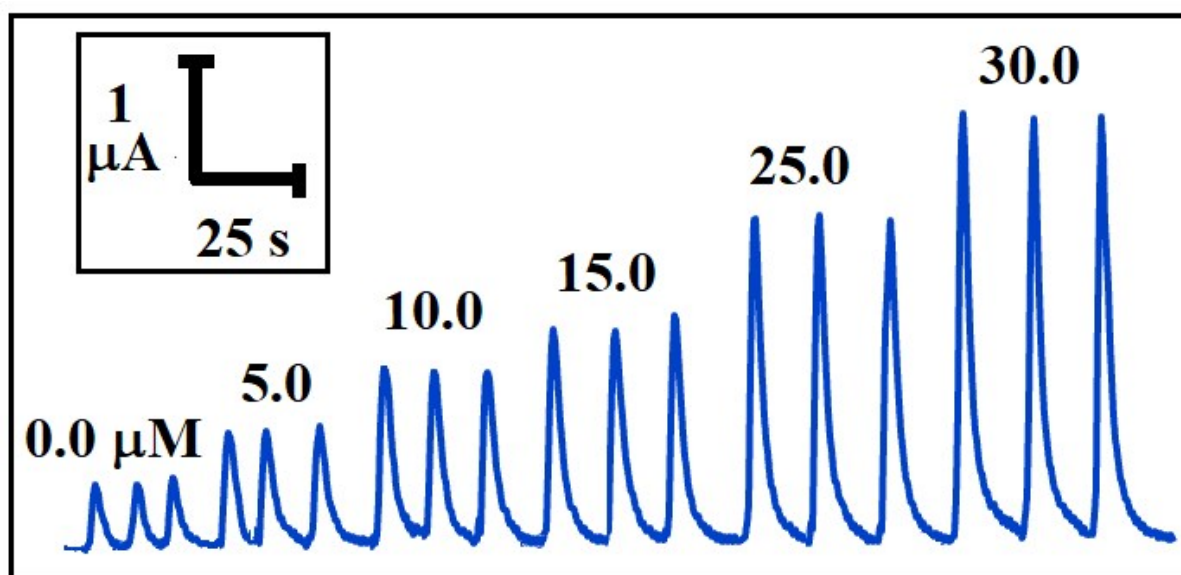


- A. FI amperometric *i-t* curves of interference effect of some organic molecules on NH₂OH determination at [Cu(Ncp)₂]²⁺/Nf-MWCNT/SPCE under optimized conditions given in Fig. S5A.

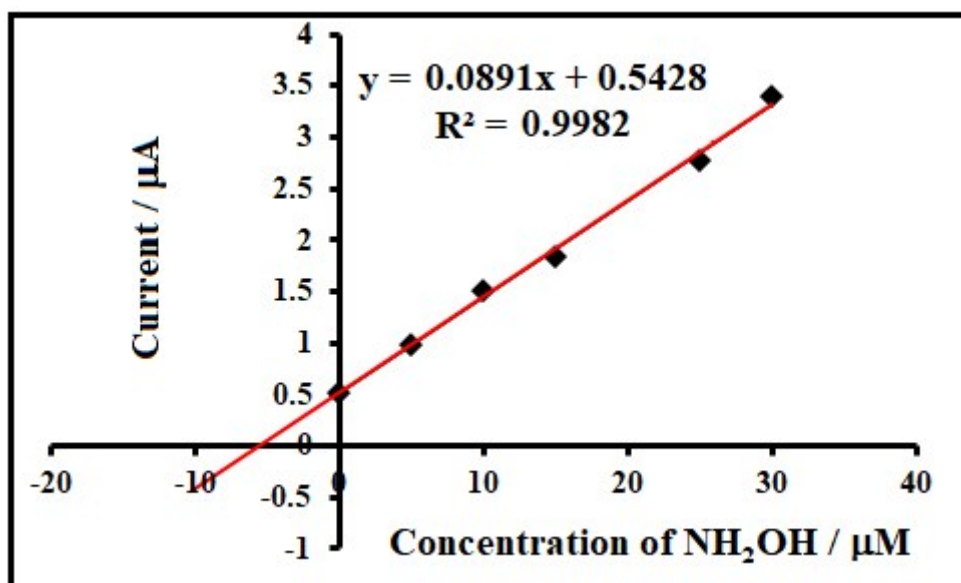


B. The percentage error of some organic molecules on NH₂OH determination

Fig. S11



A. FI amperometric *i-t* curves obtained from determination of hydroxyurea in Hydrea capsule by standard addition method under optimized conditions given in Fig. S5A. (a: Diluted hydroxyurea solution explained in experimental section; b) a + 5.0; c) a + 10.0; d) a + 15.0; e) a + 25.0; and f) a + 30.0 μM NH₂OH)



B. Obtained standard addition curve.