

Supporting Information

Rapid Quantitative Analysis of Urinary Nicotine Metabolites via High-performance Nanoconcentrator

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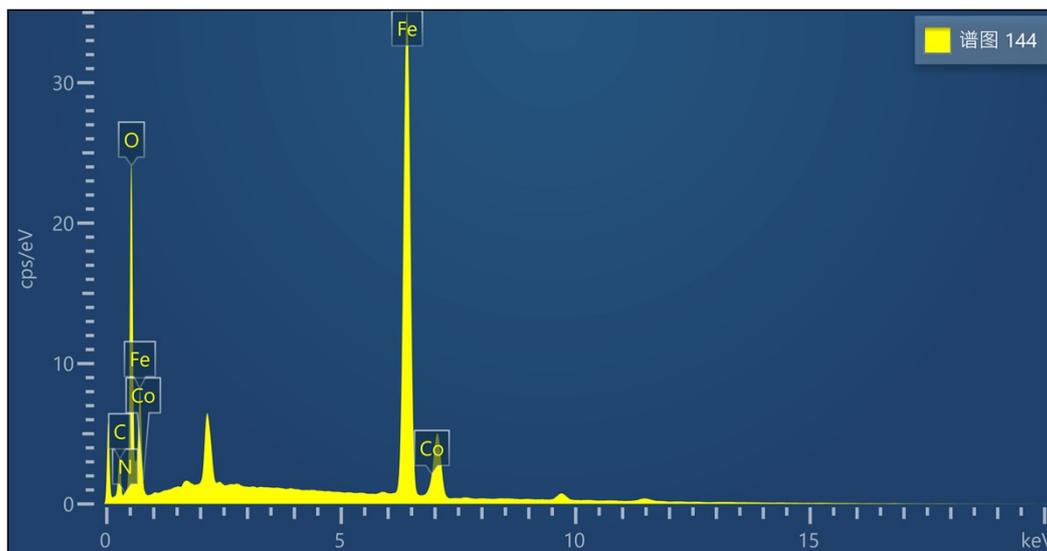


Figure S1. EDS of the magnetic nanoconcentrator.

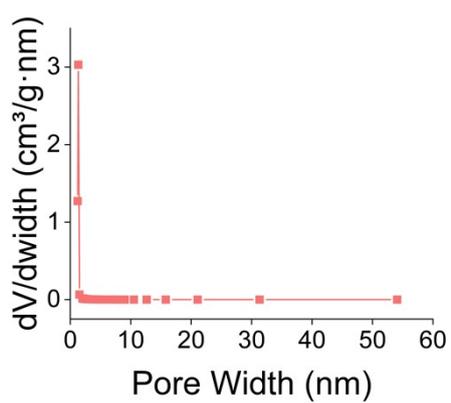


Figure S2. The full scope of pore size distribution.

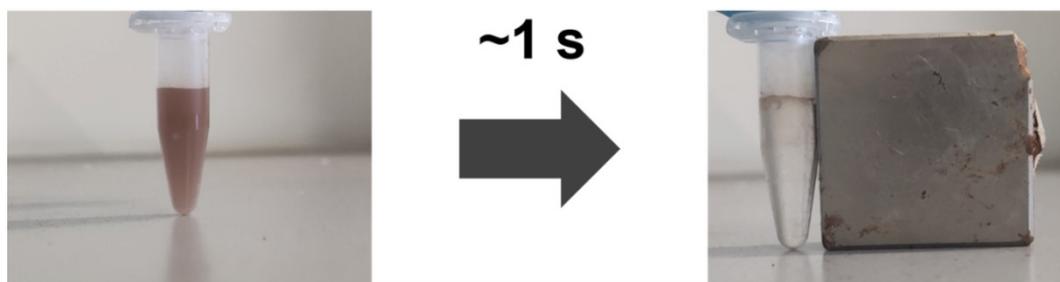


Figure S3. Rapid magnetic response of the magnetic nanoconcentrator.

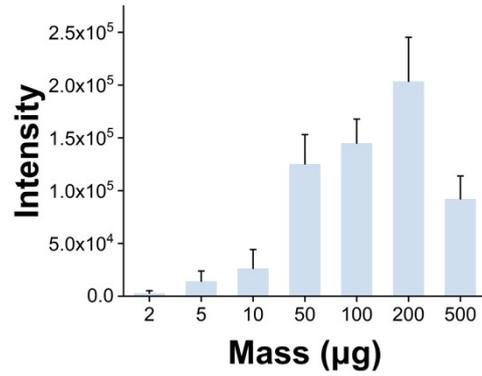


Figure S4. Optimization of the amount of the nanoconcentrator for magnetic enrichment. Data are presented as mean \pm standard variation, $n = 3$.

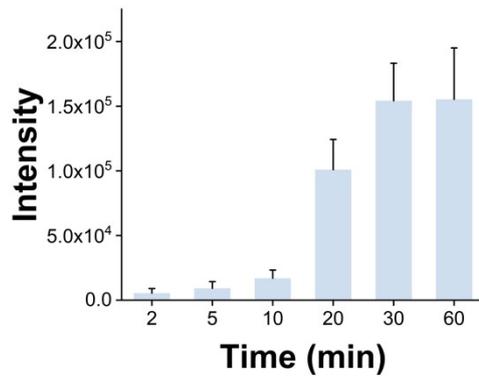


Figure S5. Optimization of incubation time of magnetic enrichment. Data are presented as mean \pm standard variation, $n = 3$.

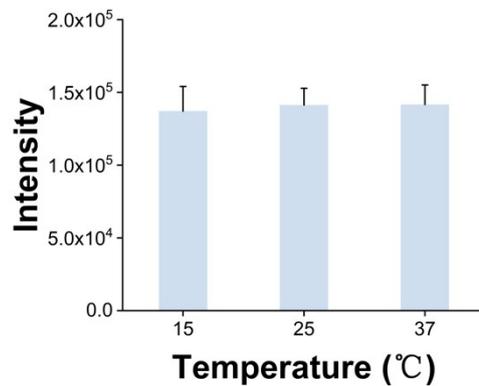


Figure S6. The effect of temperature on magnetic enrichment. Data are presented as mean \pm standard variation, $n = 3$.

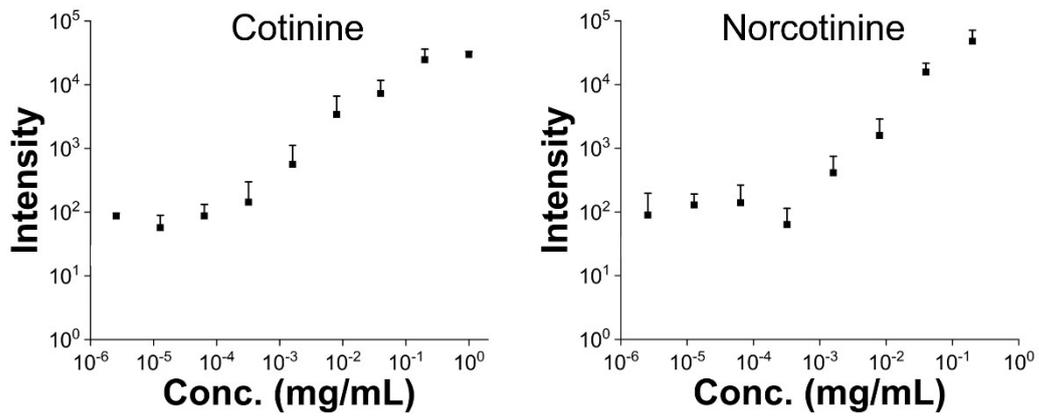


Figure S7. The LOD of cotinine and norcotinine detected by the nanoconcentrator.

Data are presented as mean \pm standard variation, n = 3.

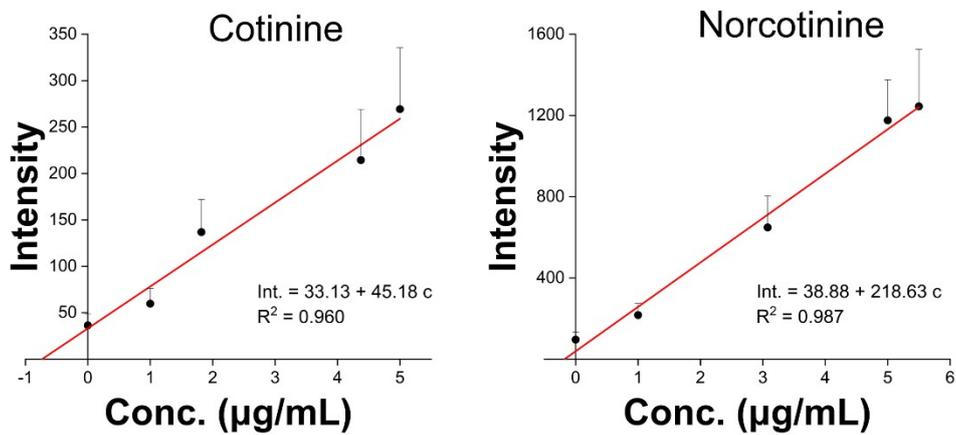


Figure S8. The relationship between LDI-TOF-MS intensity and added concentration.

Data are presented as mean \pm standard variation, n = 3.

Table S1. Method validation for cotinine (n = 3).

	HQC	MQC	LQC
CV/%	17.7	38.7	33.9
Accuracy/%	117.6	103.2	90.0

Table S2. Method validation for norcotinine (n = 3).

	HQC	MQC	LQC
CV/%	16.3	22.5	16.6
Accuracy/%	85.1	117.4	122.2