Supporting Information

An enzymatically amplified electrochemical sensor for the sensitive and label-free monitoring of uranyl ions in environmental waters

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Table S1 Comparison of the proposed sensor with other UO_2^{2+} detection methods.

Material	Method	LOD (M)	Linear range(M)	Reference
CPE	Colorimetric	2.10×10^{-9}	1.26×10^{-8}-1.05×10^{-6}	[1]
Fe_3O_4@SiO_2	Electrochemical	1.08×10^{-9}	1.00×10^{-9}-2.00×10^{-7}	[2]
PeNCs@NHS-M	Electrochemical	1.00×10^{-9}	3.00×10^{-9}-2.00×10^{-5}	[3]
Ln-MOFs	Fluorescence	2.70×10^{-9}	1.00×10^{-8}-1.00×10^{-4}	[4]
TPE-A	Fluorescence	4.70×10^{-9}	5.00×10^{-8}-4.50×10^{-7}	[5]
SC4A@Tb^{3+}	Fluorescence	8.40×10^{-8}	0.00-3.60×10^{-7}	[6]
TEA-CDs	Fluorescence	2.04×10^{-8}	0.00-5.00×10^{-4}	[7]
DNAzymes	Electrochemical	4.18×10^{-11}	7.00×10^{-11}-1.50×10^{-9}	this work

The calculation method for recovery rate

The recovery for spiked samples was calculated using the standard formula:

$$Recovery\ (\%) = \frac{M_{a+spike} - M_a}{M_{spike}}$$

Where：$M_{a+spike}$ represents the concentration of the known standard added to the sample; M_a represents the concentration of the analyte in the raw, unspiked sample as measured using this sensor; M_{spike} is the concentration of the known standard added to the sample.

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