Supplementary material

Preparation and evaluation of Fe$_3$O$_4$@C@NiCo-LDH@CDs composites for magnetic solid-phase extraction of trace endocrine disruptors

Honglin Qin[1,#], Ruozhu Xu[1,#], Lizhen Qiao[1,2,*], Xupeng Zhai[2], Peixin Guo[2], Chen Li[2],

Bingyan Han[1,*]

1 School of Chemical Engineering, University of Technology, Panjin 124221, China

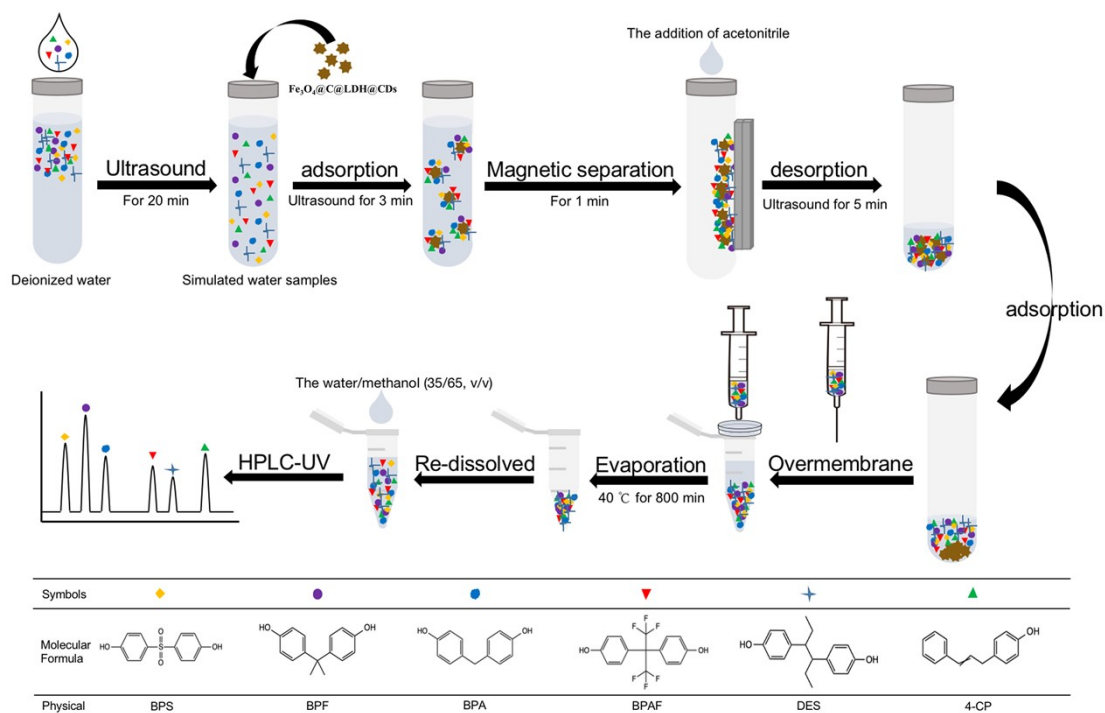2 Huajin Aramco Petrochemical Company Limited, Panjin 124211, China

* Correspondence:

Dr. Lizhen Qiao, e-mail: lzqiao3@163.com

Dr. Bingyan Han, e-mail: byhan@dlut.edu.cn

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Figure S1. The schematic diagram for magnetic solid-phase extraction of EDPs using

Fe$_3$O$_4$@C@NiCo-LDH@CDs adsorbents.
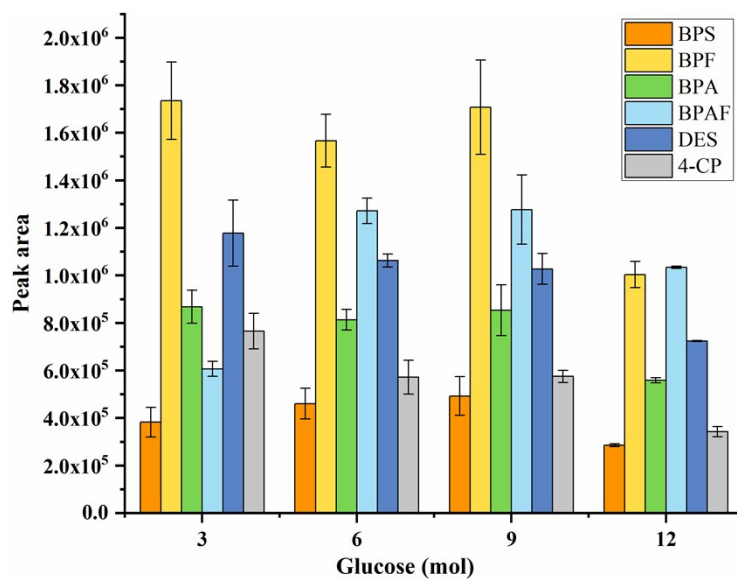
Figure S2. Effect of glucose content on the MSPE efficiency.
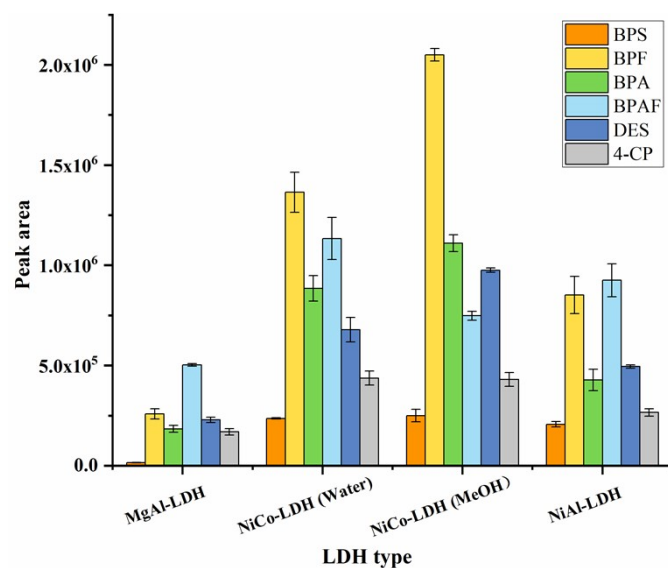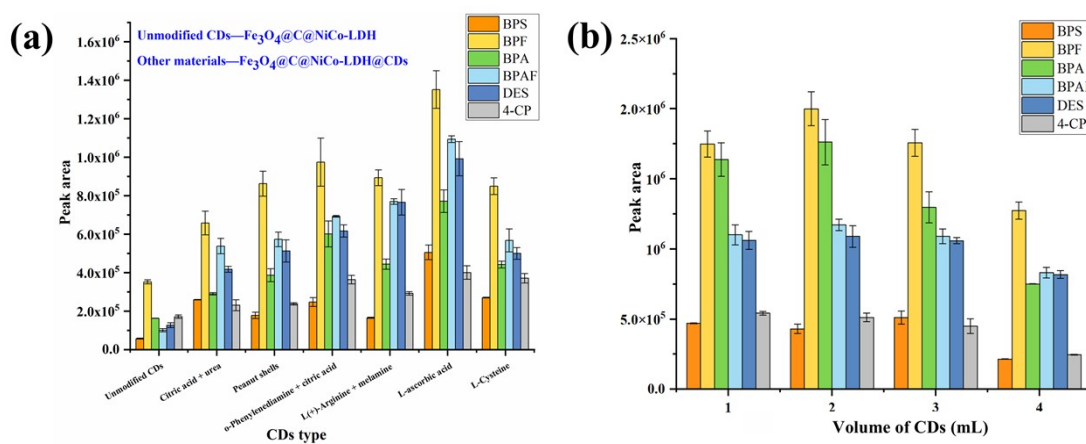
Figure S3. Effect of LDH type on the MSPE efficiency.

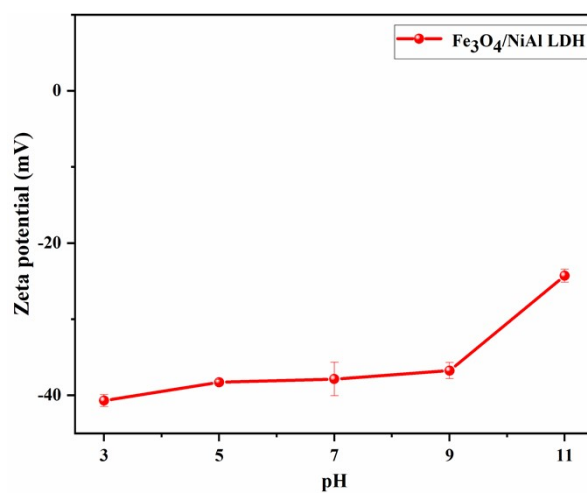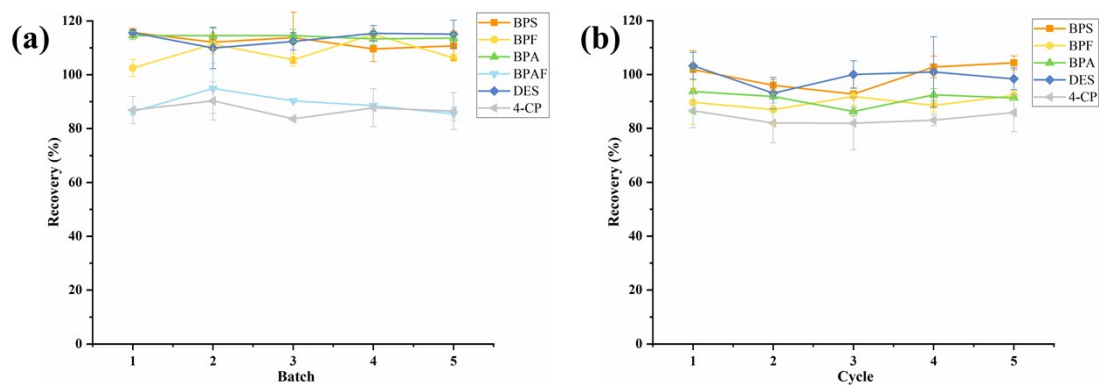**Figure S4.** Effect of CDs type (a) and volume of CDs solution (b) on the MSPE efficiency.

Figure S5. Zeta potential of $Fe_3O_4@C@NiCo-LDH@CDs$.

Figure S6. The reproducibility (a) and reusability (b) of the Fe$_3$O$_4$@C@NiCo-LDH@CDs adsorbents.

Table S1. The standard deviation corresponding to the slope and intercept.

Analytes	Regression equation	Slope		Intercept	
		Value	Standard deviation	Value	Standard deviation
BPS	Y=18.97X+54.87	18.97	0.26	54.87	21.64
BPF	Y=36.15X+129.03	36.15	0.36	129.03	26.49
BPAF	Y=22.28X+69.53	22.28	0.22	69.53	15.92
4-CP	Y=20.01X-7.13	20.01	0.18	-7.13	13.54
BPA	Y=24.43X+33.88	24.43	0.42	33.88	30.75
DES	Y=8.28X+124.41	8.28	0.31	124.41	22.51