

Electronic Supplementary Information for

Preparation of bifunctional magnetic nanoparticles with octadecyl and phosphate group by thiol-ene click chemistry for extraction and enrichment of organophosphorus pesticides in tea drink

Fan Nie[‡], Jiannan Wang[‡], Xin Lu^{*} and Fanggui Ye^{*}

*State Key Laboratory for the Chemistry and Molecular Engineering of Medicinal Resources,
College of Chemistry and Pharmaceutical Science, Guangxi Normal University, Guilin 541004,
P.R. China*

Corresponding author: Prof. Xin Lu, luxin-chem@163.com; Prof. Fanggui Ye

Tel: +86-773-5856104; fax: +86-773-5832294

E-mail address: fangguiye@163.com

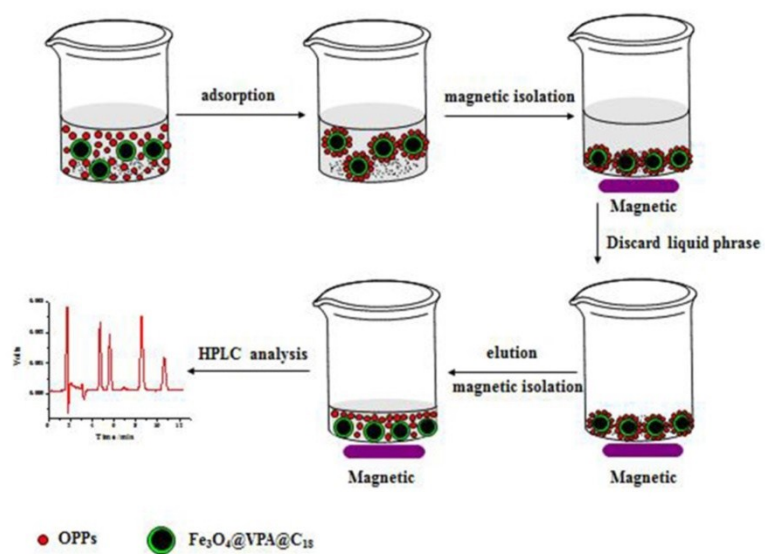


Fig. S1. Schematic illustration of MSPE process.

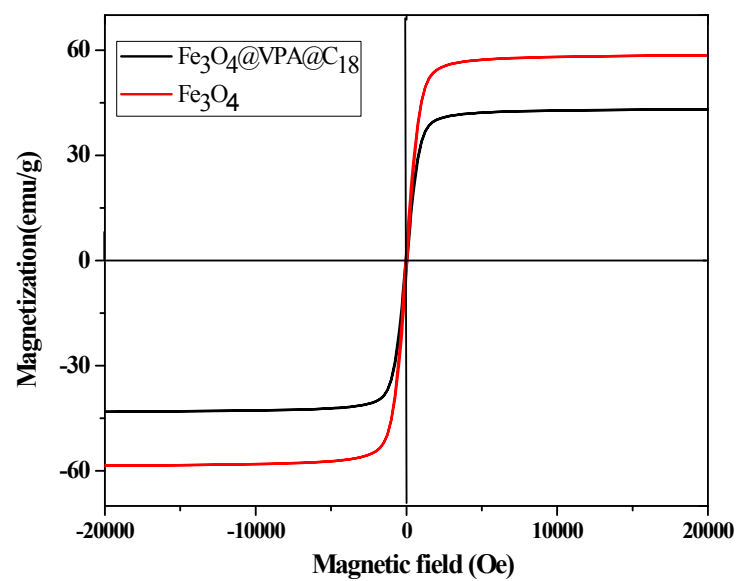


Fig. S2. Room-temperature magnetization curves of bare Fe_3O_4 and $\text{Fe}_3\text{O}_4@\text{VPA}@\text{C}_{18}$.

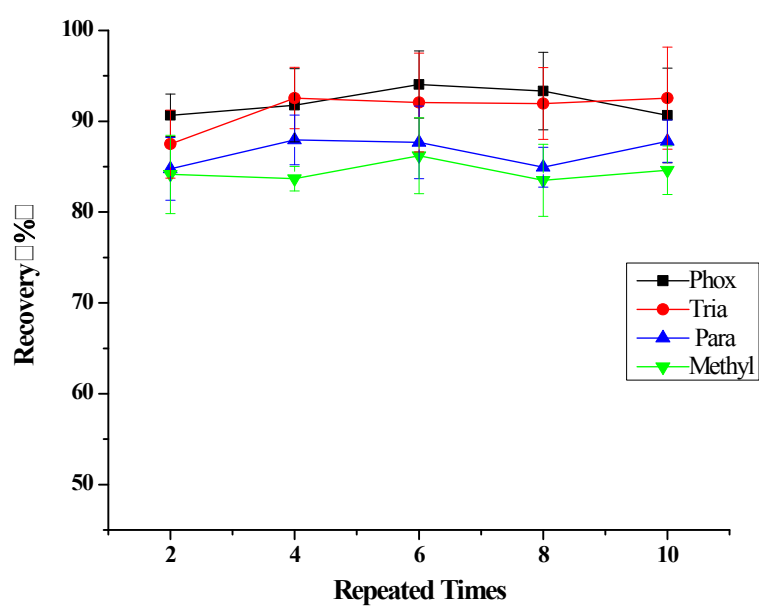


Fig.S3. Effect of recycling times on the recoveries of OPPs.

Table S1 Comparison of the present method with other methods for the determination of OPPs

Method	Linearity ($\mu\text{g/L}$)	LOD ($\mu\text{g/L}$)	Extraction time (min)	RSD (%)	Recovery (%)	EF	References
SPME ^a -HPLC	0.2-100	0.01-0.03	45	4.0-9.8	77.7-119.8	84-161	[26]
HS ^b -MSPE-GC-MS ^c	14.1-28	2.2-10.9	50	6.1-29.2	86.6-107.5	469-510	[29]
MSPE-HPLC-UV	1-200	0.01	2	5.5-10.9	81.4-112.6	84-161	[30]
DI-SPME-GC-CD-IMS ^d	0.01-3.0	0.05-0.30 ^e	30	5.9-7.8	79-98	220-350	[31]
LPME-HPLC-DAD ^f	0.01-5	10	20	6.5-8.1	92.3-96.7	--	[32]
MSPE-GC-NPD ^g	0.06-200	0.02-0.1	5	<4, 8	90.4-108.0	477-512	[33]
MSPE-HPLC-UV	0.1-300	0.01-0.05	15	2.8-5.3	81.7-92.8	420-455	This work

^a. SPME: solid-phase microextraction;

^b. HS: headspace

^c. MS: mass spectrometry

^d. GC-CD-IMS: gas chromatography-corona discharge ionmobility spectrometry;

^e. $\mu\text{g/kg}$;

^f. DAD: diode array detector;

^g. GC-NPD: gas chromatography-nitrogen phosphorous detection;