

1 **Electronic supplementary information**

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3 Speciation of Mercury in Coal Using HPLC-CV-AFS System:

4 Comparison of Different Extraction Methods

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1 **Tables**

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3 **Table S1** Recoveries of microwave assisted extraction at 30w-120w powers using

4 TMA and KOH/CH₃OH as extractants

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Power	Extractants	Recoveries (MeHg, %)	Recoveries (EtHg, %)
30 w	TMA	73.8±1.7	70.7±2.2
	KOH/CH ₃ OH	72.2±6.3	70.1±2.4
60 w	TMA	90.3±4.0	75.6±5.4
	KOH/CH ₃ OH	88.3±4.2	75.5±10.7
90 w	TMA	90.3±3.7	77.6±5.5
	KOH/CH ₃ OH	85.8±0.4	77.9±6.5
120 w	TMA	75.3±1.3	70.7±3.6
	KOH/CH ₃ OH	72.5±2.6	71.0±6.6

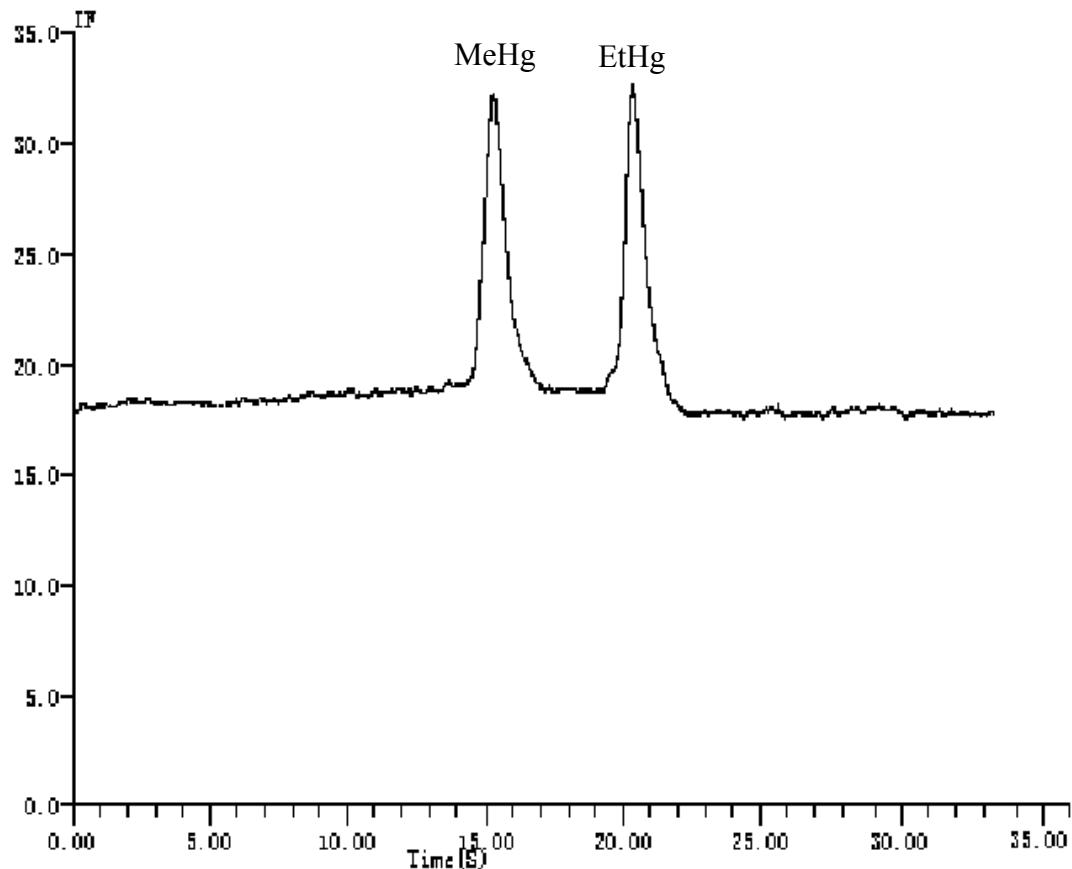
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1 **Figures**

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3 **Figure S1** Chromatogram of the standard solution for MeHg and EtHg, 5 ng ml⁻¹.

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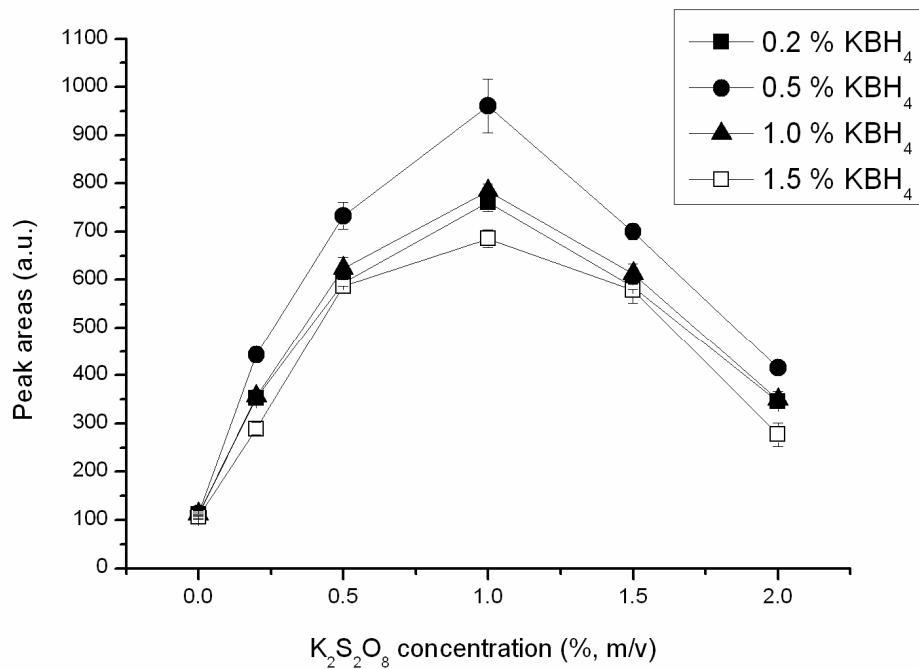
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1 **Figure S2** Effect of $\text{K}_2\text{S}_2\text{O}_8$ and KBH_4 concentrations on fluorescence intensity of
2 MeHg and EtHg.

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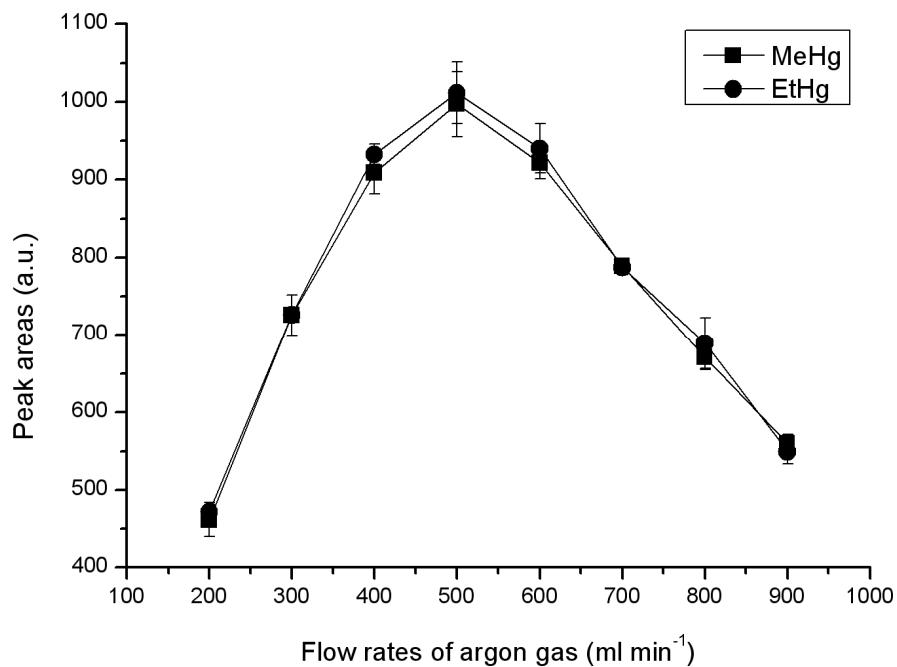


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1 **Figure S3** Effect of argon gas on fluorescence intensity of MeHg and EtHg.

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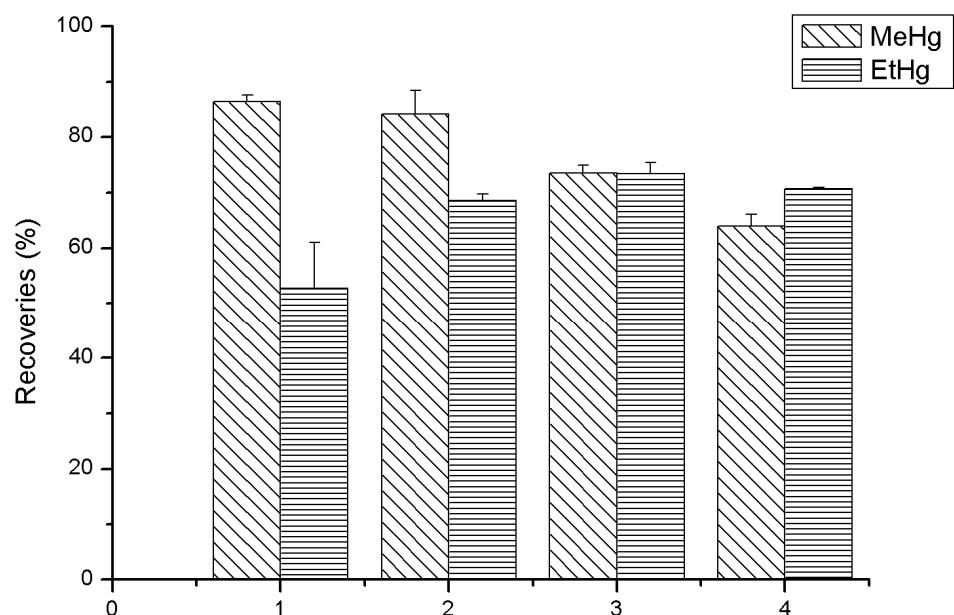


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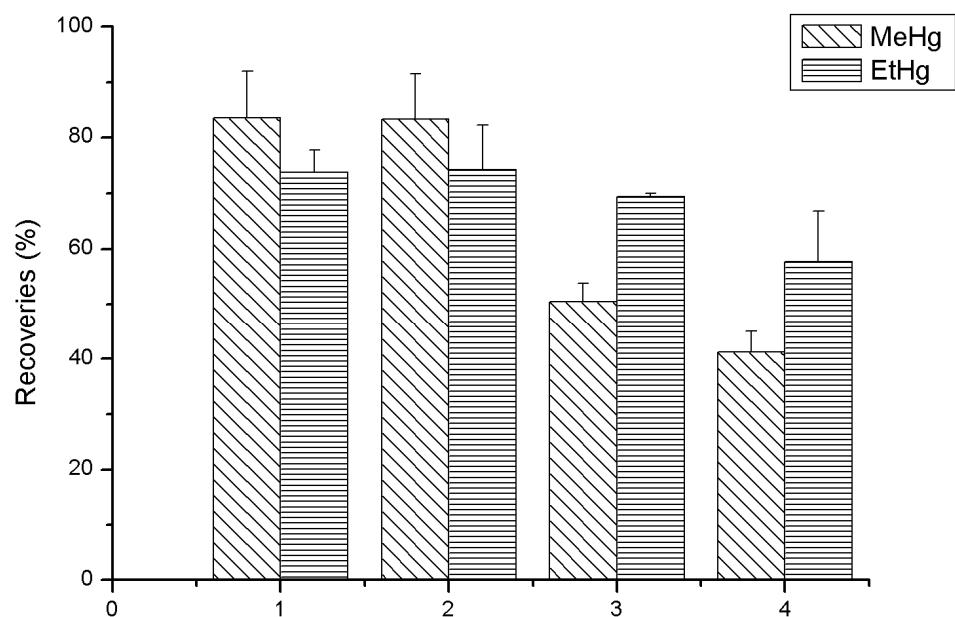
1 **Figure S4** Recoveries of the shaking extraction for MeHg and EtHg using different
2 extraction solvents. 1 TMA; 2 KOH/CH₃OH; 3 HCl; 4 KBr/CuSO₄.
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1 **Figure S5** Recoveries of the ultrasonic extraction for MeHg and EtHg using
2 different extraction solvents. 1 TMA; 2 KOH/CH₃OH; 3 HCl; 4
3 KBr/CuSO₄.

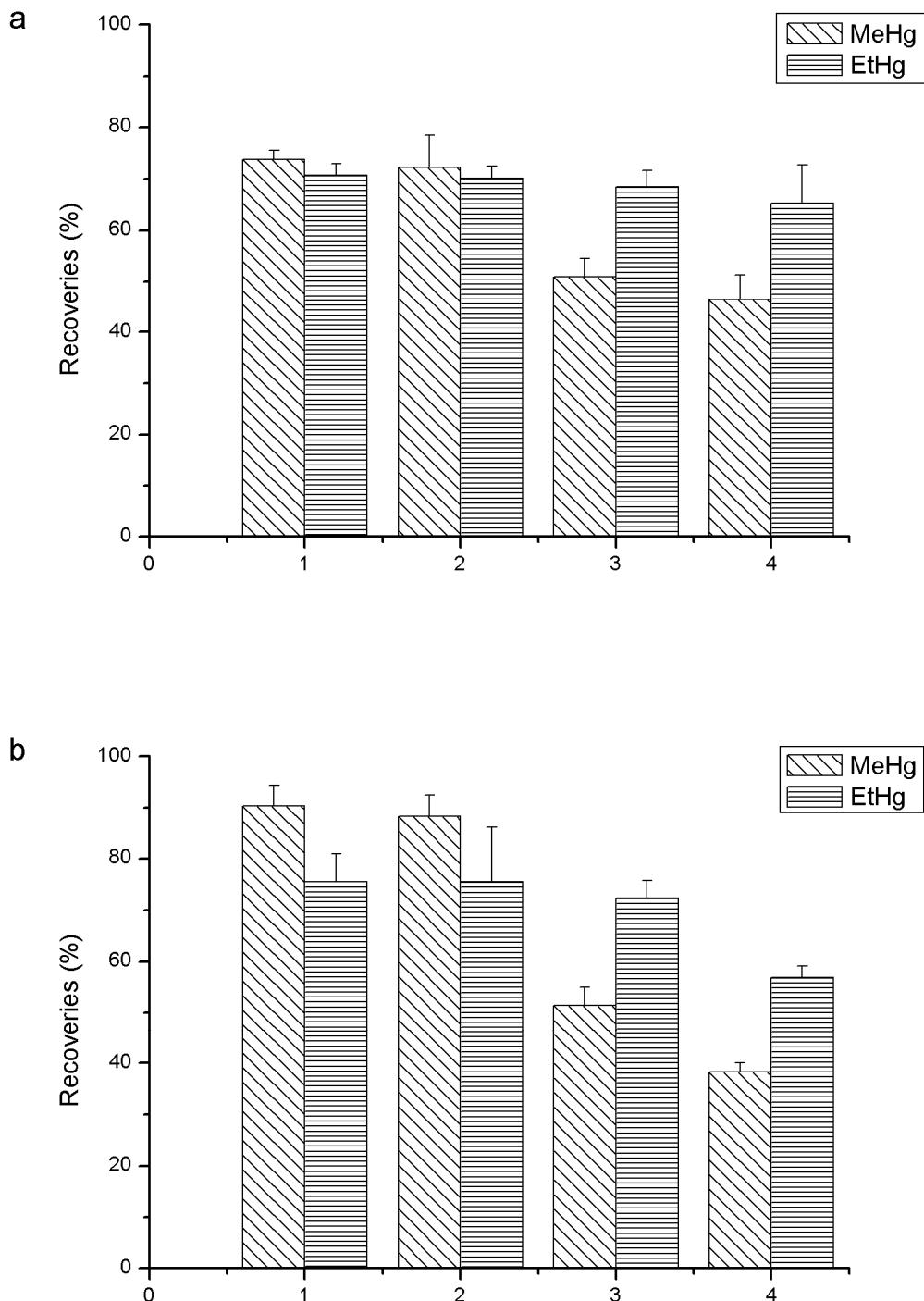
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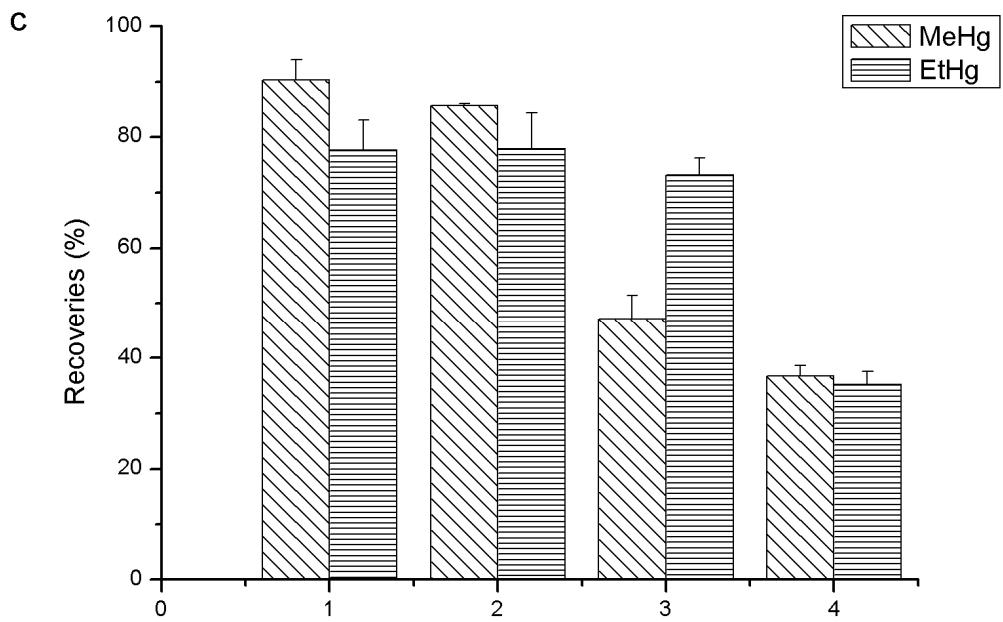
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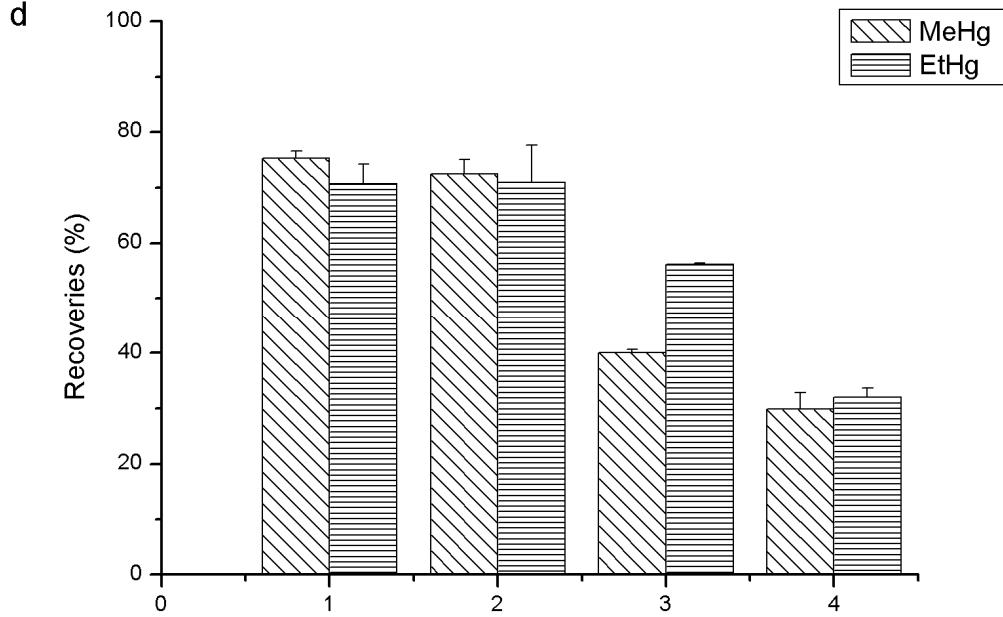
1 **Figure S6** Recoveries of the microwave assisted extraction at different powers for
2 MeHg and EtHg using different extraction solvents. (a) 30w; (b) 60w; (c)
3 90w; (d) 120w. 1 TMA; 2 KOH/CH₃OH; 3 HCl; 4 KBr/CuSO₄.



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