Electronic supplementary information (ESI)





Fig. S2. Chromatograms of a standard mixture containing 50 μ g L⁻¹of Hg²⁺, 20 μ g L⁻¹MeHg, 50 μ g L⁻¹ EtHg and 50 μ g L⁻¹PhHg





Fig. S3. Effect of argon carrier gas flow rate on response. Each mercury species was present at 50 μ g L⁻¹.



Fig. S4. Effect of pH on response. Each mercury species was present at 50 μ g L⁻¹.



Fig. S5. Effect of Fe₃O₄ diameter on catalytic activity

Fig. S6. Chromatograms obtained using the proposed method with 20 μ L injection of water samples spiked with 50 μ g L⁻¹of Hg²⁺, 20 μ g L⁻¹MeHg, 50 μ g L⁻¹ EtHg and 50 μ g L⁻¹PhHg: (a) water from lotus pond, (b) water from Funan River. HPLC separation column, mobile phase: a mixture of 10% (v/v) CH₃CN, 0.12% (m/v) L-cysteine, 0.47 % (m/v) NH₄Ac (pH 6.8); and flow rate of the mobile phase: 0.6 mL min⁻¹. Other conditions of post-column oxidation and vapor generation as described in Table 1.

