Supporting information

Preparation of thiol-functionalized magnetic sawdust composites as the adsorbent to remove heavy metal ions

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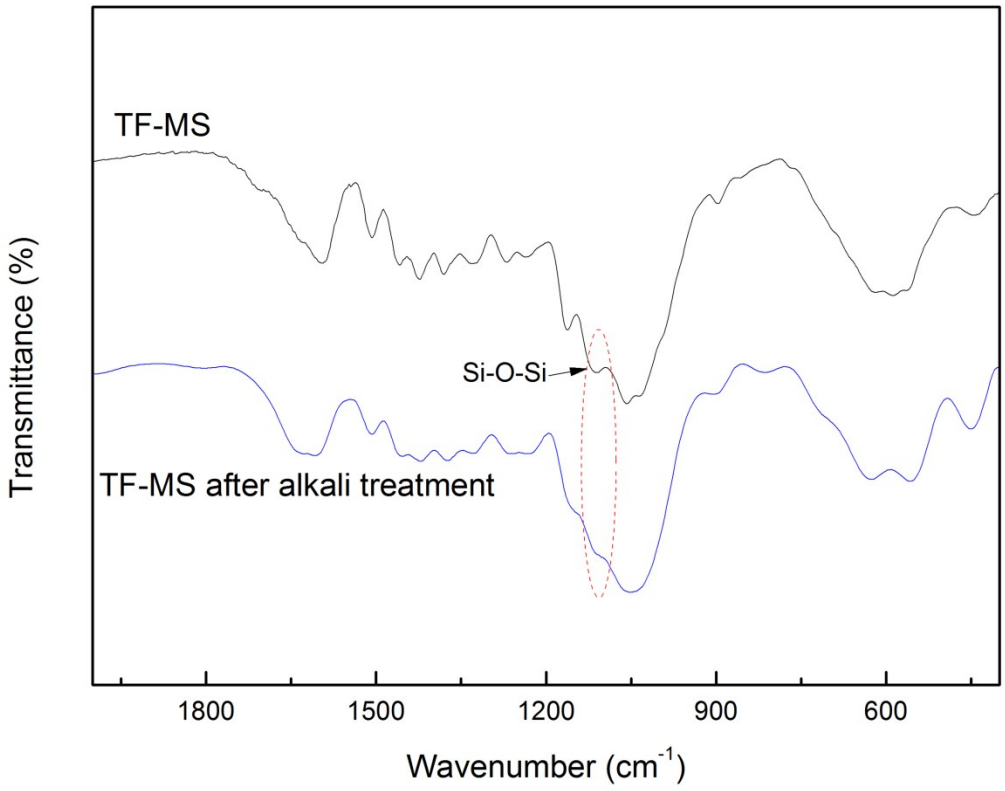

Figure S1 FTIR spectra of TF-MS before and after alkali treatment.

Table S1 Effect of the concentration of iron oxides on t Pb^{2+} adsorption.

Fe^{3+} content (mol/L)	Fe^{2+} content (mol/L)	Surface area (m^2/g)	Pore size (d, nm)	Pb^{2+} adsorption
0.01	0.005	12.13	13.84	9.37
0.02	0.01	12.51	13.51	9.62
0.03	0.015	16.75	15.29	10.16

Measured using N_2 adsorption with the Brunauer-Emmett-Teller (BET) method. Pore

size in diameter calculated by the desorption data using Barrett-Joyner-Halenda (BJH) method. Pb^{2+} adsorption conditions: pH: 6.0; contact time: 30 min; C_0=10 mg/L; adsorbent concentration: 1 g/L.

Table S2 The list of biomass materials available for adsorption heavy metal ions.

Adsorbent	q_m (mg/g)			Reference
	Cu^{2+}	Pb^{2+}	Cd^{2+}	
Maple sawdust	1.79	3.19	-	Yu et al. 2001
Poplar sawdust	2.25	-	0.50	Šćiban et al. 2004
Almond shell	3.62	-	-	Altun et al. 2007
Modified peanut husk	3.80	4.66	-	Li et al. 2007
Abies aschalinensis Masters	4.4	-	6.7	Seki et al. 1997
Black locust	4.48	-	-	Sciban et al. 2006
Pomegranate peel	7.2	14.4	-	El-Ashtoukhy et al. 2008
Bael tree leaf power	-	0.328	-	Senthil Kumar et al. 2009
Sphagnum moss peat	12.4	12.3	-	Ho et al. 2000
Banana peel	-	7.97	-	Annadurai et al. 2003
TF-MS	5.49	12.50	3.80	This study