

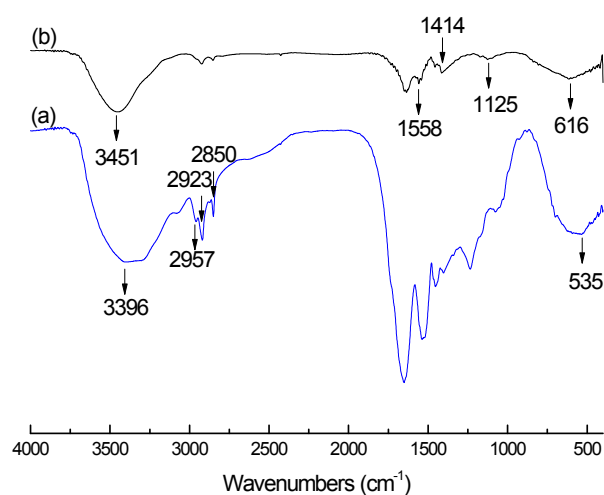


Fig. s1 FT-IR spectra of CFP (a) and CFP-g-PKA/PVA semi-IPN SAR (b)

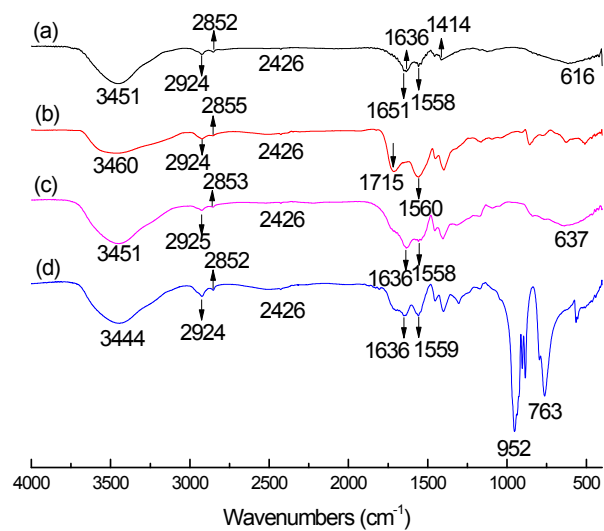


Fig. s2 FT-IR spectra of CFP-g-PKA/PVA semi-IPN SAR before (a) and after the adsorption of Pb²⁺ (b), Ni²⁺ (c), and Cr⁶⁺ (d)

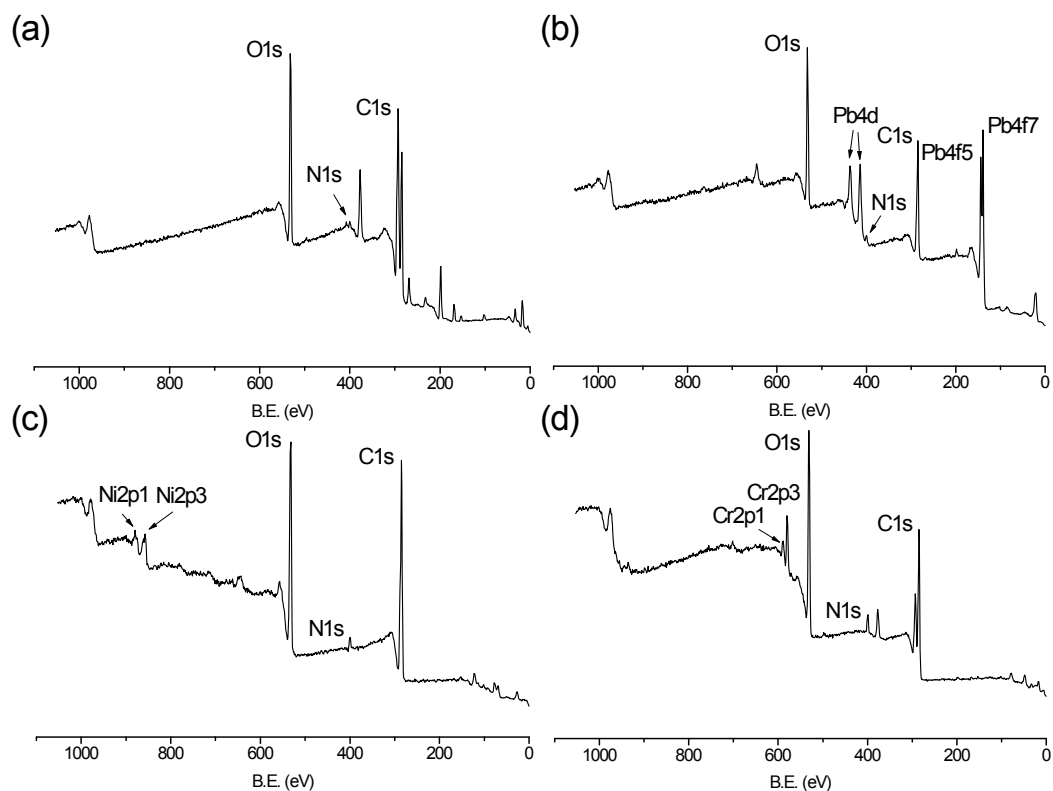


Fig. s3 Low-resolution XPS spectra of CFP-g-PKA/PVA semi-IPN SAR before (a) and after the adsorption of Pb^{2+} (b), Ni^{2+} (c) and Cr^{6+} (d)

Table s1 Thermodynamic parameters of the metal adsorption.

Metal	T (K)	k_s (kg^{-1})	ΔG^0 (kJ/mol)	ΔH^0 (kJ/mol)	ΔS^0 (J/mol K)
Ni^{2+}	283	1481	-17.18		
	298	1641	-18.34	3.1	50.8
	313	1685	-19.33		
Pb^{2+}	283	890	-15.98		
	298	950	-16.99	2.4	48.8
	313	983	-17.93		
Cr^{6+}	283	728	-15.51		
	298	766	-16.45	2.1	20.9
	313	793	-17.37		