

(Supporting Information)

Enantioselective separation of *RS*-mandelic acid using β -cyclodextrin modified

$\text{Fe}_3\text{O}_4@\text{SiO}_2/\text{Au}$ microspheres

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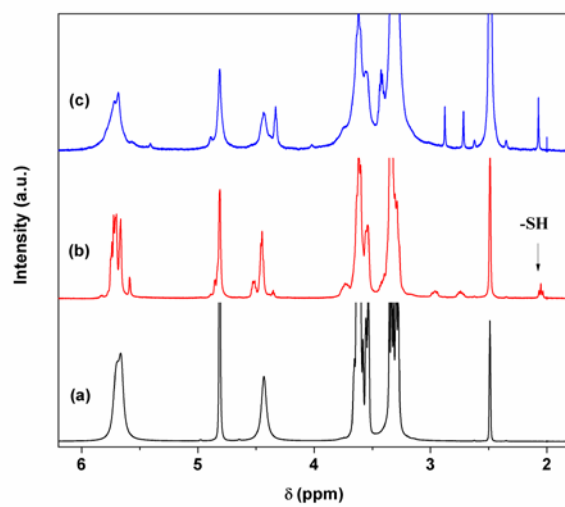


Fig. S1 The ^1H -NMR (500MHz, DMSO) spectra of (a) β -CD, (b) SH- β -CD, (c) Au-SH- β -CD.

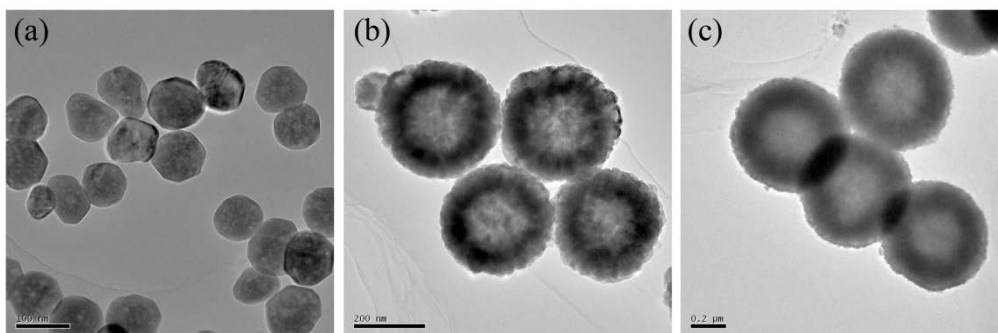


Fig. S2 Magnetic Fe_3O_4 microspheres with diameter of (a) ≈ 100 nm, (b) ≈ 300 nm, (c) ≈ 600 nm.

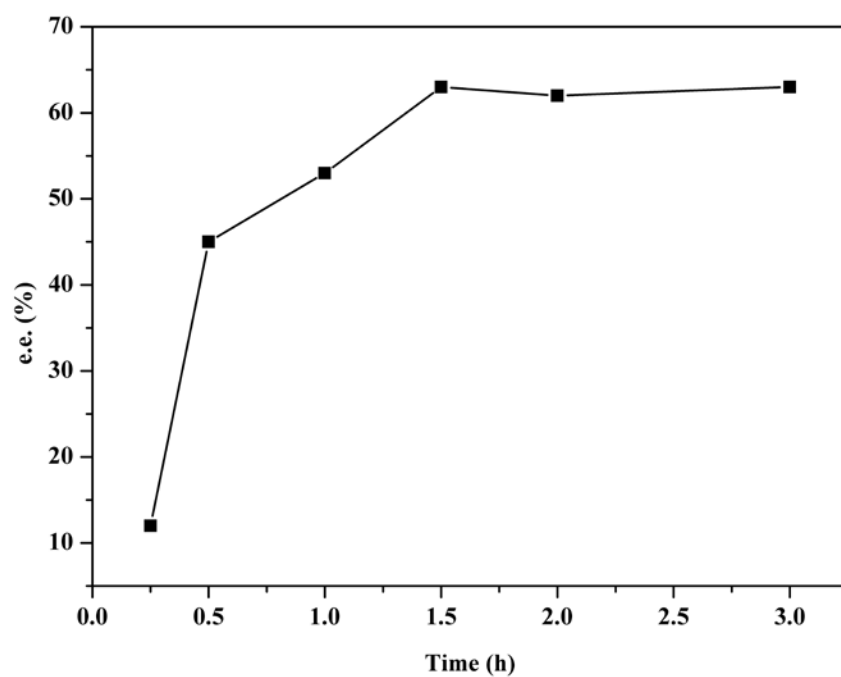


Fig. S3 The effect of adsorption time for sorption of MA on magnetic $\text{Fe}_3\text{O}_4@\text{SiO}_2/\text{Au}/\beta\text{-CD}$ composites.

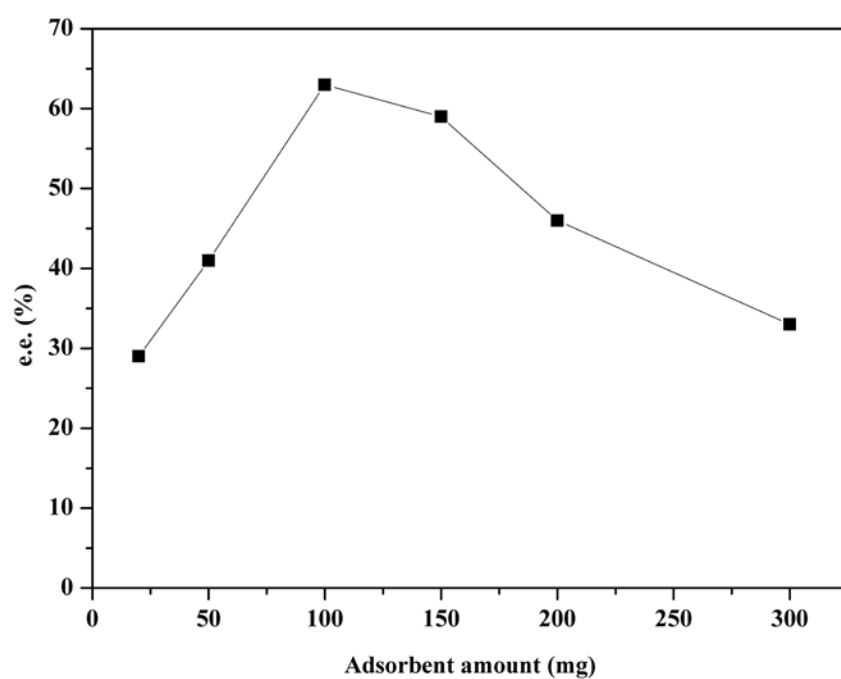


Fig. S4 The effect of adsorbent amount for sorption of MA on magnetic $\text{Fe}_3\text{O}_4@\text{SiO}_2/\text{Au}/\beta\text{-CD}$ composites.

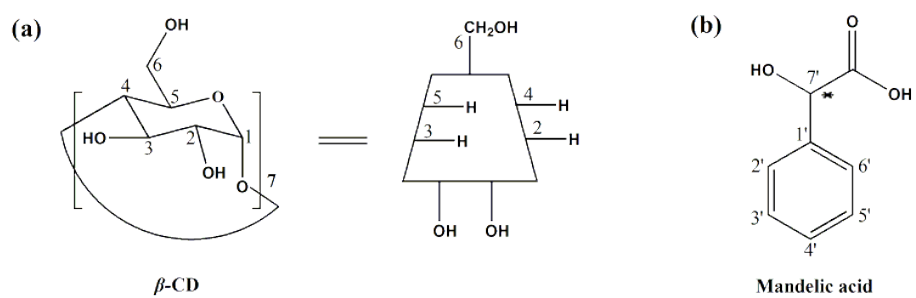


Fig. S5 The molecular structures of (a) β -CD and (b) mandelic acid.