

Investigation of magnetic properties and colloidal stability by surface modification

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Introduction

Recent research has focused on improving the



Experimental Methods



Fig 2. (a) thermogravimetric analysis under argon atmosphere, 30 °C - 600 °C interval, 5 °C/min rate and hold at 200 °C, 120 min, (b) equation of surface ligand density of Fe_3O_4 NCs, (c) surface ligand density and number of particle per unit mass of modified Fe_3O_4 NCs.

	Fraction of <i>tert</i> -formed ligand	
	Low	High
Steric repulsion		
Colloidal stability		

We showed that we can control the magnetic properties, colloidal stability and interparticle distance

In further study, we will use the unary / binary linear or branched aliphatic ligand with short length to improve the magnetic properties and colloidal stability of Fe₃O₄ NCs. Since the polarity of NCs

In addition, we will synthesize the Magnetic Nanoassemblies (MNAs) to control packing density of

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