

Magnetorheological fluids based on core-shell carbonyl iron particles modified by various organosilanes: Synthesis, stability and performance

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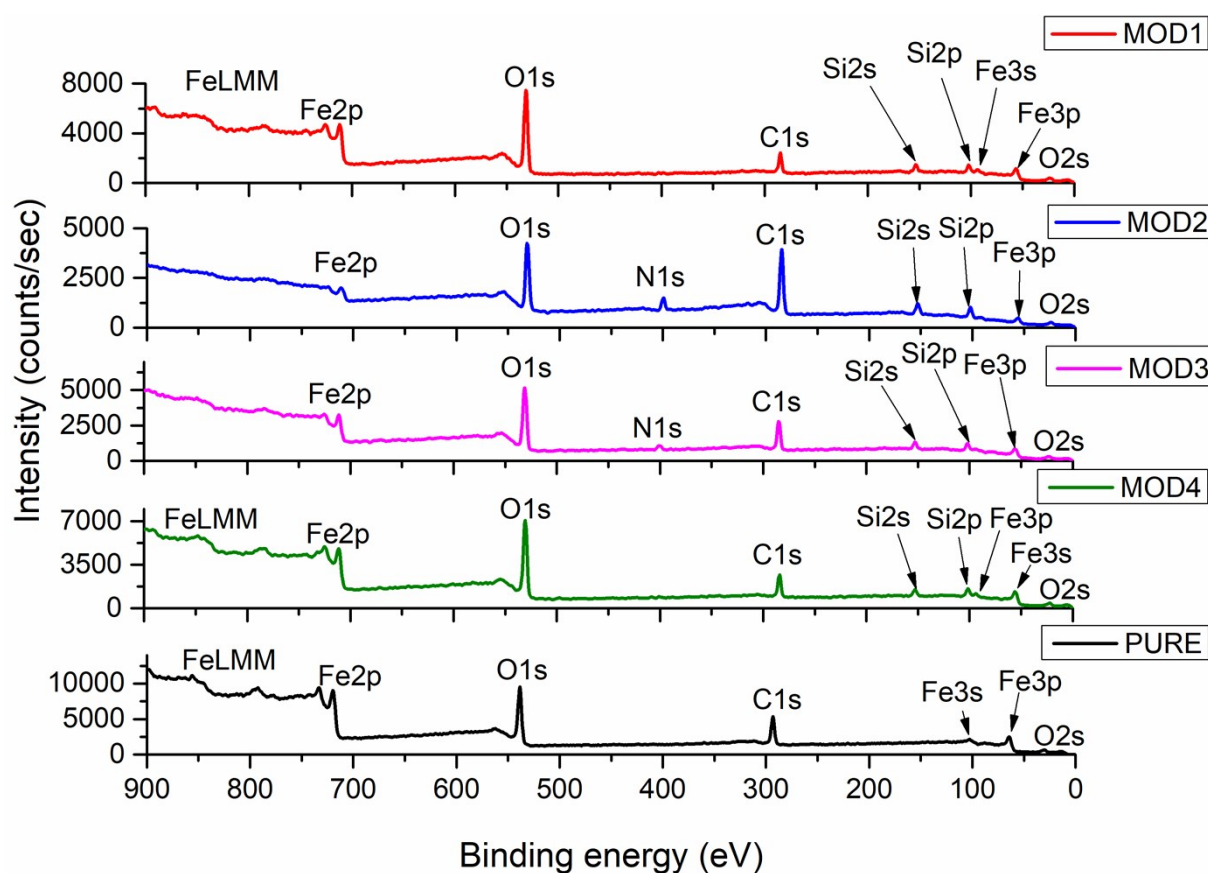


Figure S1 XPS spectra of carbonyl iron particles modified with various types of organosilanes.

Table S1 Numerical parameters of the R–S model.

Sample ID	Parameter	Magnetic field strength (kA·m ⁻¹)			
		0	72	216	432
PURE	τ_0 (Pa)	0.908	245.1	1804	5784
	K (Pa·s ^{<i>n</i>})	0.509	380.0	2046	5019
	n (-)	0.948	0.121	0.123	0.135
MOD1	τ_0 (Pa)	1.098	237.5	1574	5027
	K (Pa·s ^{<i>n</i>})	0.528	340.0	1892	4493
	n (-)	0.953	0.117	0.119	0.144
MOD2	τ_0 (Pa)	1.168	184.1	1339	4697
	K (Pa·s ^{<i>n</i>})	0.528	334.7	1778	4406
	n (-)	0.953	0.127	0.140	0.154
MOD3	τ_0 (Pa)	1.208	177.3	1355	4845
	K (Pa·s ^{<i>n</i>})	0.554	337.9	1830	4547
	n (-)	0.946	0.129	0.137	0.150
MOD4	τ_0 (Pa)	1.105	235.9	1648	5205
	K (Pa·s ^{<i>n</i>})	0.542	360.4	1980	4682
	n (-)	0.951	0.116	0.122	0.147