Table S6. Microstructure of MNPs

Sample	Fe_3O_4			$Fe_3O_4/APTES$			Fe_3O_4/HA		
hkl [1]	**2Q**, ° [2]	**d**, Å [3]	**FWHM**, ° [4]	**2Q**, °	**d**, Å	**FWHM**, °	**2Q**, °	**d**, Å	**FWHM**, °
220	45.60	2.971	3.877(5)	45.61	2.959	1.790(1)	45.67	2.966	1.591(2)
311	53.98	2.535	1.445(2)	54.01	2.525	1.870(1)	54.01	2.535	1.344(7)
400	66.28	2.094	2.558(2)	66.41	2.095	2.980(2)	66.36	2.094	1.401(2)
422	84.25	1.714	5.912(6)	84.37	1.711	1.870(5)	84.25	1.714	1.483(2)
511	90.77	1.610	1.541(2)	90.68	1.609	2.749(5)	90.71	1.612	1.792(3)
440	101.52	1.476	2.248(7)	101.6	1.479	0.860(4)	101.4	1.476	1.591(2)
a, Å [5]	8.383(2)			8.372(1)			8.382(6)		
X [6]	0.387(7)			0.290(3)			0.382(1)		
δ [7]	0.059(4)			0.117(2)			0.062(7)		
Structure	$Fe_{2,94}O_4$			$Fe_{2,88}O_4$			$Fe_{2,93}O_4$		
D XRD, nm [8]	6.9±2.4			9.6±1.4			10.3±1.3		
CV, % [9]	34			14.5			12.6		
D SEM, nm [10]	32.1±4.3			24.18±2.8			34.75±4.3		
CV, %	13.5			11.6			12.45		

[1] hkl – Miller indexes.

[2] Q – angle at which the reflex was measured.

[3] d – interplanar distance.

[4] FWHM – full width at half maximum of XRD reflex.

[5] a – interplanar distance.

[6] X – the Fe^{2+}/Fe^{3+} ratio.

[7] δ – calculated value, which range from zero (stoichiometric magnetite) to 1/3 (completely oxidized).

[8] D XRD – average particle size calculated by the Scherrer equation ± standard deviation.

[9] CV – coefficient of variation characterizing the polydispersity of the system.

[10] D SEM – average particle size calculated by the SEM ± standard deviation.