

Supporting Information

Functionalized Fe₃O₄ nanoparticles: influence of ligand addition sequence and pH during their continuous hydrothermal synthesis

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	a: DHCA				a: LDOPA			
	Fe2p _{1/2} (eV)	Satellite Fe2p _{3/2} (eV)	Fe2p _{3/2} (eV)	Δ(Satellite-Fe2p _{3/2}) (eV)	Fe2p _{1/2} (eV)	Satellite Fe2p _{3/2} (eV)	Fe2p _{3/2} (eV)	Δ(Satellite-Fe2p _{3/2}) (eV)
Ref: Fe₃O₄	723.9	718.6	710.4	8.2	723.9	718.6	710.4	8.2
Run{1/a/100%}	724.0	718.7	710.4	8.3	724.4	718.9	710.8	8.1
Run{1/a/50%}	724.2	718.7	710.5	8.2	724.3	718.8	710.9	7.9
Run{1/a/33%}	724.1	718.8	710.6	8.2	724.4	718.8	710.6	8.2
Run{2/a/100%}	724.1	n.d	710.5	n.d	724.2	718.6	710.6	8.0
Run{2/a/50%}	724.1	718.7	710.6	8.1	724.1	718.7	710.6	8.1
Run{2/a/33%}	724.1	718.8	710.5	8.3	724.1	718.8	710.7	8.1
Run{3/a/100%}	723.9	718.7	710.5	8.2	724.3	718.7	710.5	8.2
Run{3/a/50%}	724.0	718.6	710.5	8.1	724.2	718.8	710.7	8.1
Run{3/a/33%}	724.0	718.5	710.5	8.0	724.4	718.8	710.7	8.1

Table S1: XPS Fe2p peak positions for Fe₃O₄-LDOPA and Fe₃O₄-DHCA NPs from run {1/a/b}, run {2/a/b} and run {3/a/b}

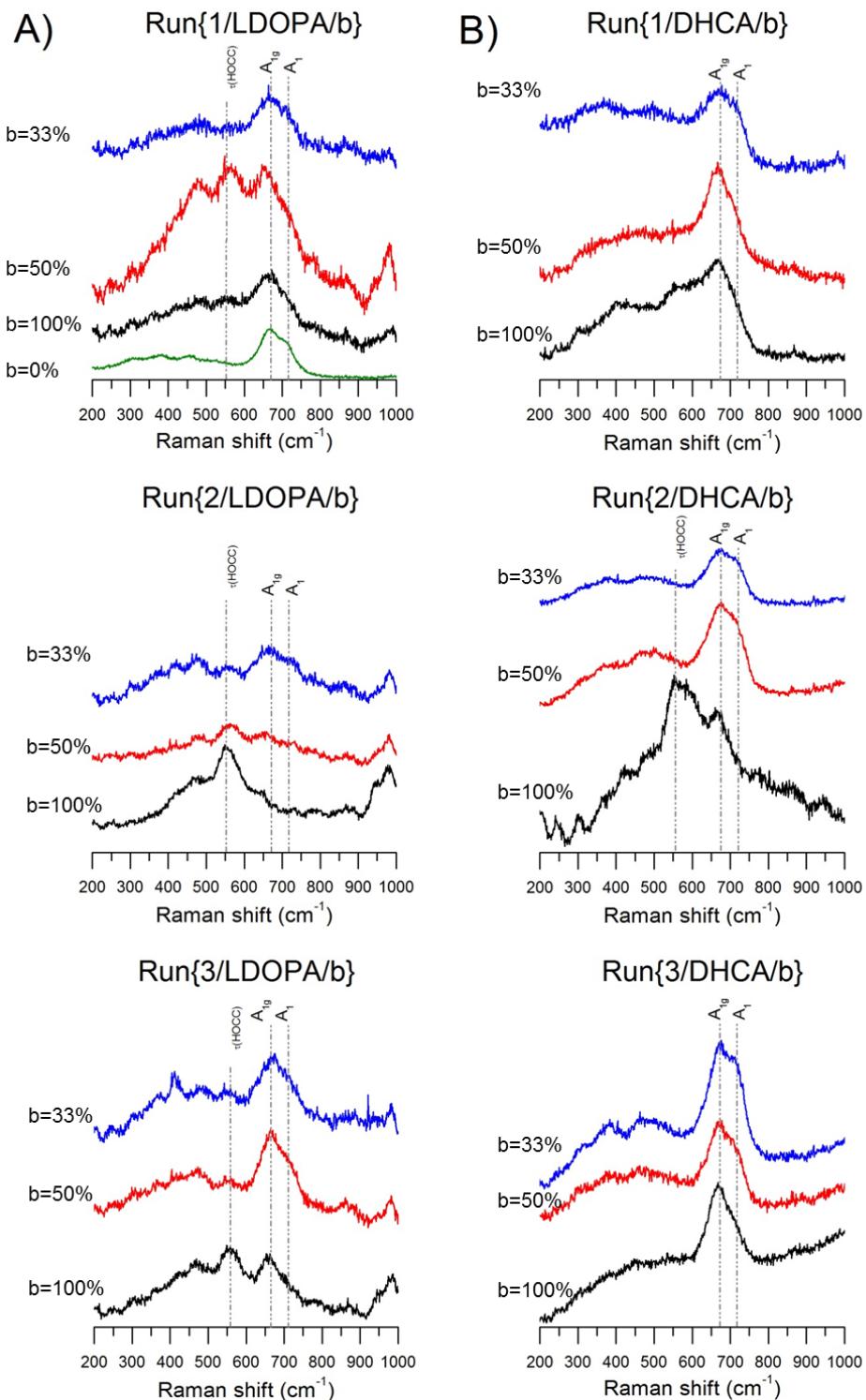


Fig. S1: Raman spectra of A) Fe₃O₄-LDOPA from run{1/LDOPA/b}, run{2/LDOPA/b} and run{3/LDOPA/b} and B) Fe₃O₄-DHCA synthesized in run{1/DHCA/b}, run{2/DHCA/b} and run{3/DHCA/b} from 200 to 1000 cm⁻¹ (τ: torsion)

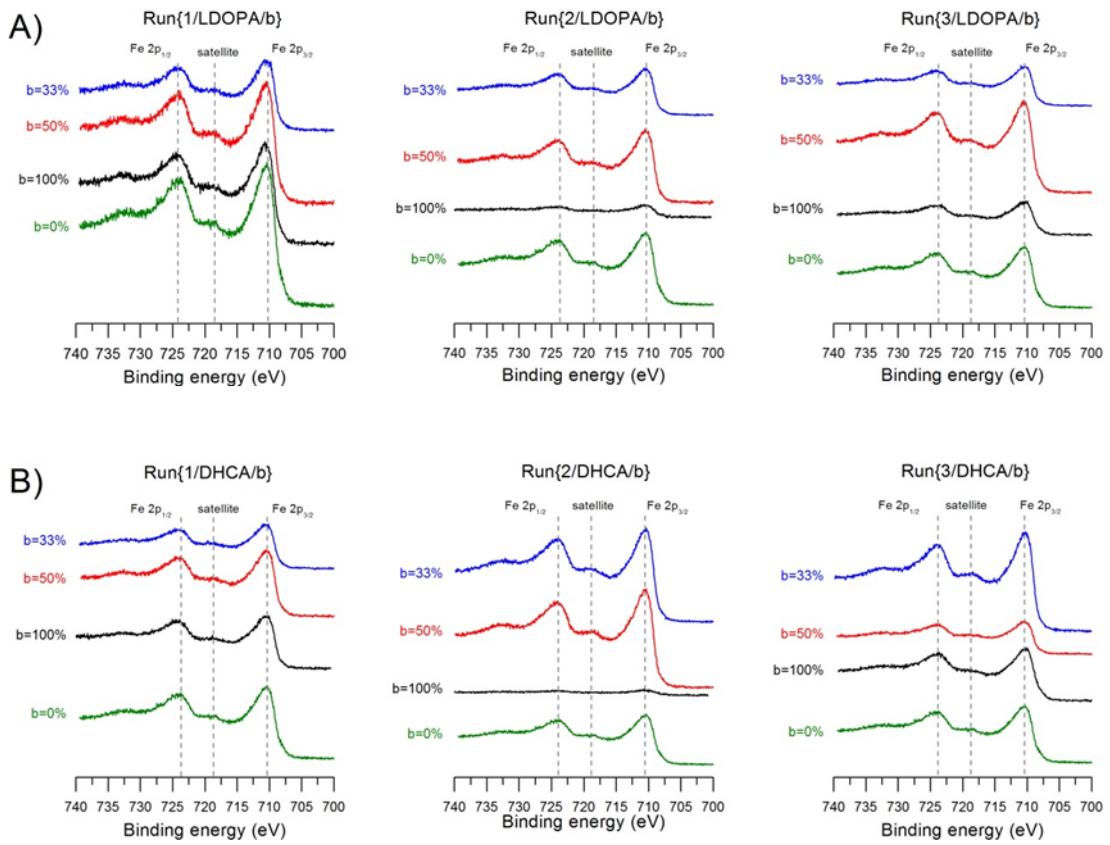


Fig. S2: XPS spectra of Fe2p collected on A) Fe_3O_4 -DHCA, B) Fe_3O_4 -LDOPA NPs from run{1/a/b}, run{2/a/b} and run{3/a/b}

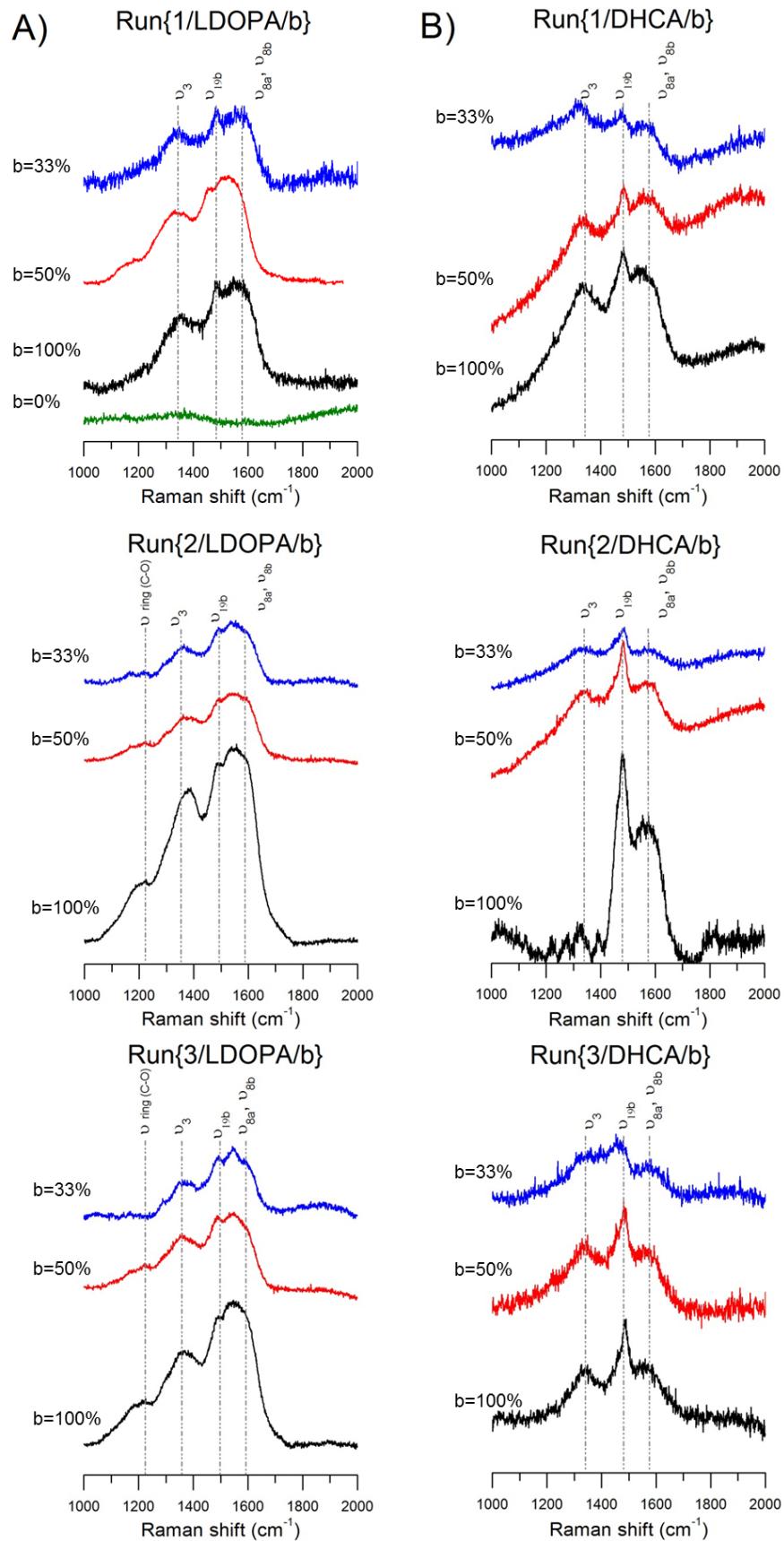


Fig. S3: Raman spectra of A) Fe_3O_4 -LDOPA from run{1/LDOPA/b}, run{2/LDOPA/b} and run{3/LDOPA/b} and B) Fe_3O_4 -DHCA synthesized in run{1/DHCA/b}, run{2/DHCA/b} and run{3/DHCA/b} from 1000 to 2000 cm^{-1} (v: stretching)

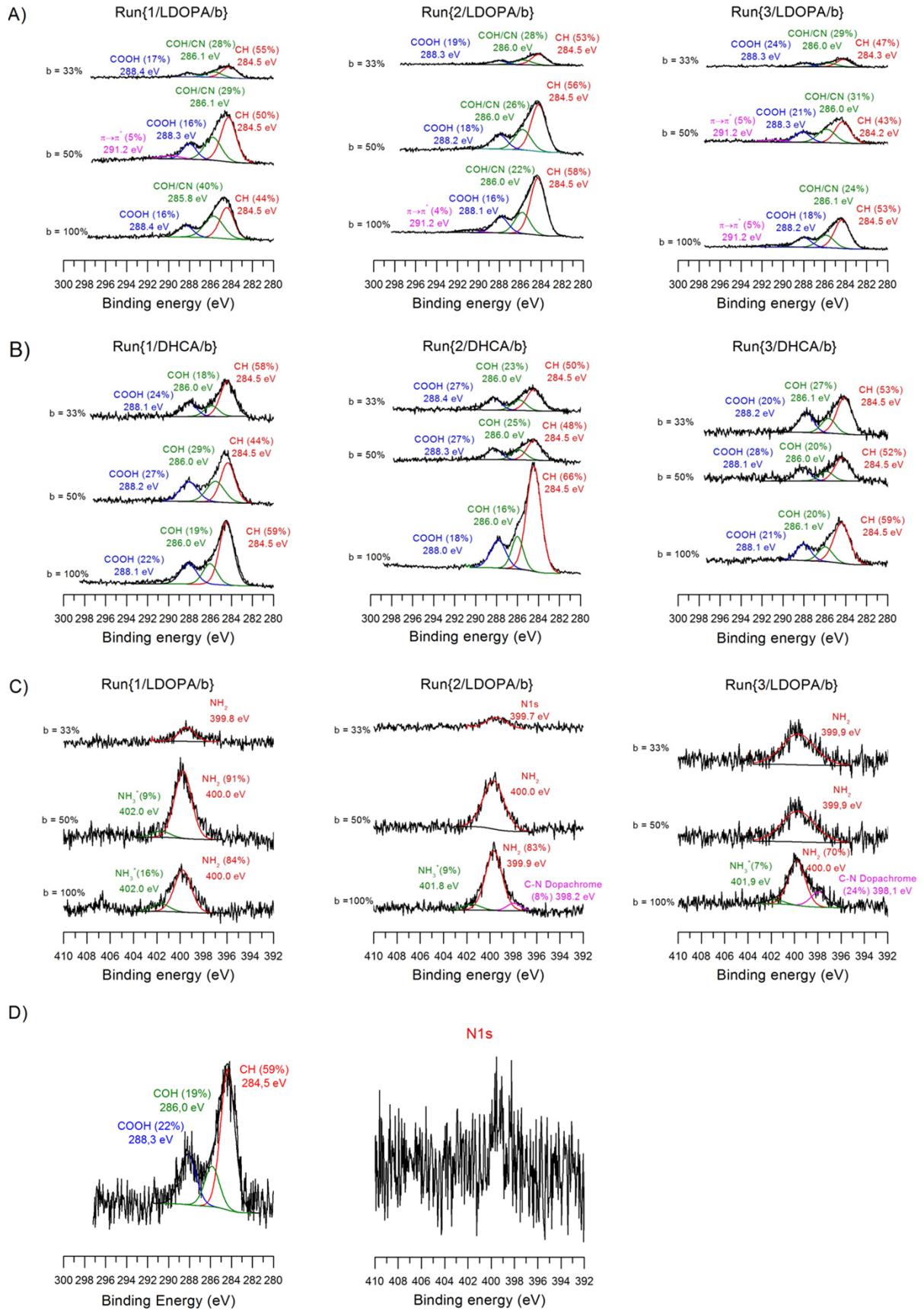


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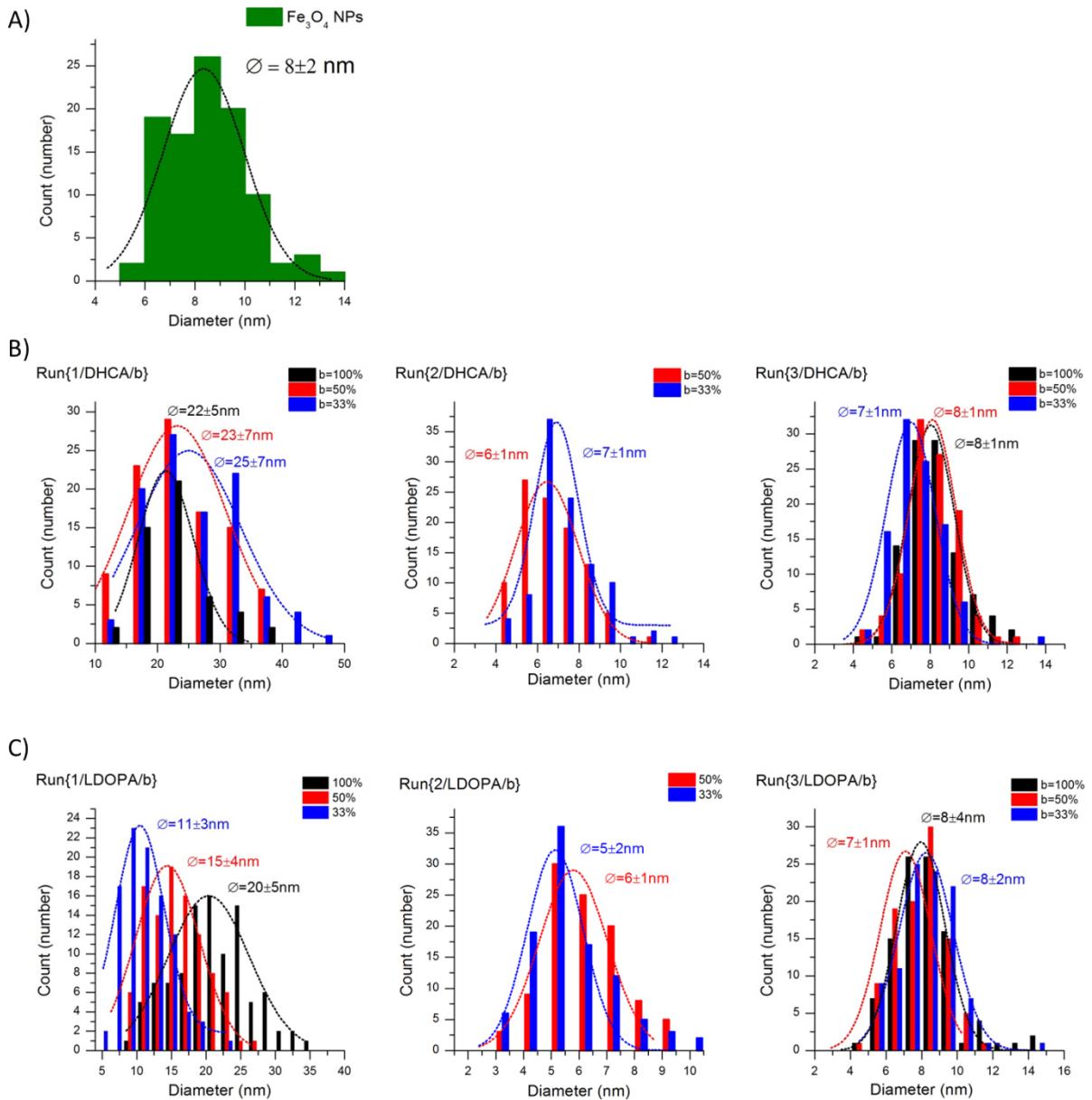


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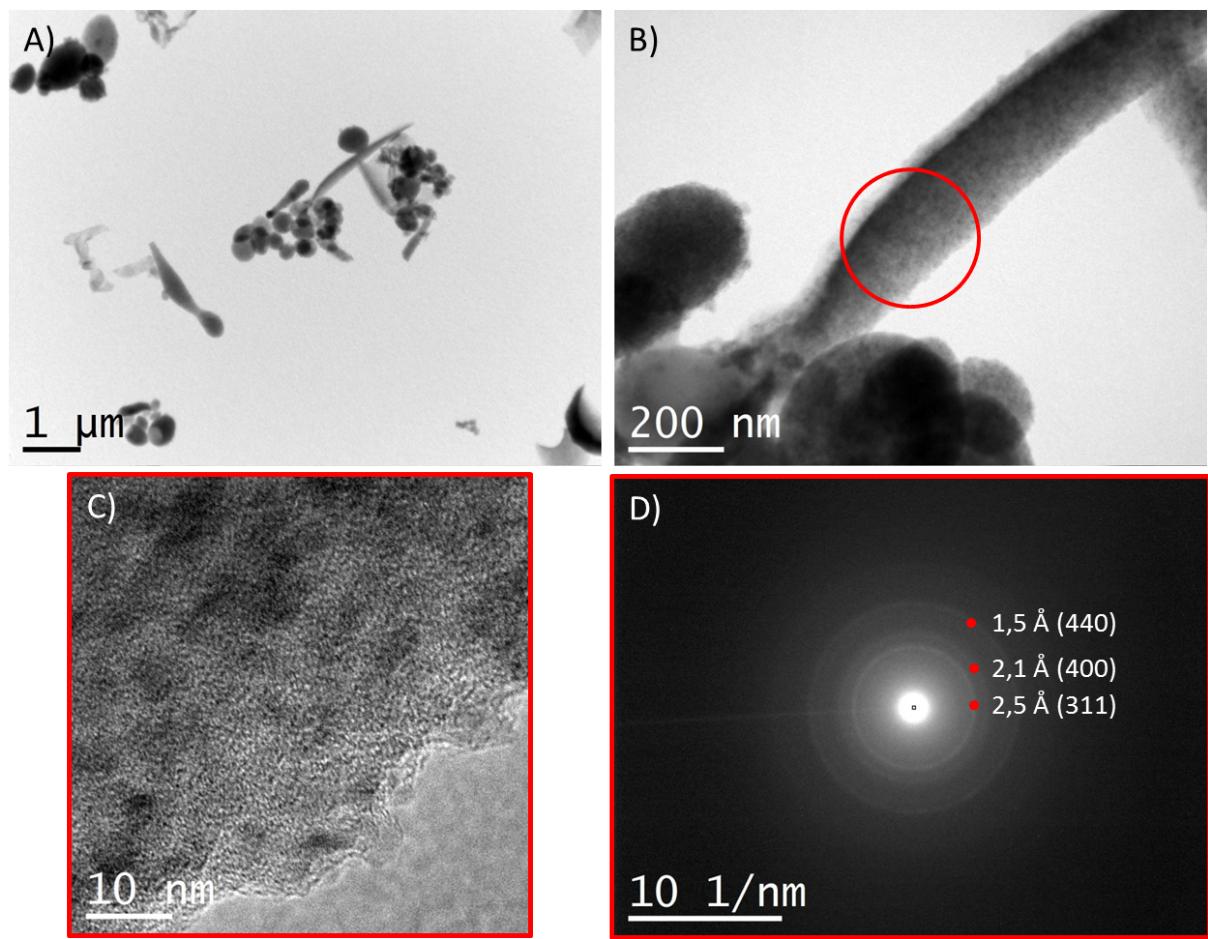


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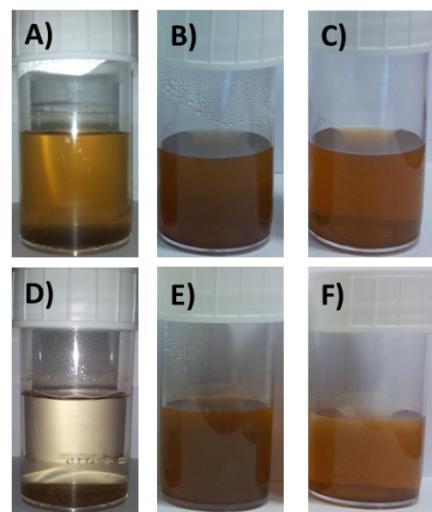


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