



Microfluidic Synthesis of -NH₂- and -COOH-Functionalized Magnetite Nanoparticles

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Figures S1 and S2 represent the schematic configuration of the microfluidic devices used for the synthesis of magnetite nanoparticles.

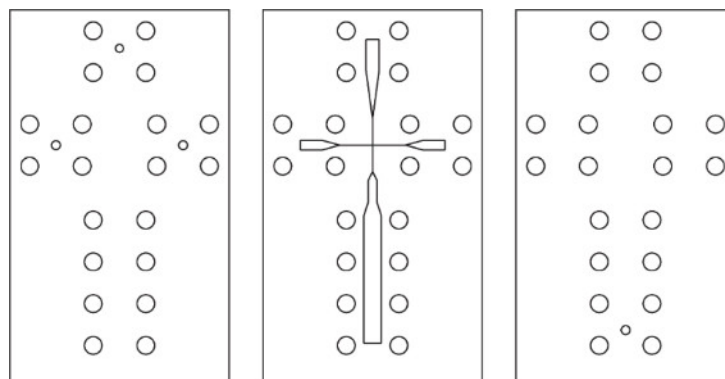


Figure S1. The design of the LoC device.

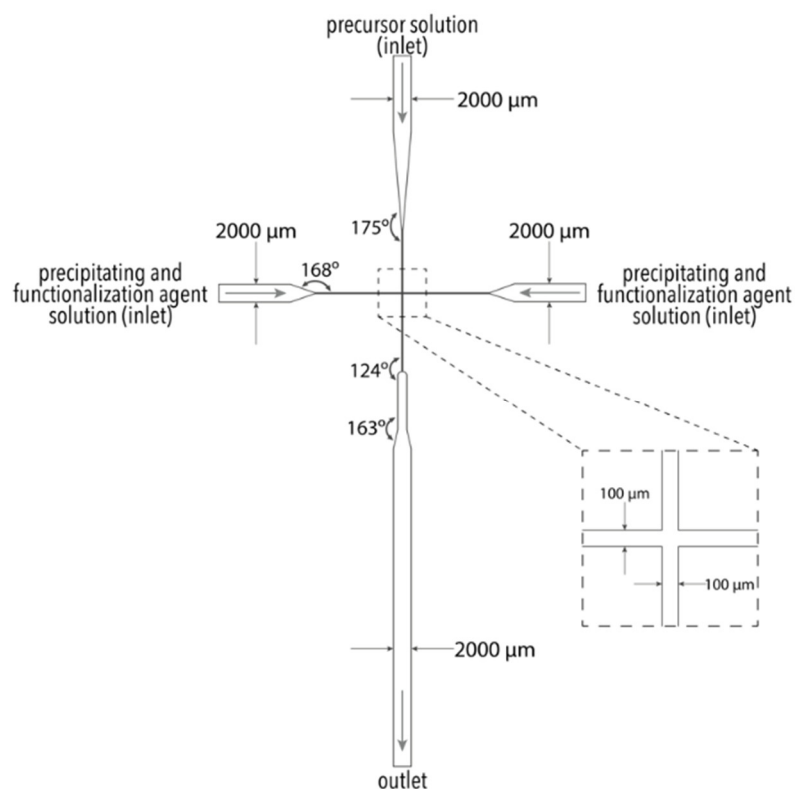


Figure S2. The geometry of the channel within the middle layer. Adapted from an open-access source [1].

Figures S3 and S4 show the values of the hydrodynamic diameter obtained for all the synthesized MNPs. Figures S3 and S4 show the values of the zeta potential obtained for all the synthesized MNPs.

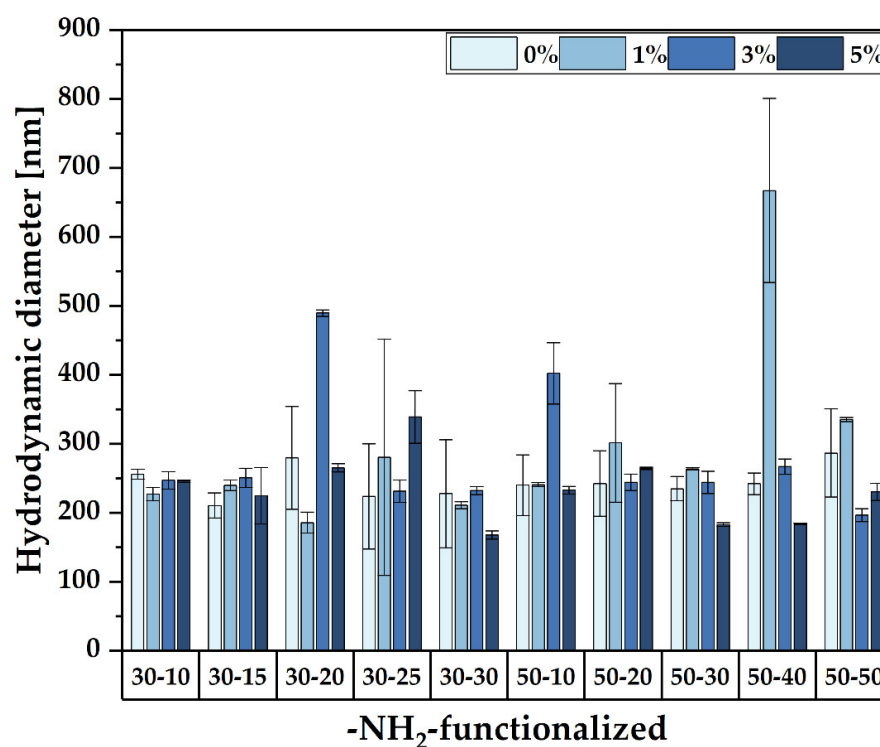


Figure S3. The hydrodynamic diameter values of the pristine and -NH₂-functionalized MNPs.

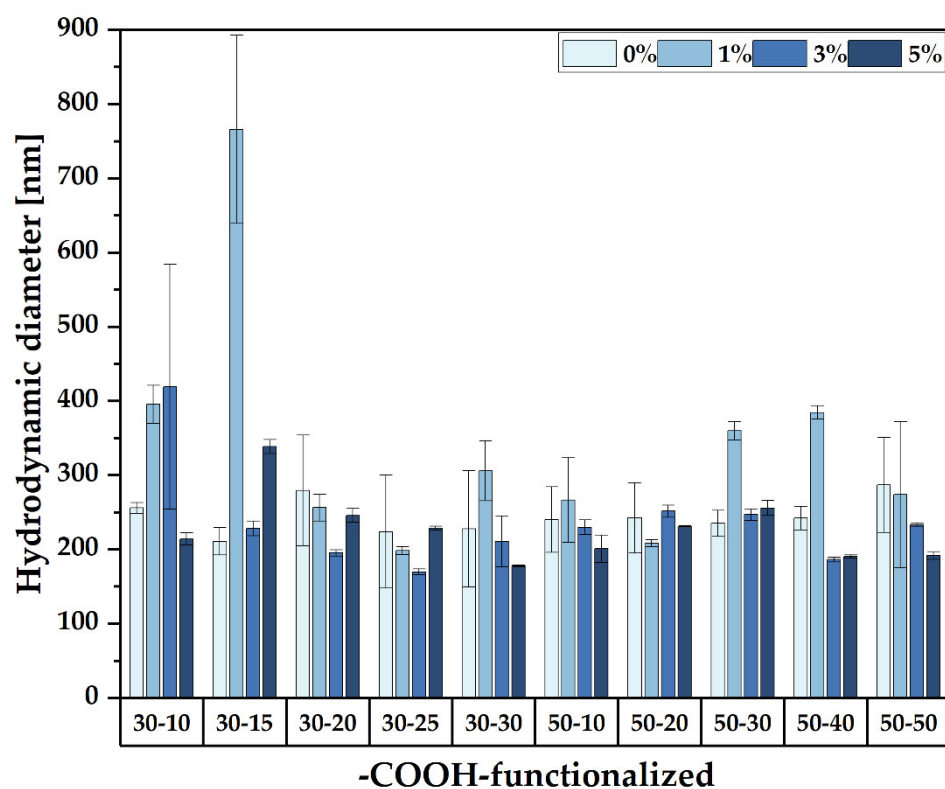


Figure S4. The hydrodynamic diameter values of the pristine and -COOH-functionalized MNPs.

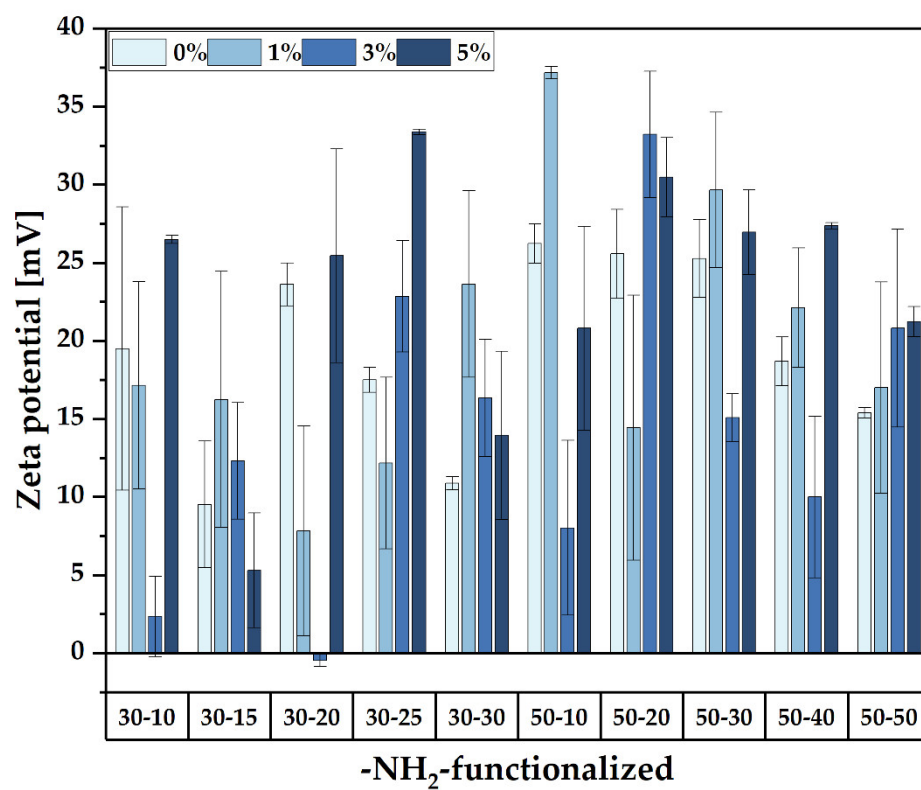


Figure S5. The zeta potential values of the pristine and -NH₂-functionalized MNPs.

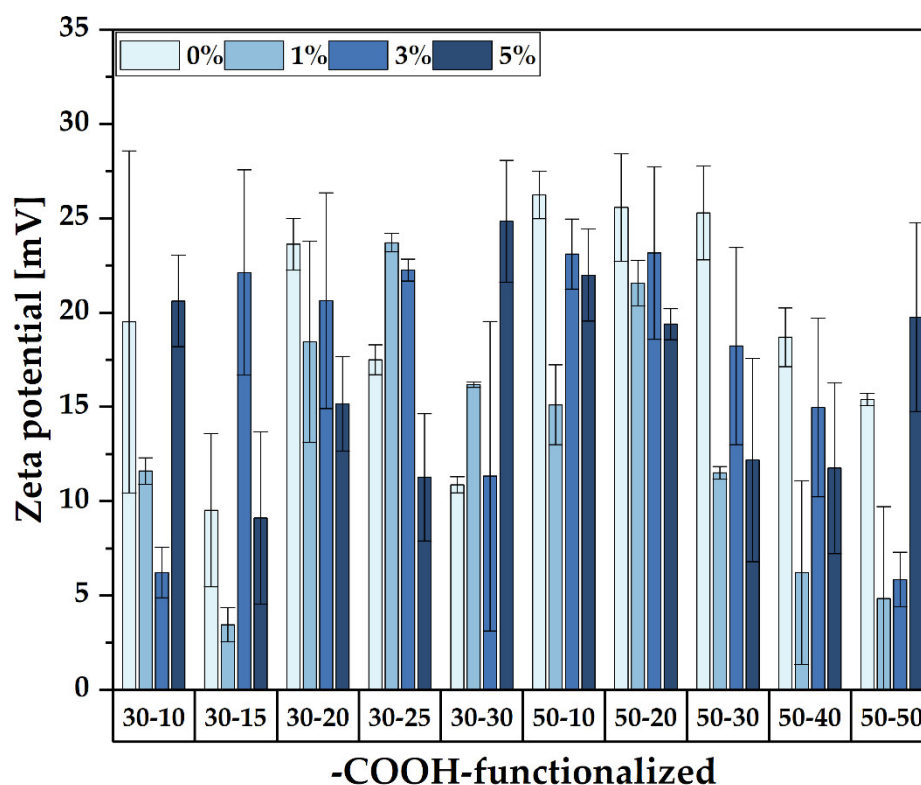


Figure S6. The zeta potential values of the pristine and -COOH-functionalized MNPs.

Figure S7 shows the TG-DSC curves for all the synthesized MNPs.

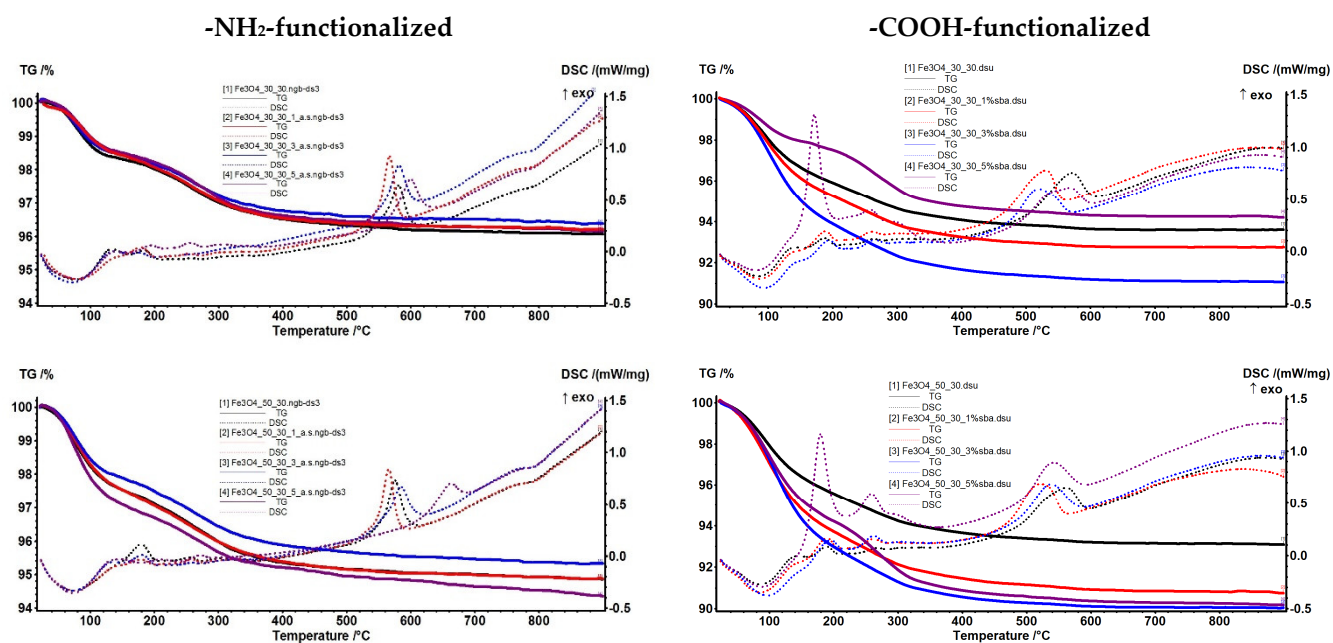


Figure S7. TG-DSC curves for the pristine and -NH₂-/-COOH-functionalized MNPs.

References

- Chircov, C.; Bîrcă, A.C.; Grumezescu, A.M.; Vasile, B.S.; Oprea, O.; Nicoară, A.I.; Yang, C.-H.; Huang, K.-S.; Andronescu, E. Synthesis of magnetite nanoparticles through a lab-on-chip device. *Materials* **2021**, *14*, 5906.