

Silver Doped Magnesium Ferrite Nanoparticles: Physico-Chemical Characterization and Antibacterial Activity

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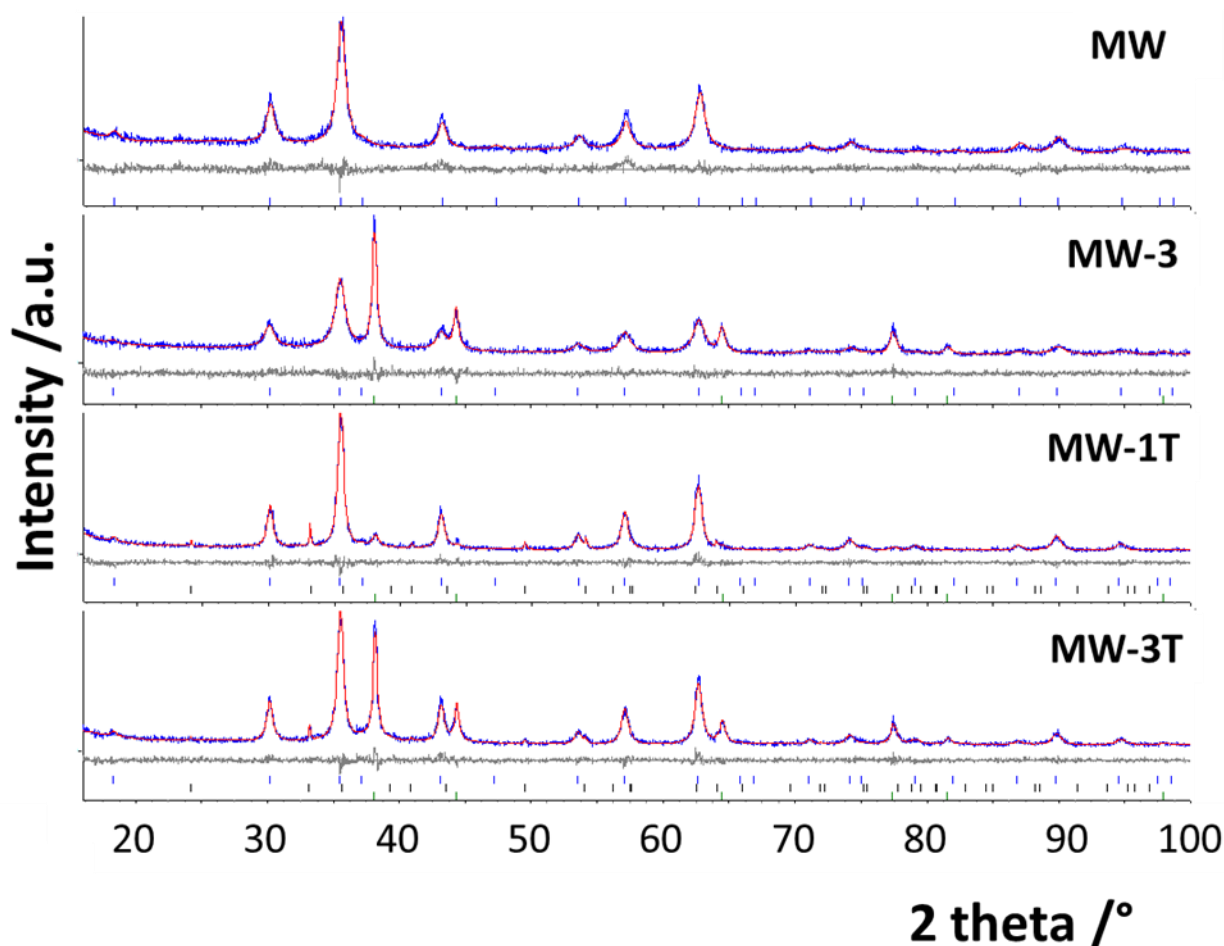


Figure S1. Rietveld refinements of the XRPD patterns of the MW samples indicated above each graph. The experimental curve (blue) is compared with the calculated one (red). On the bottom, the difference curve (grey) and the bars at the expected positions of the reflections for the different phases.

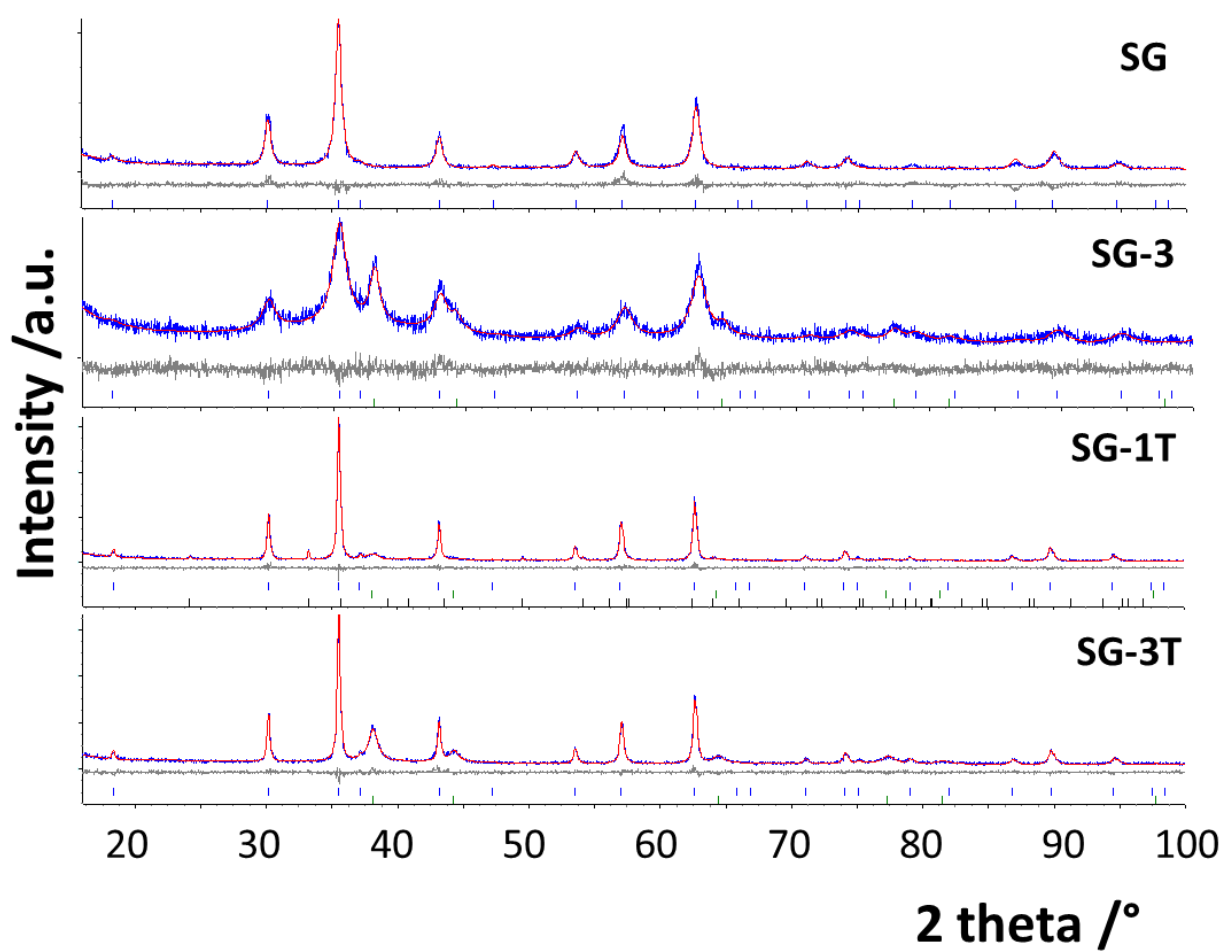
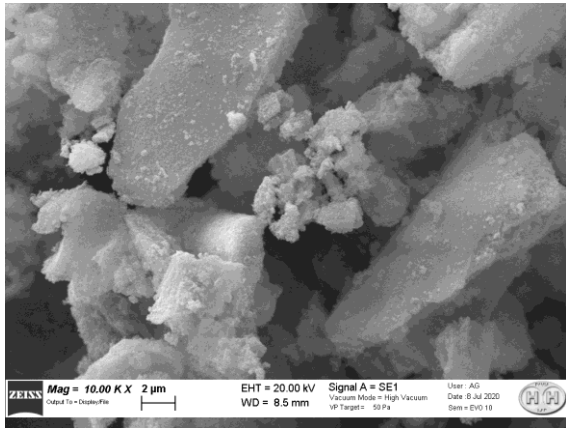
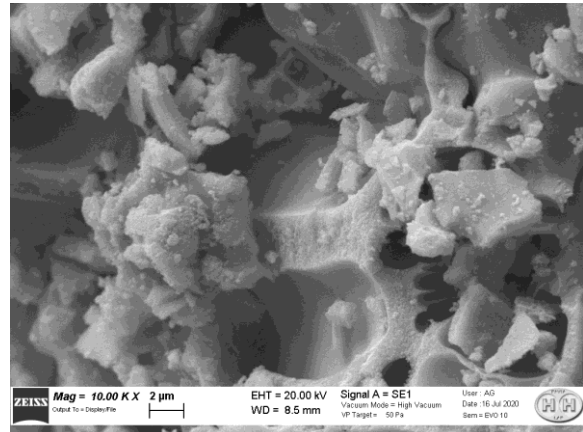
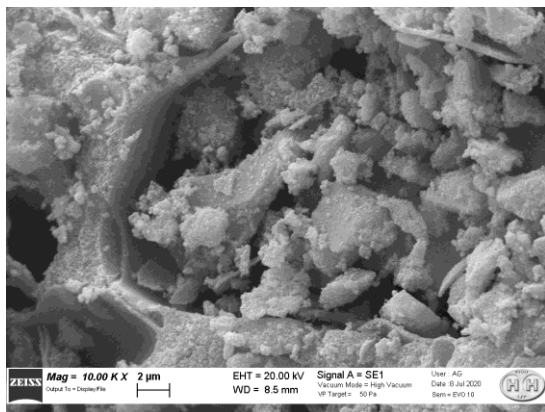
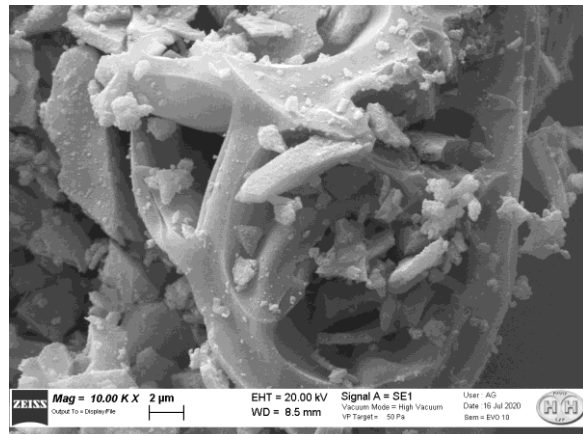
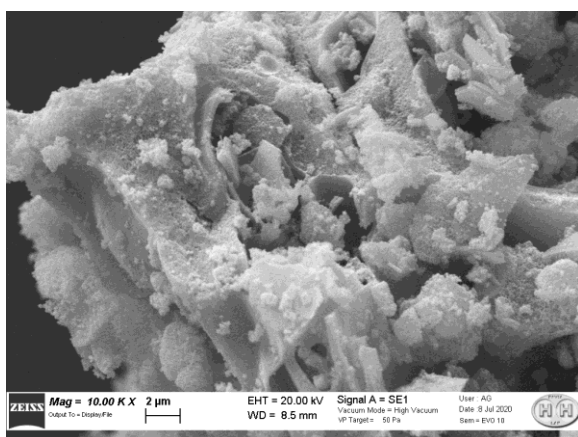
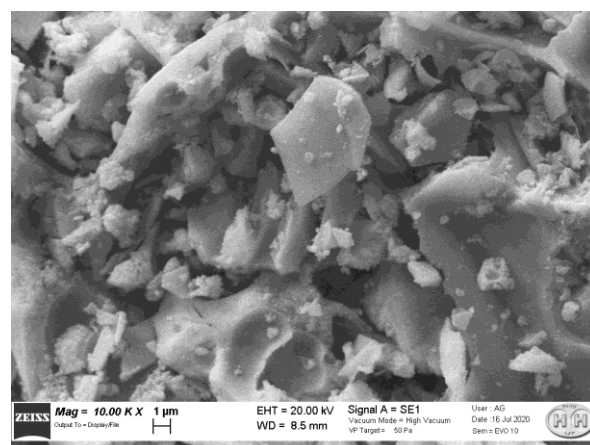


Figure S2. Rietveld refinements of the XRPD patterns of the SG samples indicated above the graph. The experimental curve (blue) is compared with the calculated one (red). On the bottom, the difference curve (grey) and the bars at the expected positions of the reflections for the different phases.

MW-1T**SG-1T****MW-3****SG-3****MW-3T****SG-3T****Figure S3.** SEM images of the indicated samples, collected at the same magnification (10kx).

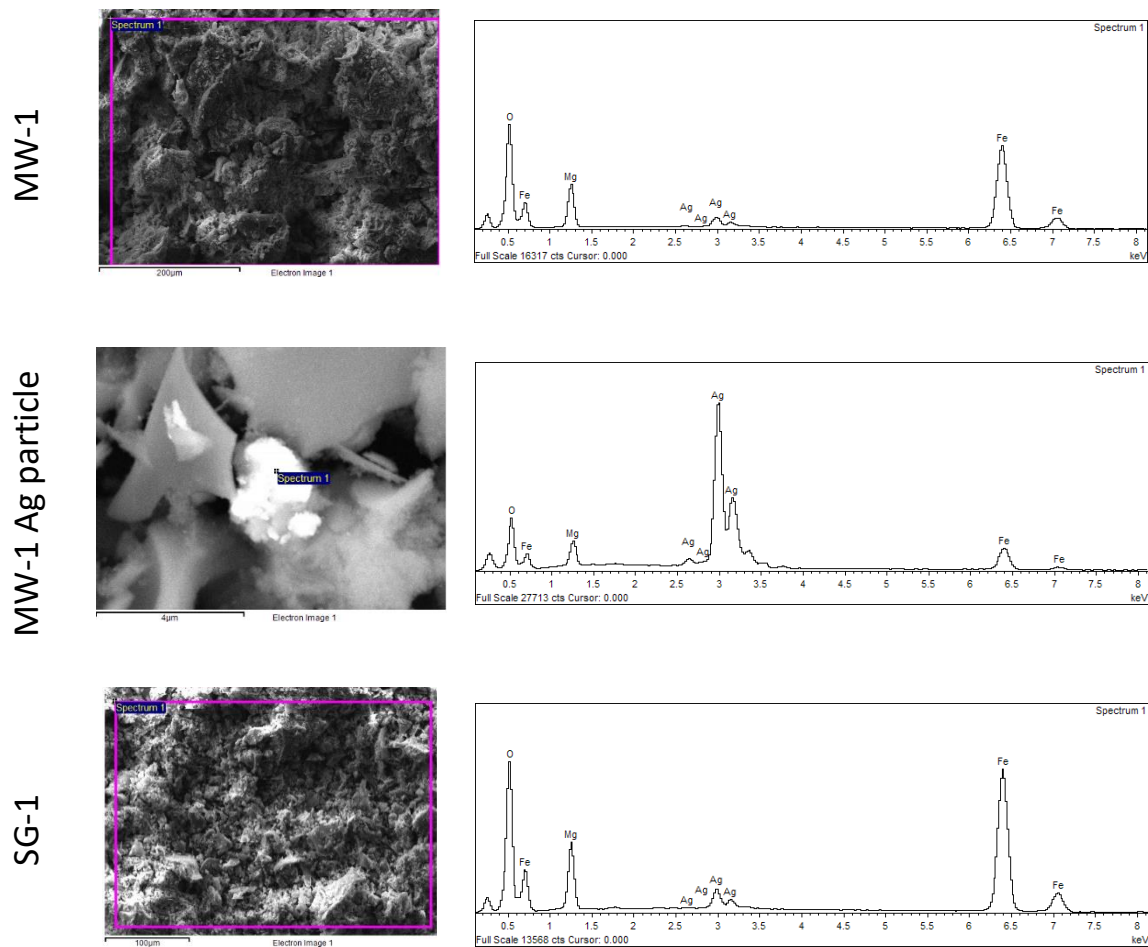


Figure S4. SEM images and the corresponding EDS spectra for the indicated samples.

Table S1. Atomic amount of the elements detected by EDS for pure and Ag 0.1 doped samples.

Sample	Mg at.%	Fe at.%	Ag at.%
MW	15.47	29.18	-
SG	14.51	28.10	-
MW-1	12.75	24.66	1.2
SG-1	12.82	26.79	1.5

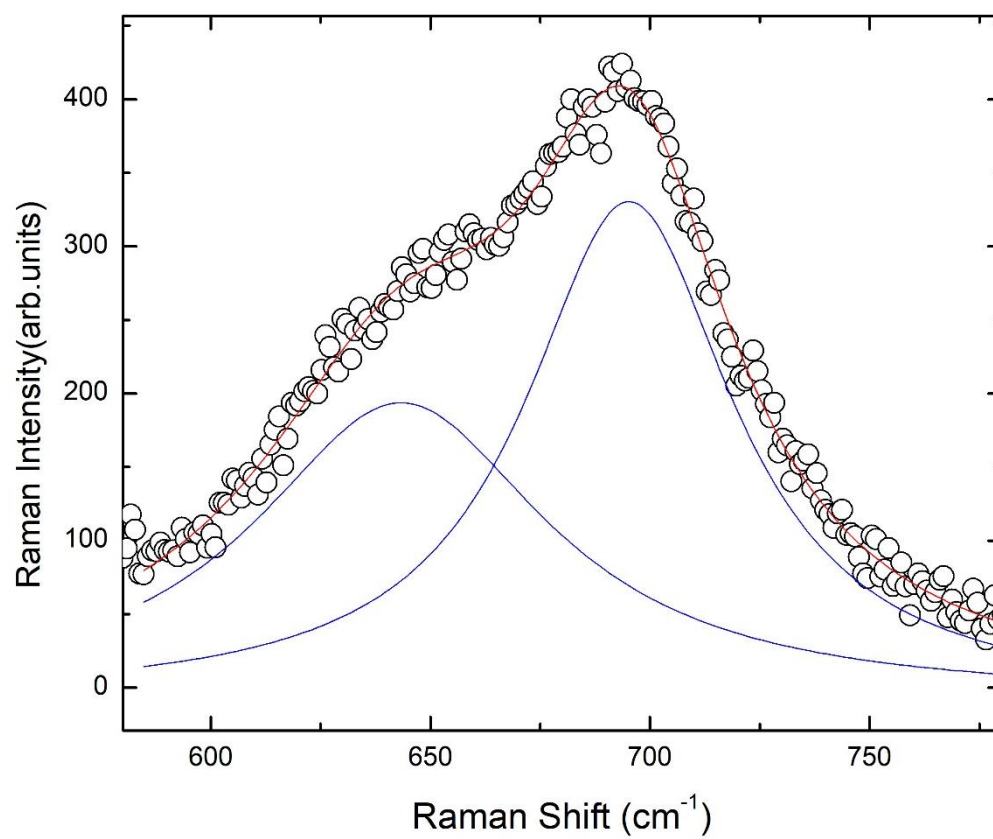


Figure S5. Example of the best fitting procedure using a sum of Lorentzian curves applied to MW sample Raman spectrum.