

## Counterion and solvent effects on the size of magnetite nanocrystals obtained by oxidative precipitation

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### SUPPLEMENTARY INFORMATION

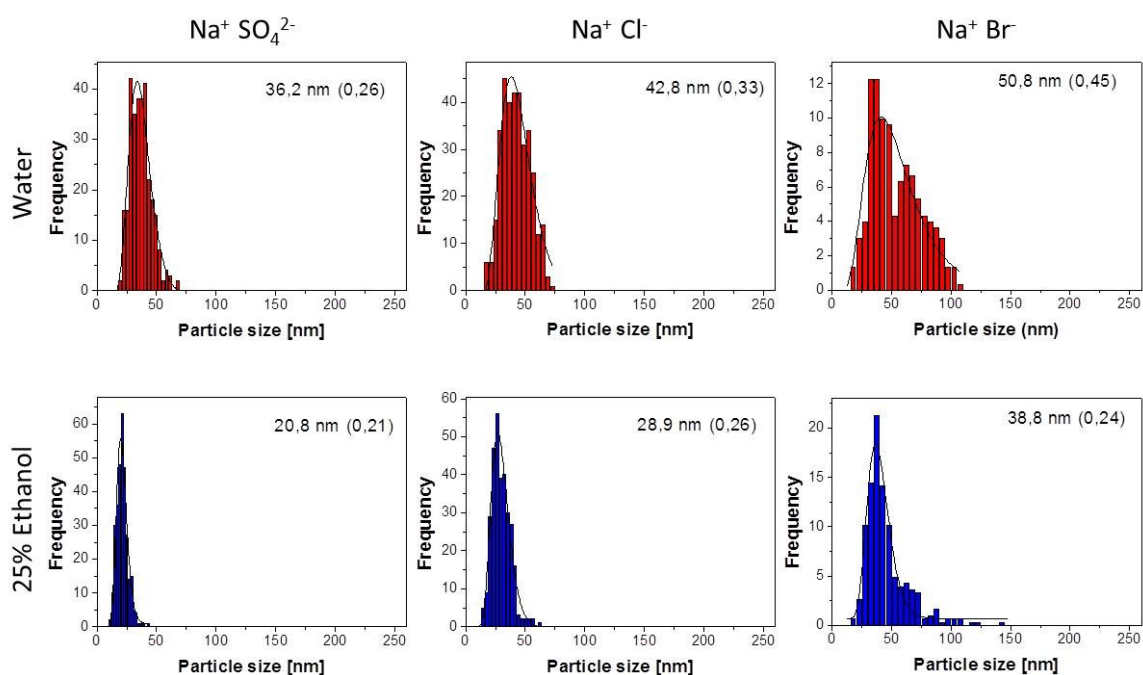


Figure 1S: TEM micrographs and particle size distributions of the sodium bearing samples obtained using different counterions in water and ethanol 25%.

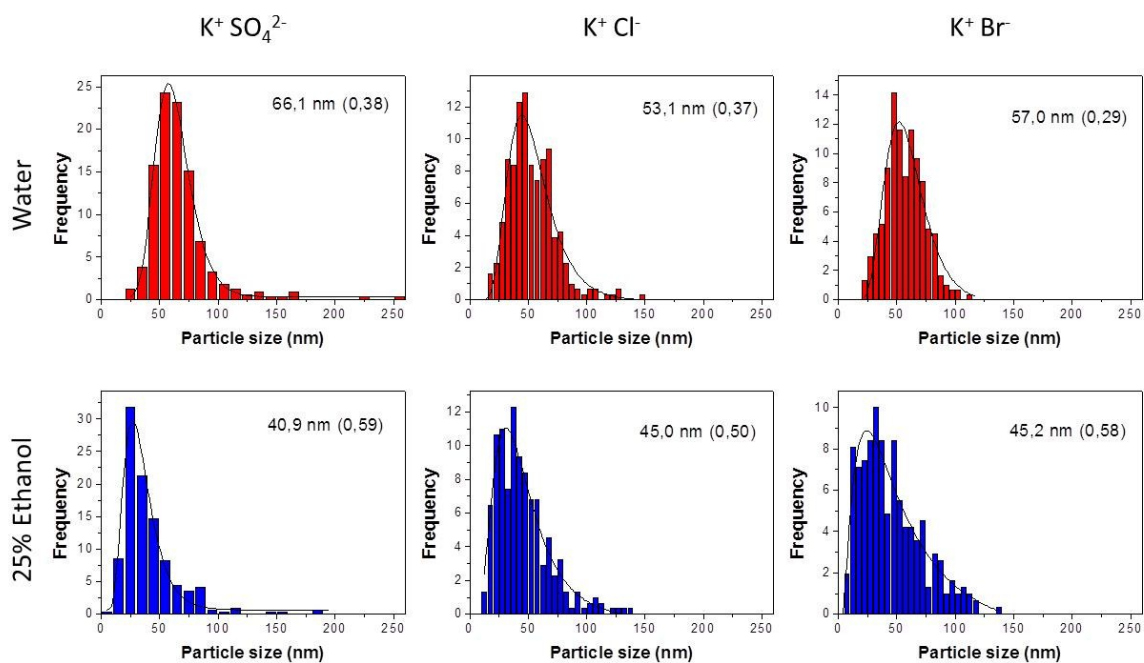
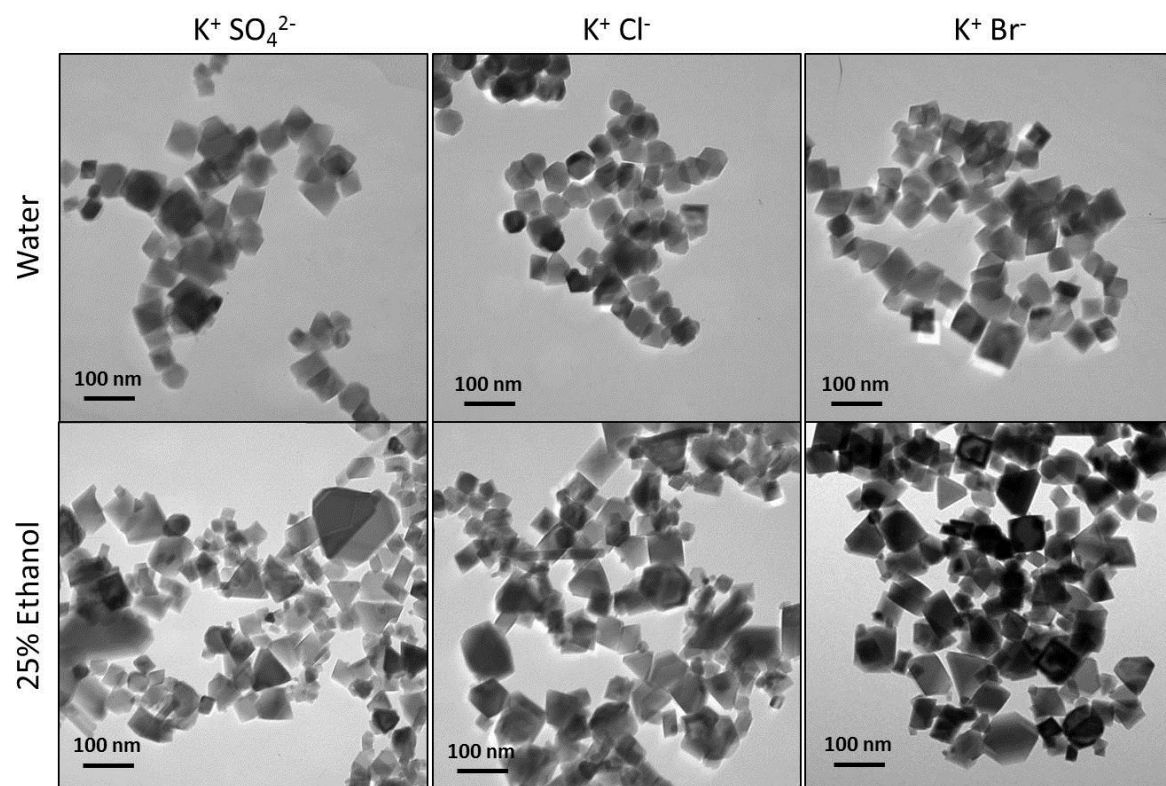


Figure 2s: TEM micrographs and particle size distributions of the potassium bearing samples obtained using different counterions in water and ethanol 25%.

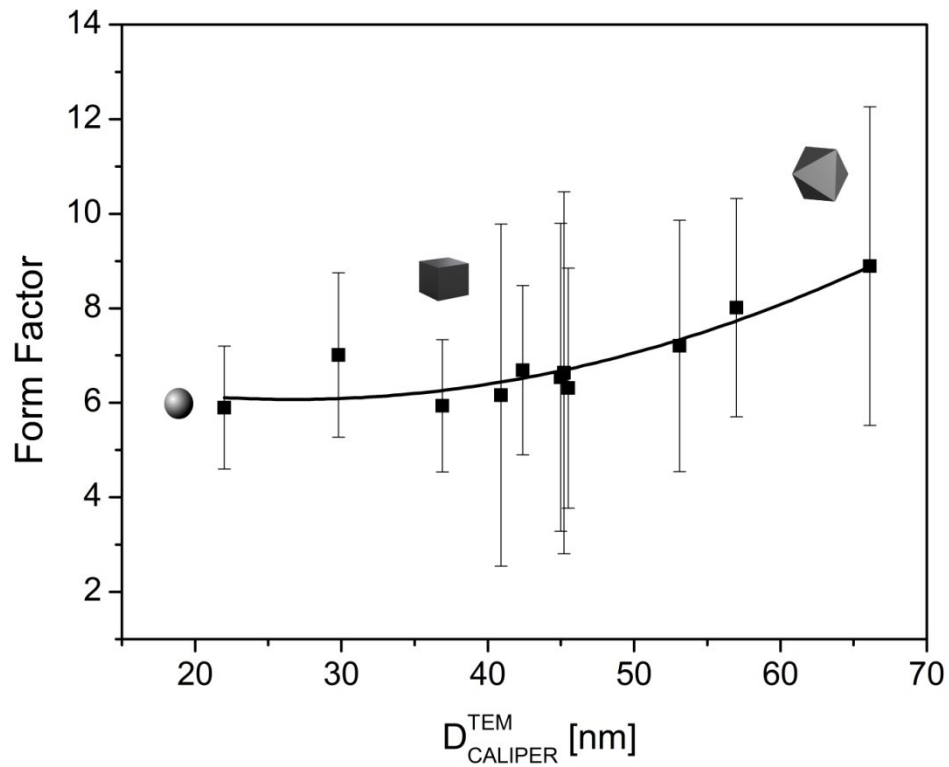


Figure 3S: Dependence of the form factor and size

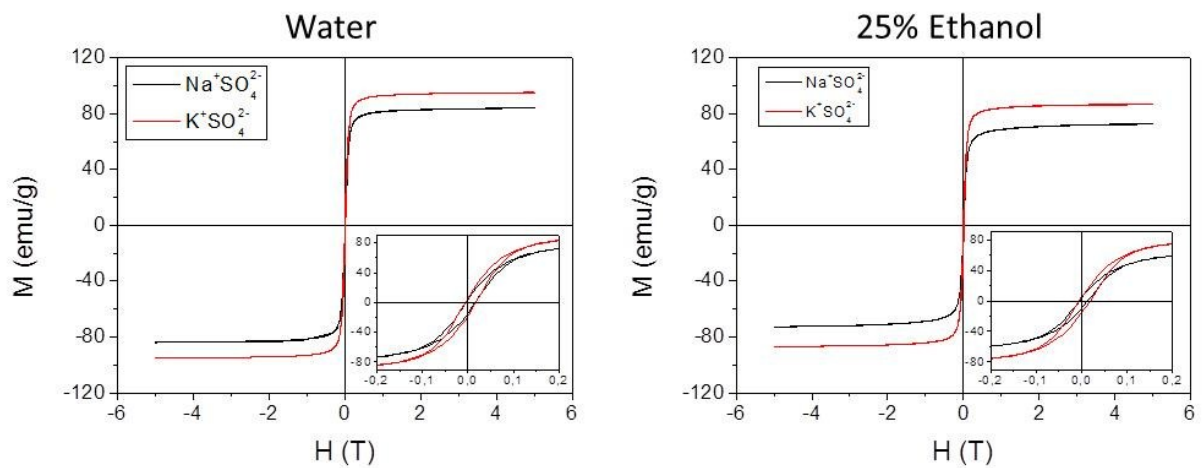


Figure 4S: Magnetization curves measured at room temperature for samples prepared from different counterions in water and 25% ethanol.

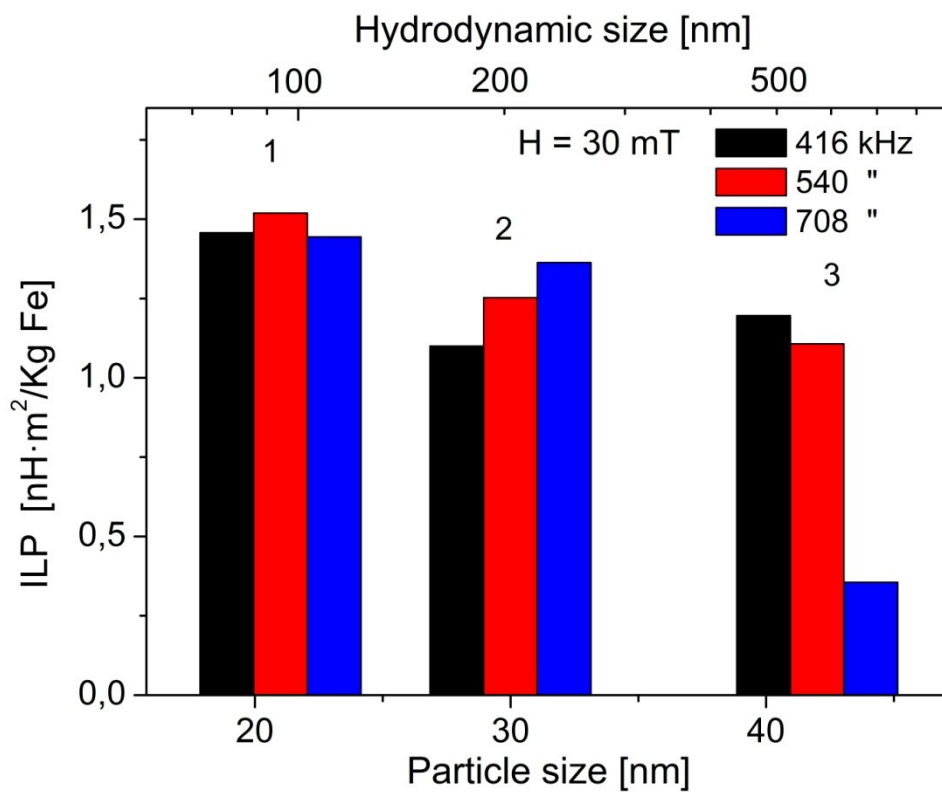


Figure 5S: ILP values of aqueous dispersions of selected samples prepared using Na<sup>+</sup> SO<sub>4</sub><sup>2-</sup> 25% ethanol(1) Na<sup>+</sup> Cl<sup>-</sup> 25% ethanol (2) and Na<sup>+</sup> Cl<sup>-</sup> in water(3)

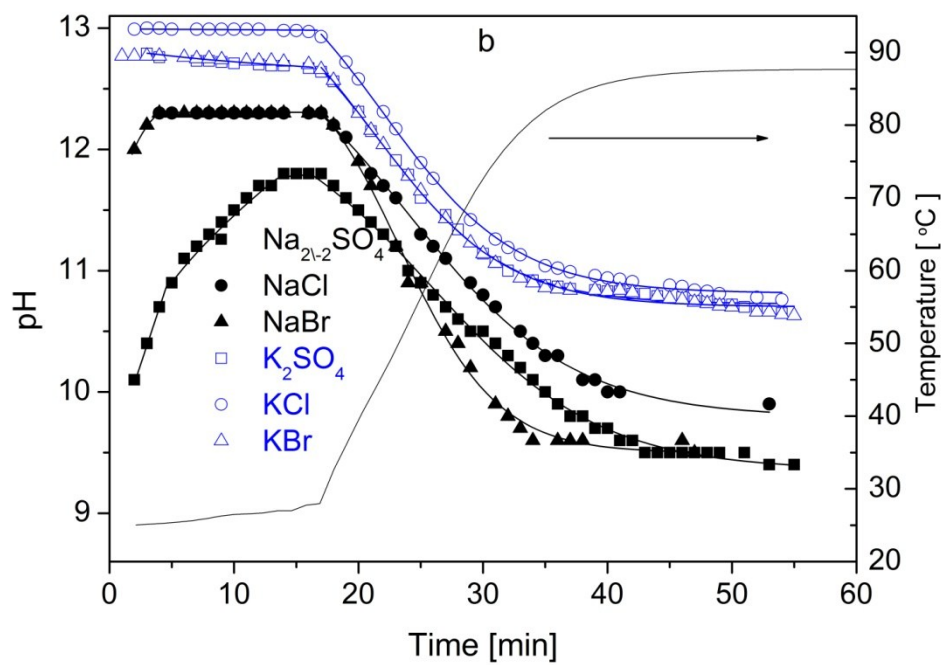
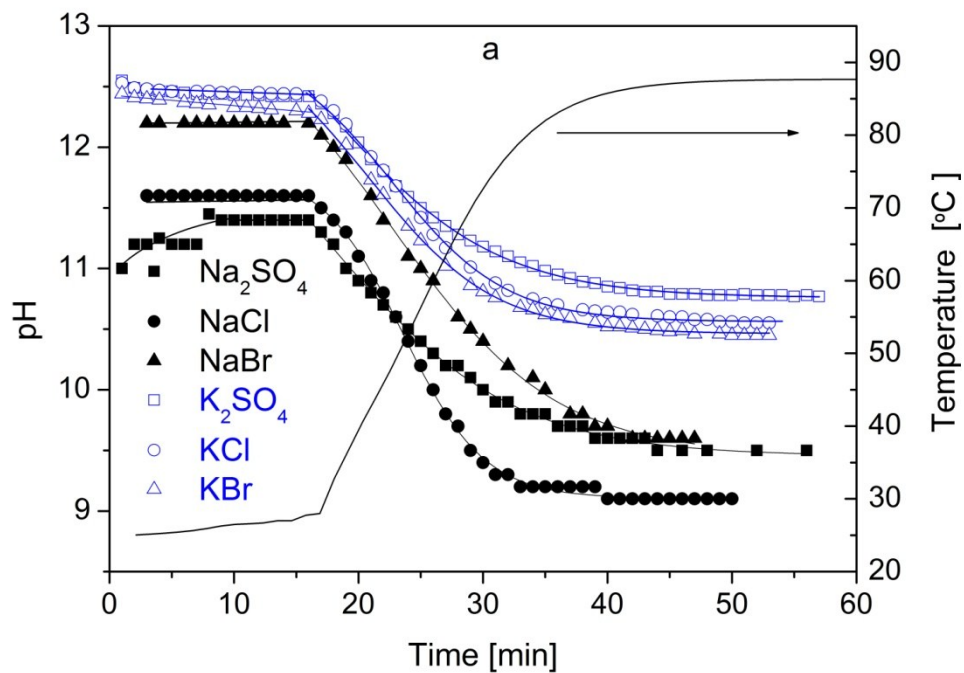


Figure 6S: Evolution of the pH with time for the different counter ions present in water (a) and in ethanol 25% (b).