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Electronic Supporting Information

Synthesis and study of Prussian blue type nanoparticles into an alginate matrix.

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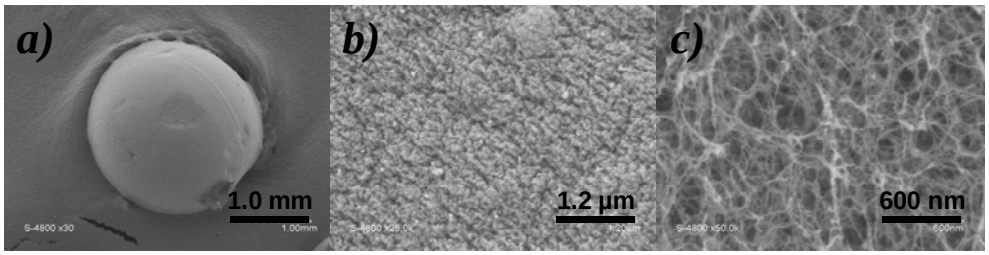

Figure S1. SEM images of the Ni^{2+}/alginate bead: a) whole bead, b) external surface of the bead, c) internal surface of the bead.

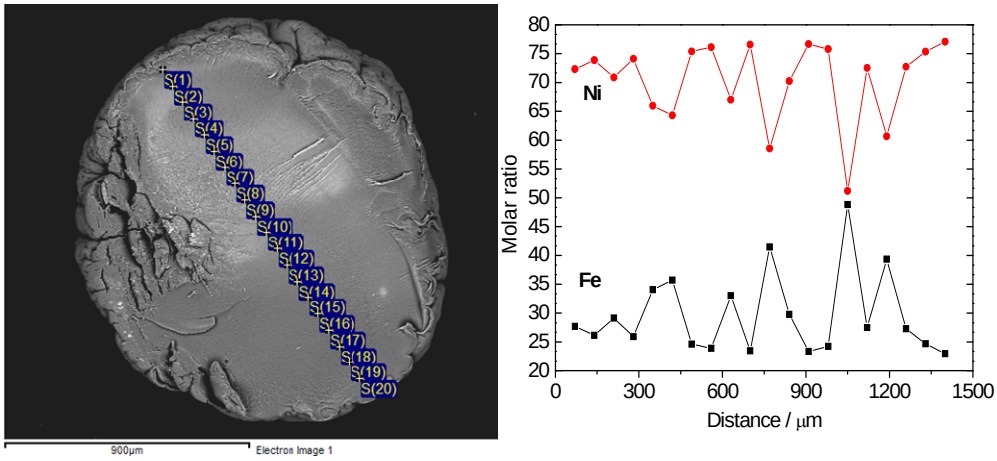

Figure S2. Internal view of the cleaved beads (left) and EDS profile curves (right) showed Ni/Fe atomic ratio (%) versus distance (µm) for **1-beads**. The analysis includes 20 points of a record through the internal surface of the beads.

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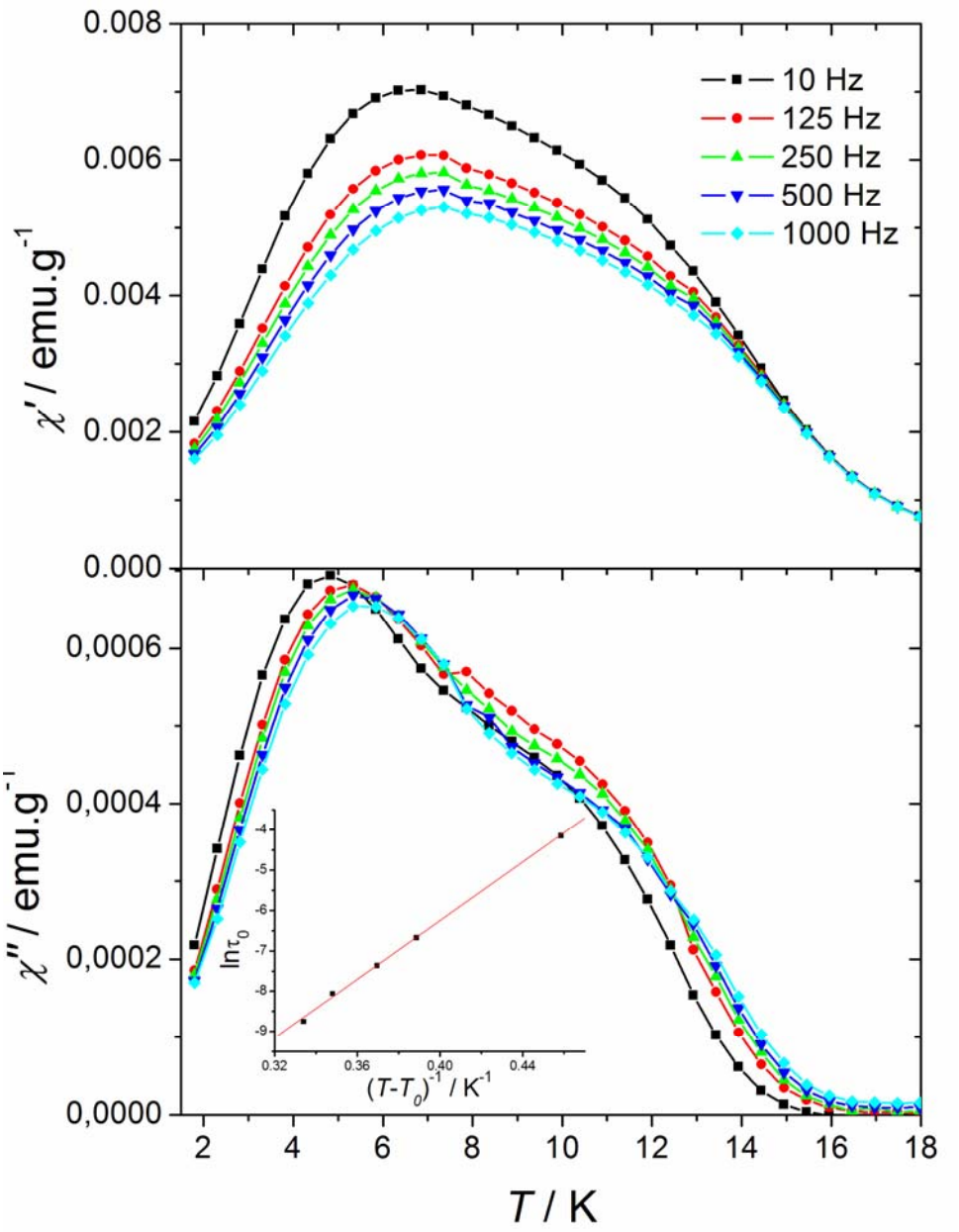

Figure S3. Temperature dependences of the in-phase (χ') and out-of-phase (χ'') components of the ac susceptibility of nanocomposites **1-beads**. Insert: The relaxation time dependence with frequency fitted with the Vogel-Fulcher law, $\tau = \tau_0 exp(E_a/k_B(T-T_0))$, for sample **1-beads**.

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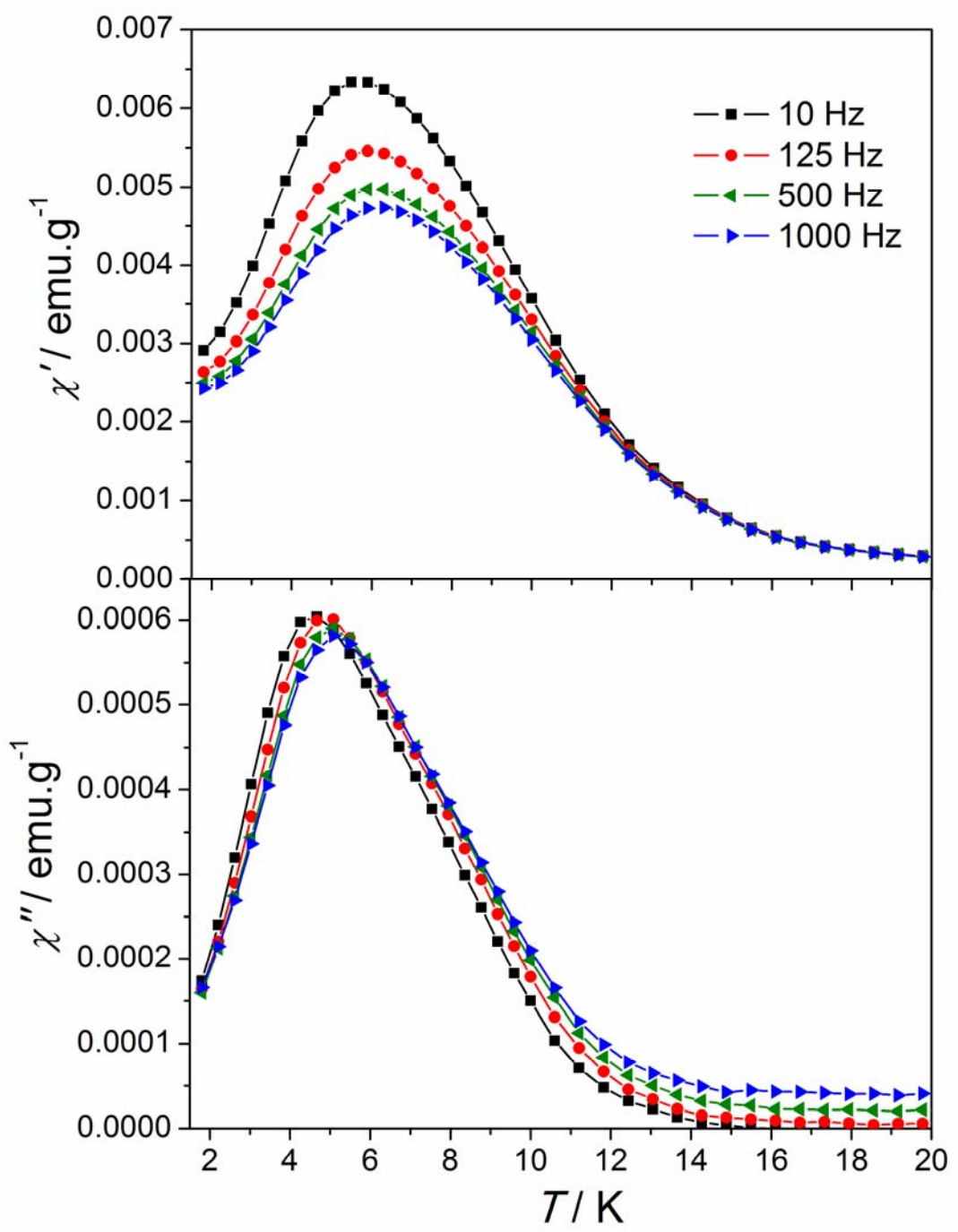

Figure S4. Temperature dependences of the in-phase (χ') and out-of-phase (χ'') components of the ac susceptibility of nanopacomposites **2-bead**.

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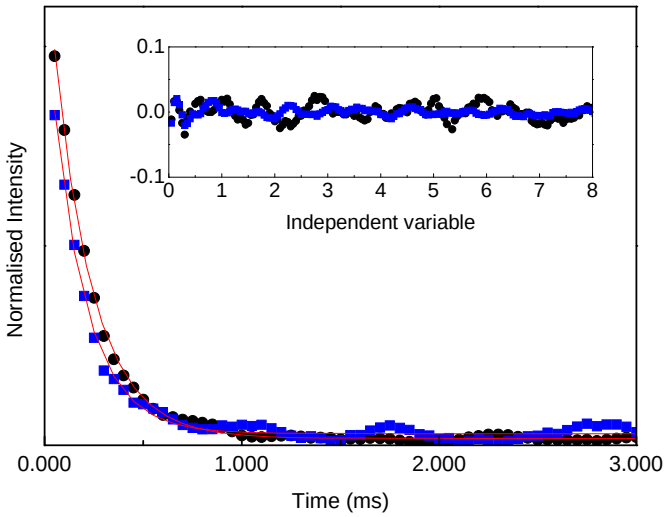

Figure S5. Emission decay curves for Eu^{3+}/$[Mo(CN)_8]^{3-}$/alginate nanocomposite **6-film** monitored within the $^5D_0 \rightarrow {}^7F_2$ (612 nm) and $^5D_0 \rightarrow {}^7F_4$ (700 nm) transitions and excited at 393 nm. The solid lines represent the data best fit using a single exponential function. The inset shows the respective regular residual plots ($\chi^2_{red} \sim 10^{-6}$) are also shown for a better judgment of the fit quality.