

Selected scientific results

Stage 2

In this stage were investigated the $M = f(H)$ curves at different temperatures for $\text{Fe@FePt}_{L10}\text{@Pt}$.

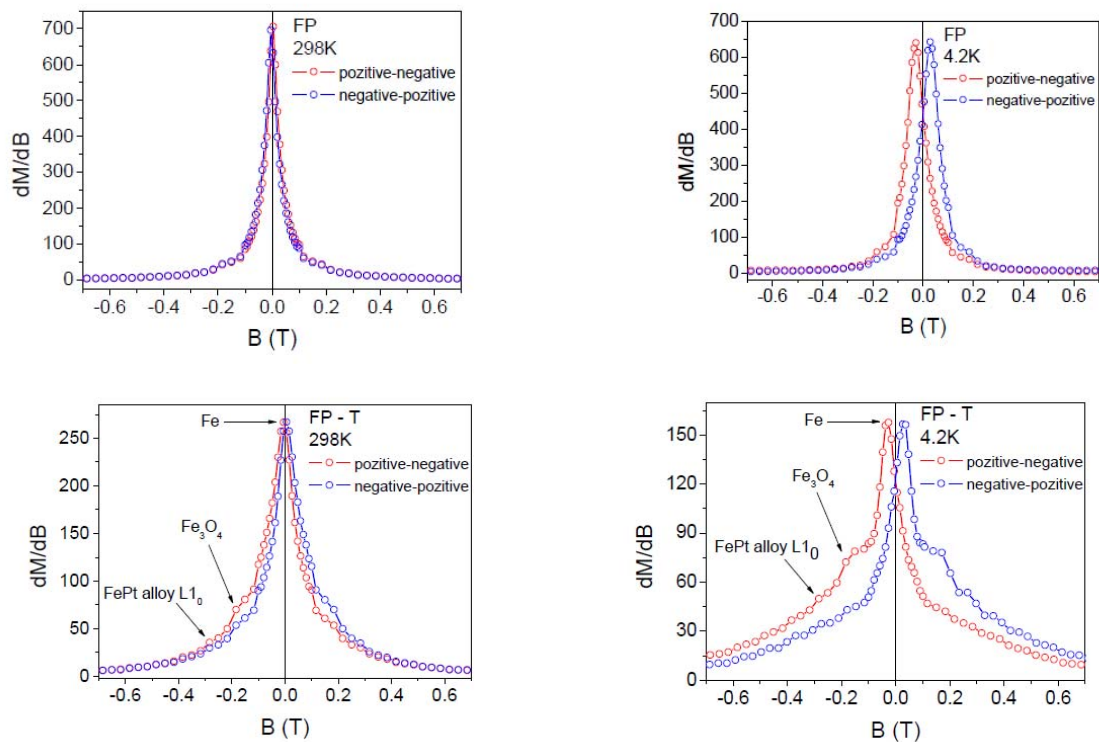


Fig. 1 Comparison of magnetization derivatives depending on the magnetic field (magnetic susceptibility) corresponding FP and FP-T samples at 298K and 4.2 K.

The maximum corresponds to the Fe magnetic phase and, in the case of FP-T sample, additional inflexion points are due to Fe₃O₄ magnetic phases and FePt L1₀ alloy.

FePt_{L10}@PPy and FePt_{L10}@P3HT composite systems were obtained. Their structure was investigated by XRD, the morphology by HRTEM and the composition was determined by XPS.

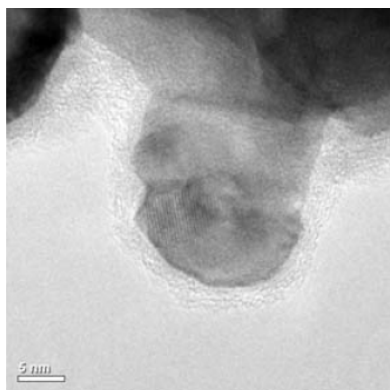


Fig. 2 HRTEM image of FePt_{L10}@P3HT

