Supporting Information

Phosphate glasses via coacervation route containing $CdFe_2O_4$ nanoparticles: a structural, optical and magnetic characterization

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S1- XRD pattern of glasses



Fig. 1 X-ray of PG and PGs containing CdFNPs.

S2- Scanning transmission electron microscopy (STEM) image using annular dark field (ADF) detector followed by elemental mapping through EDS (energy dispersive spectroscopy)



Fig. 2 Scanning transmission electron microscopy (STEM) image using (a) annular dark field (ADF) detector followed by elemental mapping through EDS (energy dispersive spectroscopy) images for PG-4%CdFNPs for elements (b) Cd-K, (c) Fe-K and (d) O-K.



Fig. 3 Scanning transmission electron microscopy (STEM) image using (a) annular dark field (ADF) detector followed by elemental mapping through EDS (energy dispersive spectroscopy) for PG-8%CdFNPs for elements (b) Fe-K, (c) Cd-K and (d) Si-K.

S3- Table with all the values obtained in the thermal analysis

Table 1 Characteristic temperatures of Tg, Tx and Tp obtained for the vitreous samples.

Glass sample	Tg(°C)	Tx(°C)	Tp(°C)	Tx-Tg(°C)
PG	416	570	609	154
PG-1%CdFNPs	425	589	657	164
PG-4%CdFNPs	430	622	675	192
PG-8%CdFNPs	444	648	722	204

(estimate error is ± 2 °C for Tg and Tx)