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## Supplementary materials

Figure S1. FTIR spectra of naked Fe<sub>3</sub>O<sub>4</sub> nanoparticles and Fe<sub>3</sub>O<sub>4</sub>-PEI nanocomposites.

Figure S2. Weight-loss curves of naked Fe<sub>3</sub>O<sub>4</sub> nanoparticles and Fe<sub>3</sub>O<sub>4</sub>-PEI nanocomposites.

**Figure S3.** Photographs of (a) hydrobiotite (HBT) dispersed in solution, (b) sedimentation of the HBT with naked Fe<sub>3</sub>O<sub>4</sub> nanoparticles, and (c) sedimentation of the HBT with Fe<sub>3</sub>O<sub>4</sub>-PEI nanocomposites at different sedimentation time (0 to 120 s)

Figure S1

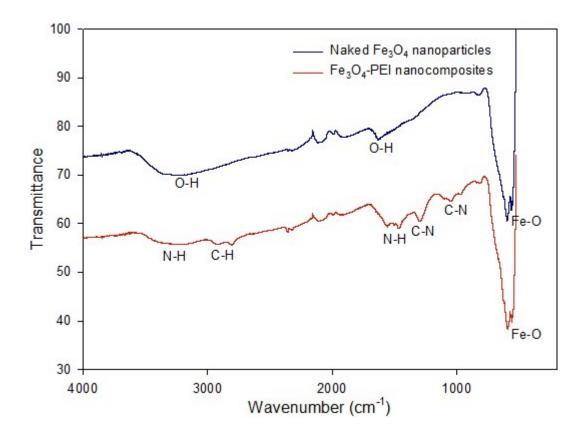


Figure S2

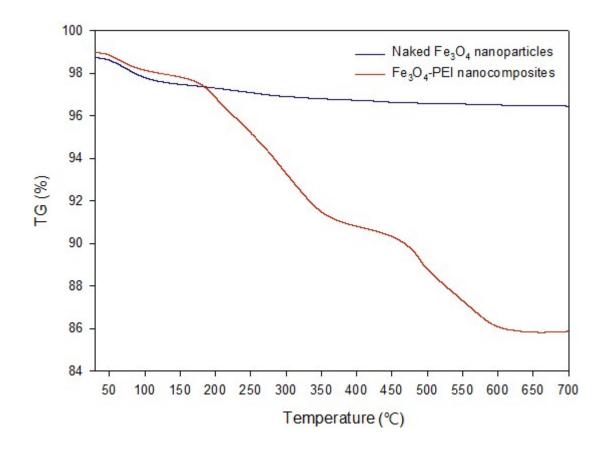
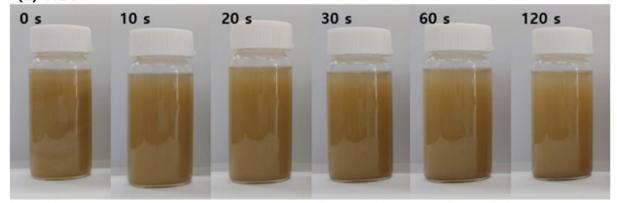
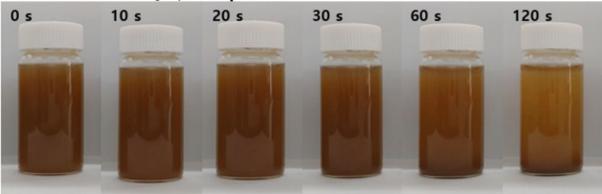


Figure S3

## (a) HBT



## (b) HBT/naked Fe<sub>3</sub>O<sub>4</sub> nanoparticles



## (c) HBT/Fe<sub>3</sub>O<sub>4</sub>-PEI nanocomposites

