Synthesis and Characterization of Magnetic Nanoparticle Assemblies

MIN-JAE LEE, HO-HYUN KIM, SHIN-HYUN KANG, SUNG-MIN CHOI, KAIST — The superstructure of magnetic nanoparticles, which may provide new properties, are of great interests for various potential applications as well as its own scientific merits. Despite recent advances in the fabrication and characterization of magnetic nanoparticle structures, it remains challenges to exploit for controllable organization of magnetic nanoparticles at the nanoscale. Here, we will report the synthesis and functionalization of monodisperse magnetic nanoparticles and their self-assembled structure.

1 corresponding author