Electronic Supplementary Information

Size Dependent Magnetic Hyperthermia of Octahedral Fe_3O_4 Nanoparticles

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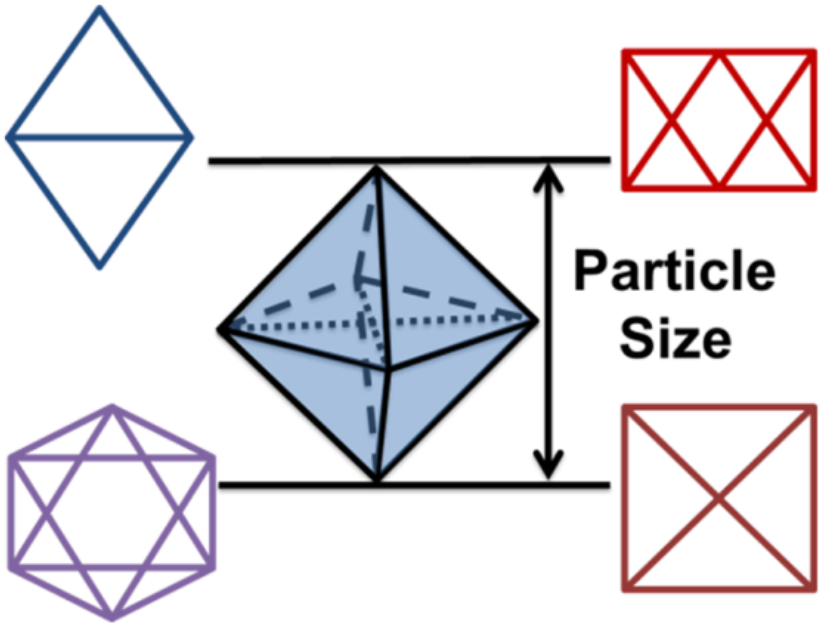

Fig. S1 Projection of octahedral Fe_3O_4 MNPs along different direction and the definition of particle size.

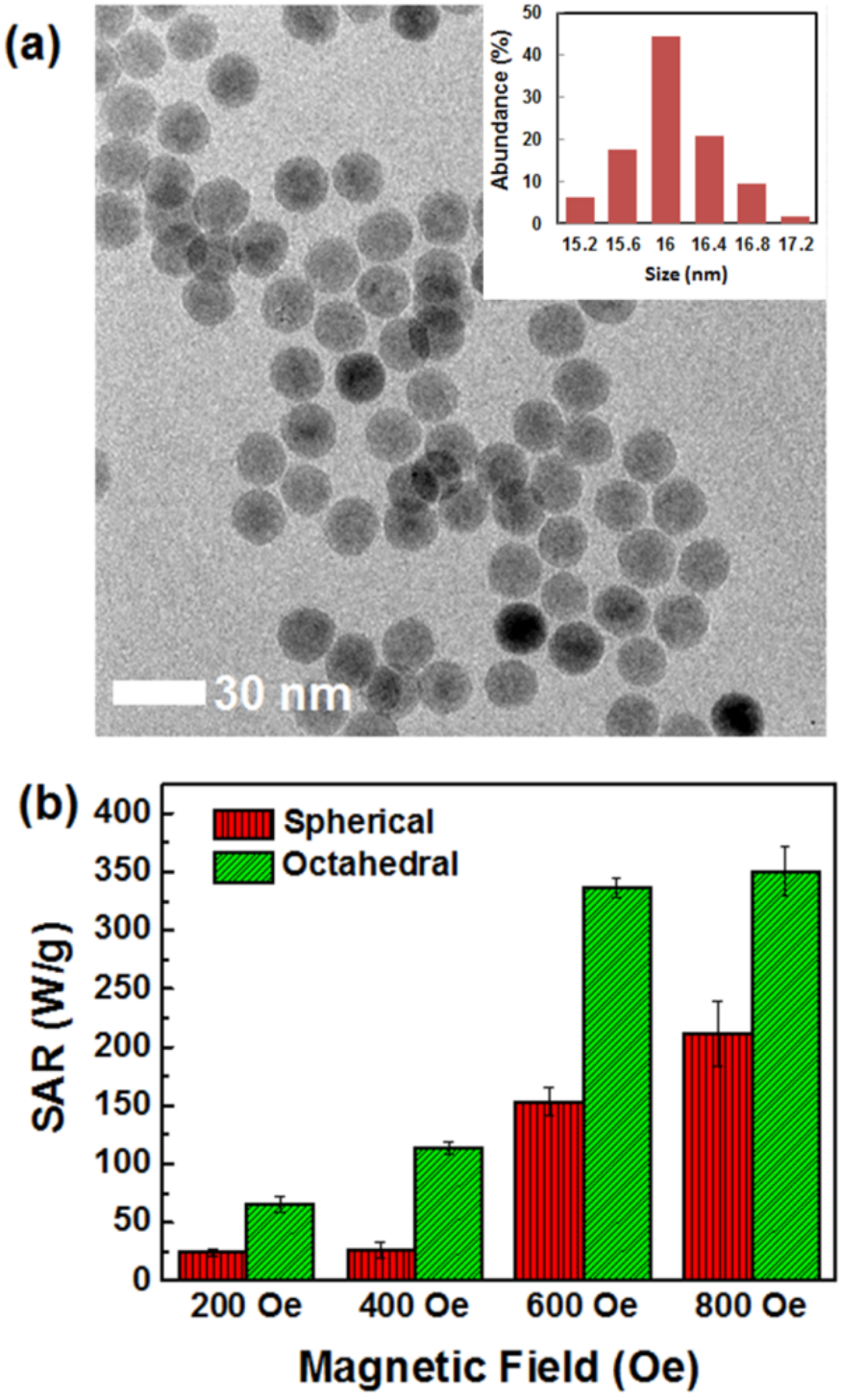

Fig. S2 (a) TEM image for 16 nm spherical Fe_3O_4 MNPs with size distribution inserted. (b) SAR values of 16 nm spherical Fe_3O_4 MNPs and 22 nm octahedral Fe_3O_4 MNPs. The two kinds of MNPs have the same volume.

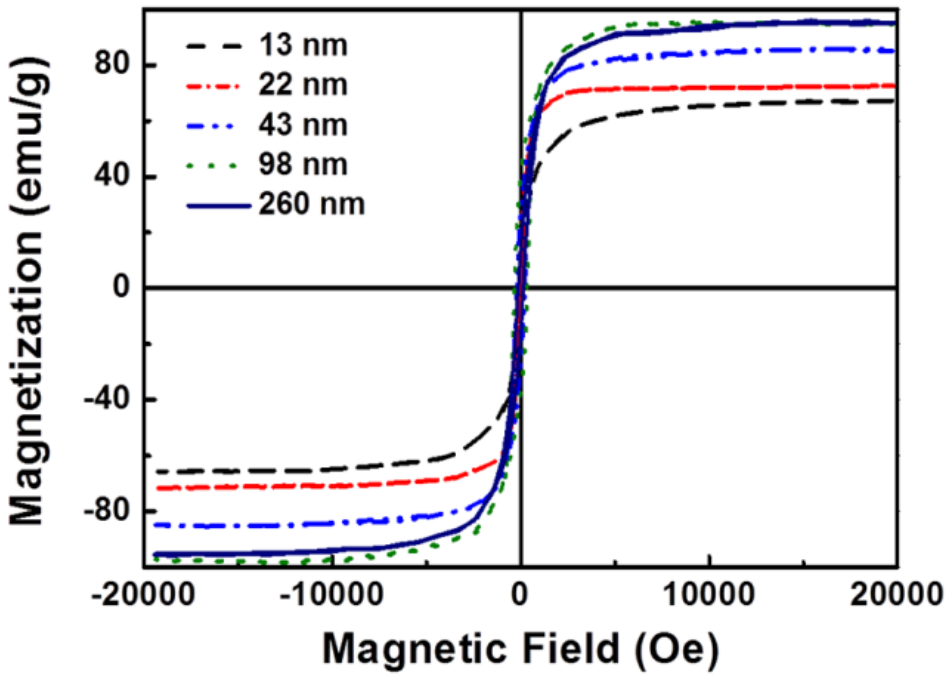

Fig. S3 Hysteresis loops of octahedral Fe_3O_4 MNPs measured in gel suspension.

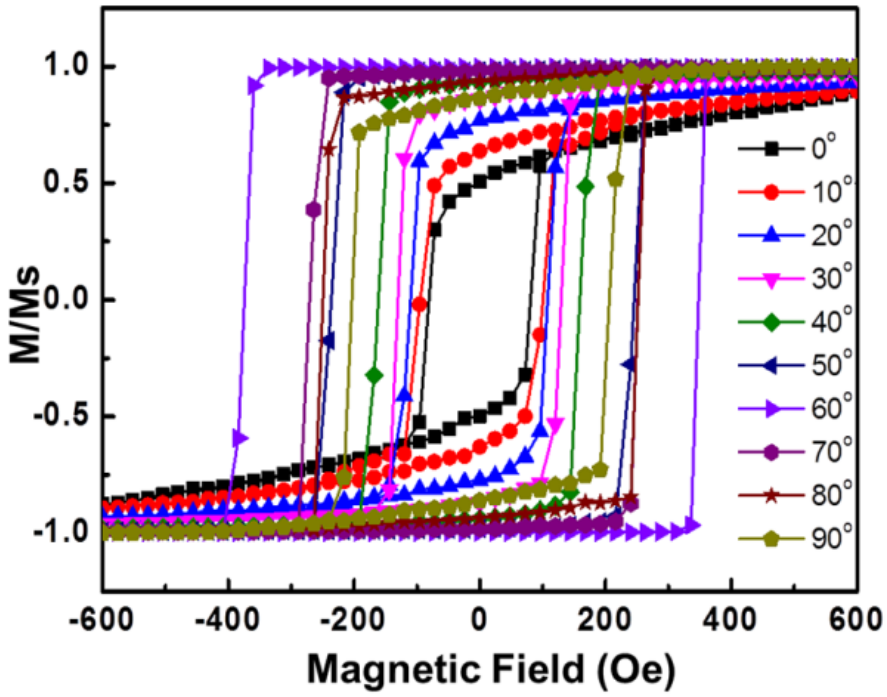

Fig. S4 Simulated hysteresis loop for 60 nm octahedral Fe_3O_4 MNP along different directions. The angle values in the figure refer to different angle between external magnetic field and the pole direction of octahedral Fe_3O_4 MNP.

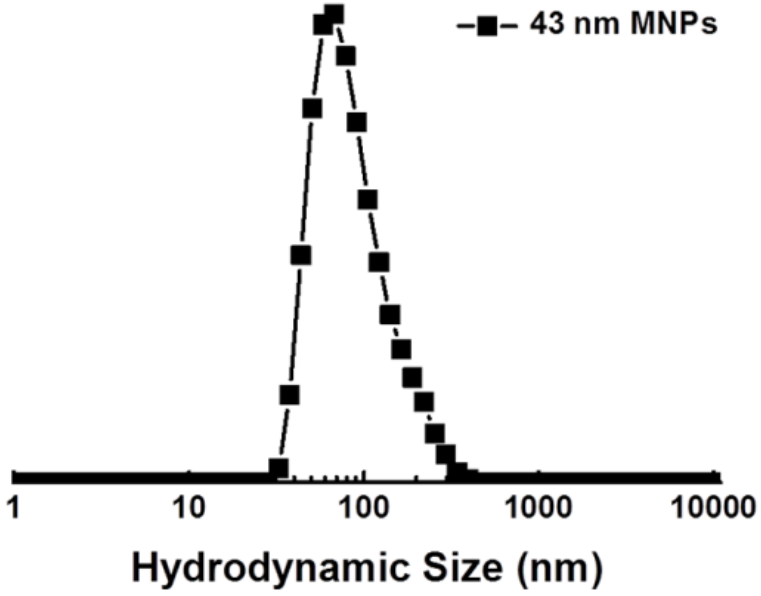

Fig. S5 Hydrodynamic size of 43 nm CTAB capped octahedral Fe_3O_4 MNPs.