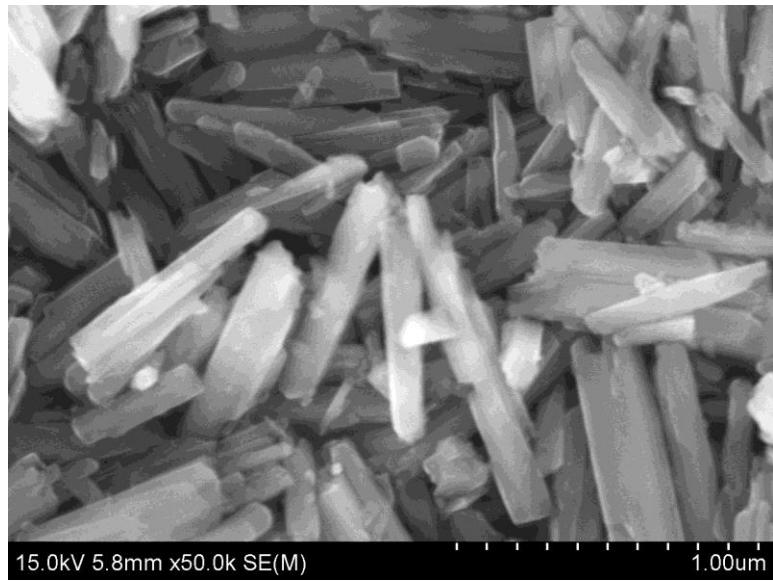
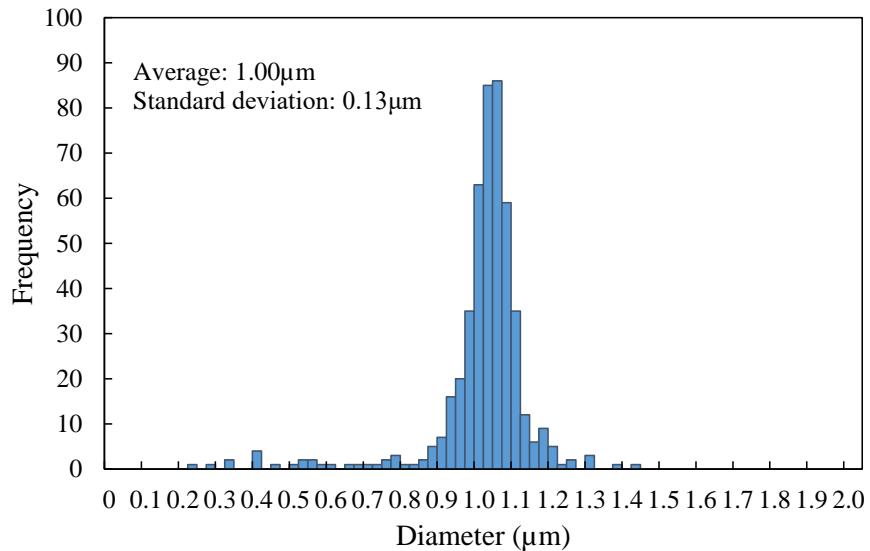


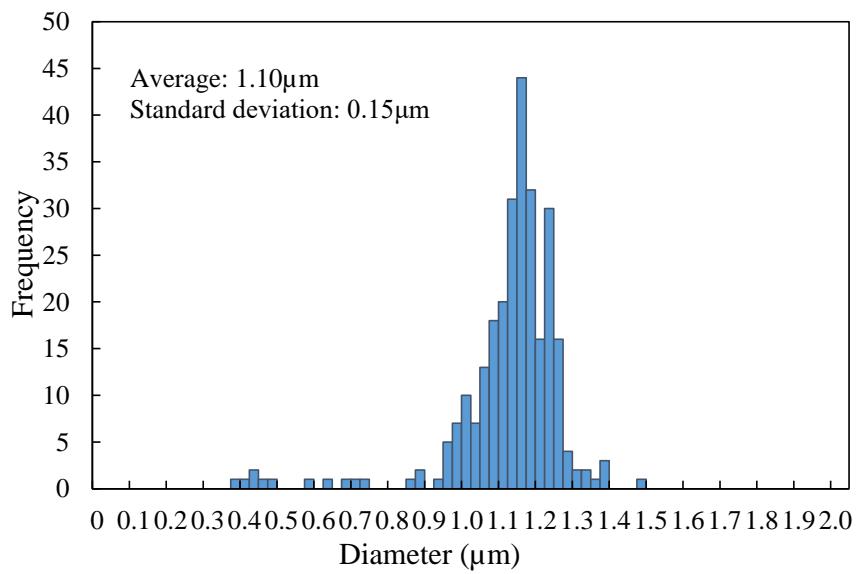
**Figure S1.** X-ray diffraction patterns of  $\alpha$ -FeOOH. All peaks are well-indexed with  $\alpha$ -FeOOH ICDD PDF #01-081-0462.



**Figure S2.** An SEM image of  $\alpha$ -FeOOH



(a)



(b)

**Figure S3.** Size distributions of (a) spherical  $\text{Fe}_3\text{O}_4$  microparticles (480 particles);

(b) octahedral  $\text{Fe}_3\text{O}_4$  microparticles (particles 277 particles)