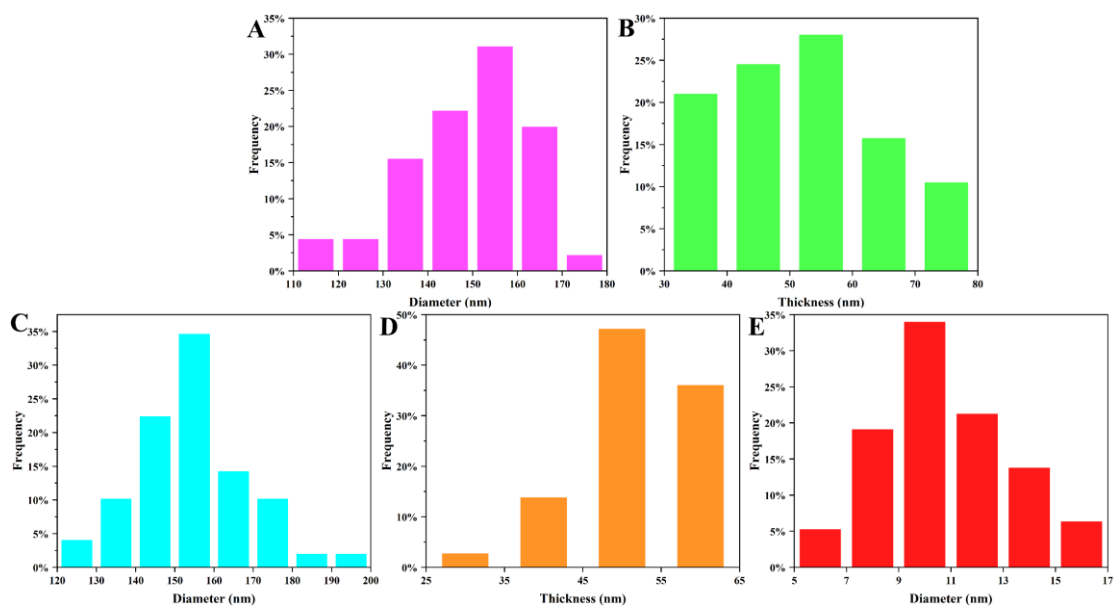


## The size distributions of the nanomaterials



**Fig. S1.** The size distributions of magnetic  $\text{Fe}_3\text{O}_4/\alpha\text{-Fe}_2\text{O}_3$  heterogeneous nanosheets (A, B), magnetic  $\text{Fe}_3\text{O}_4/\alpha\text{-Fe}_2\text{O}_3@Au$  nanocomposites (C, D), and AuNPs (E).