## Aggregation and dissolution of aluminium oxide and copper oxide nanoparticles in natural aqueous matrixes

## Supplementary material

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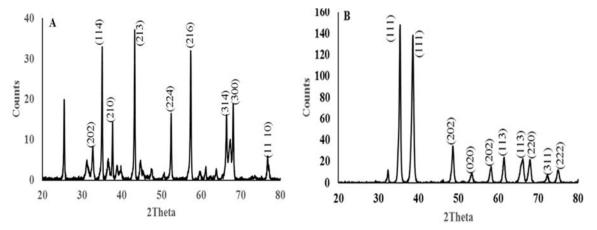


Fig. SI.1 XRD results of nAl<sub>2</sub>O<sub>3</sub> (a) and nCuO (b)

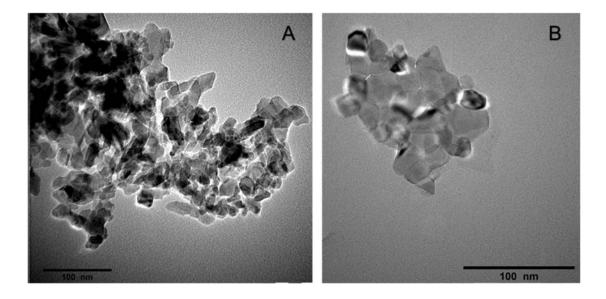


Fig. SI.2 TEM images of (a) nCuO and (b) nAl<sub>2</sub>O<sub>3</sub>

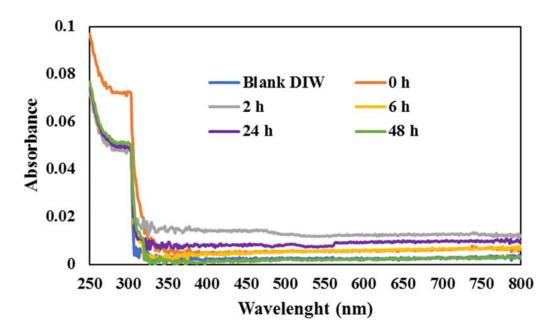


Fig. SI.3 UV-visible spectra of 1 mg/L nCuO in DIW at pH 7 over 48 h

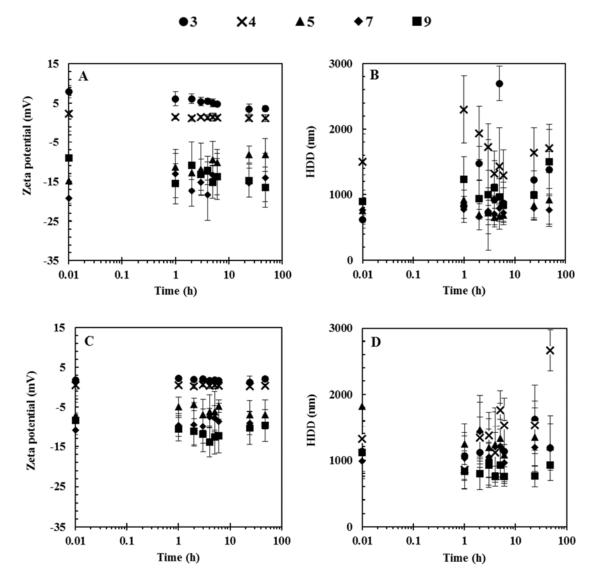


Fig. SI.4 The  $\zeta$ -potential and HDD for  $nAl_2O_3$  (a and b, respectively), and nCuO (c and d, respectively) in DIW at various pH over 48 h at 0.1 mg/L at IS (<< 0.001 mM)

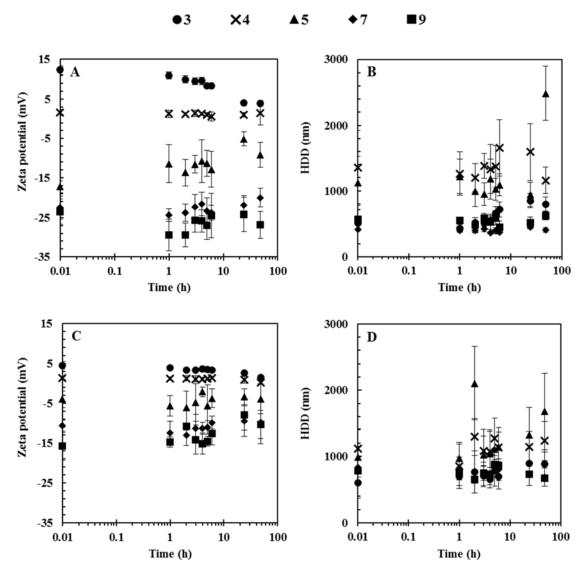


Fig. SI.5 The  $\zeta$ -potential and HDD for  $nAl_2O_3$  (a and b, respectively), and nCuO (c and d, respectively) in DIW at various pH over 48 h at 1 mg/L at IS (<< 0.001 mM)

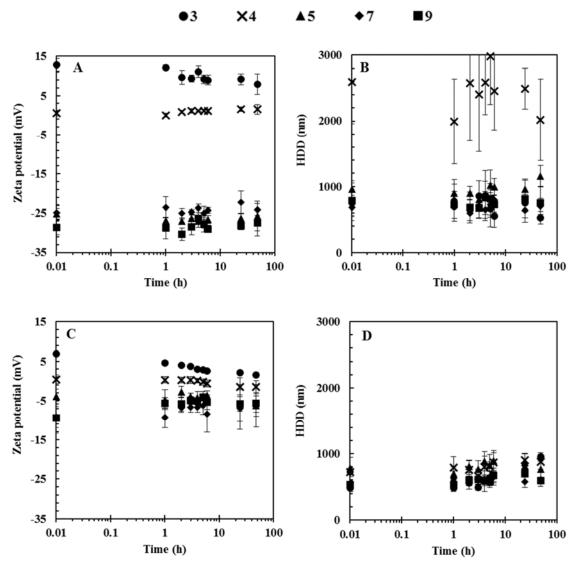


Fig. SI.6 The  $\zeta$ -potential and HDD for  $nAl_2O_3$  (a and b, respectively), and nCuO (c and d, respectively) in DIW at various pH over 48 h at 10 mg/L at IS (<< 0.001 mM)