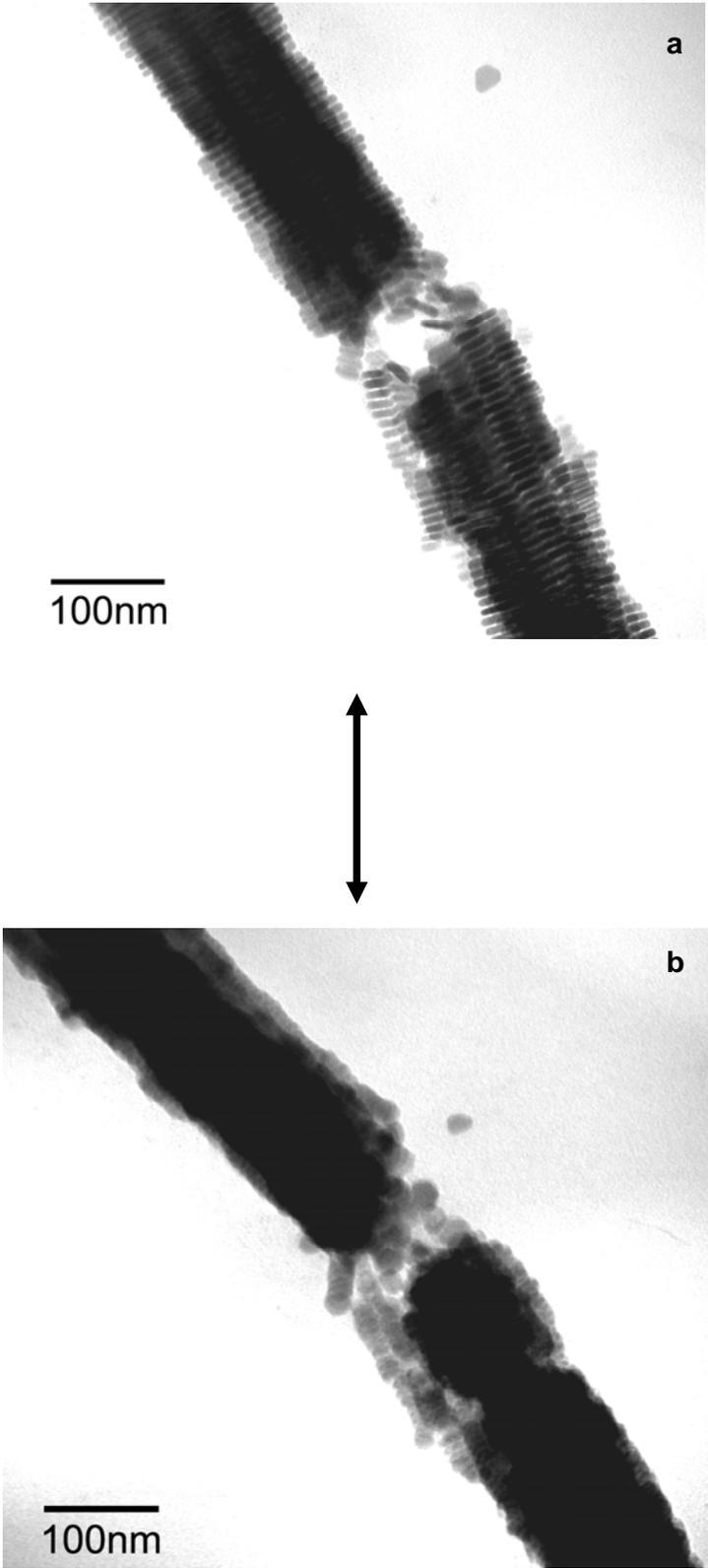
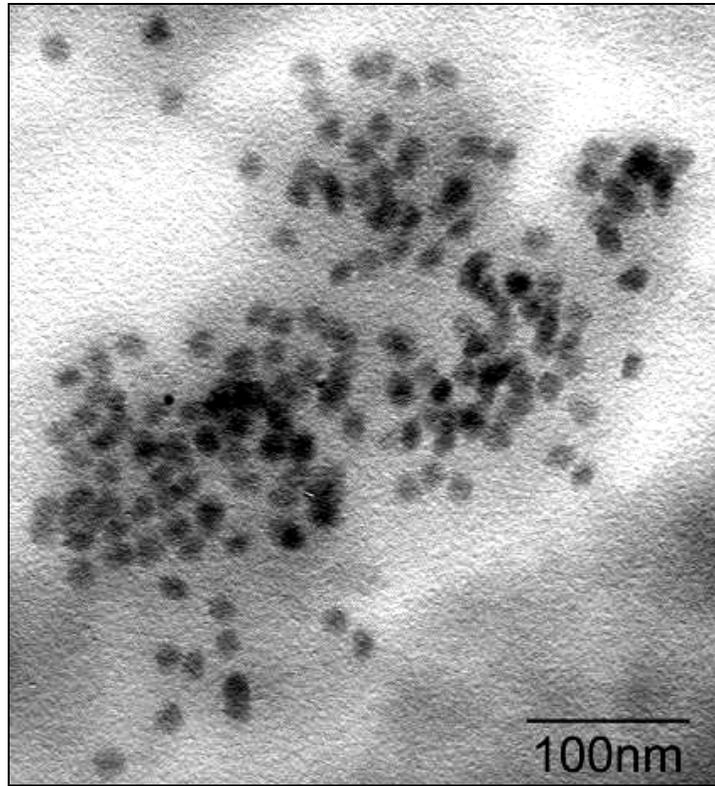


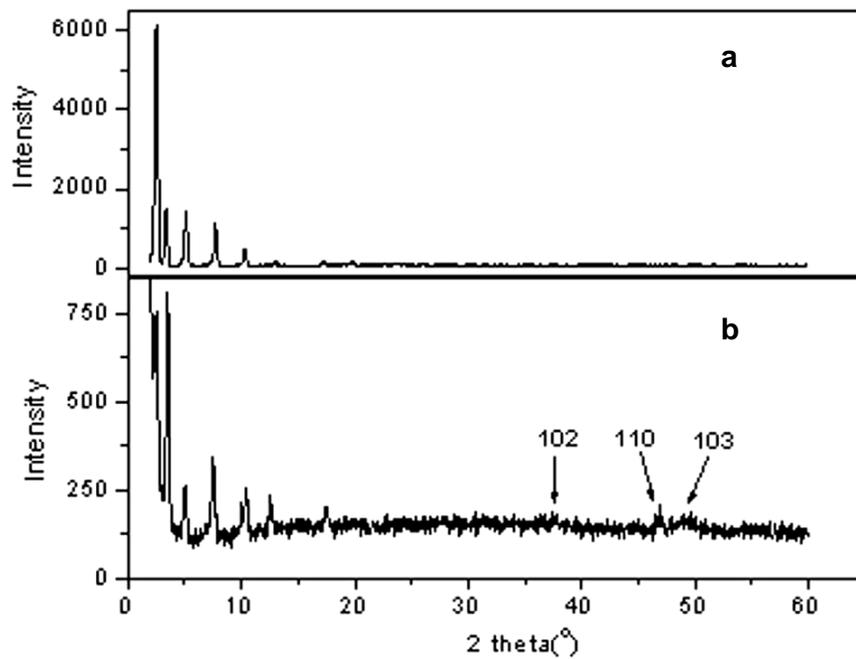
Supporting information:



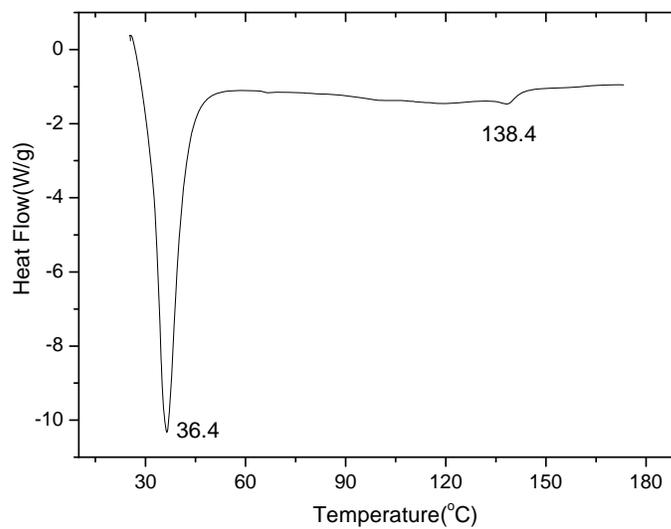
(S1) TEM images of the self assembly Cu<sub>2</sub>S nanostructure



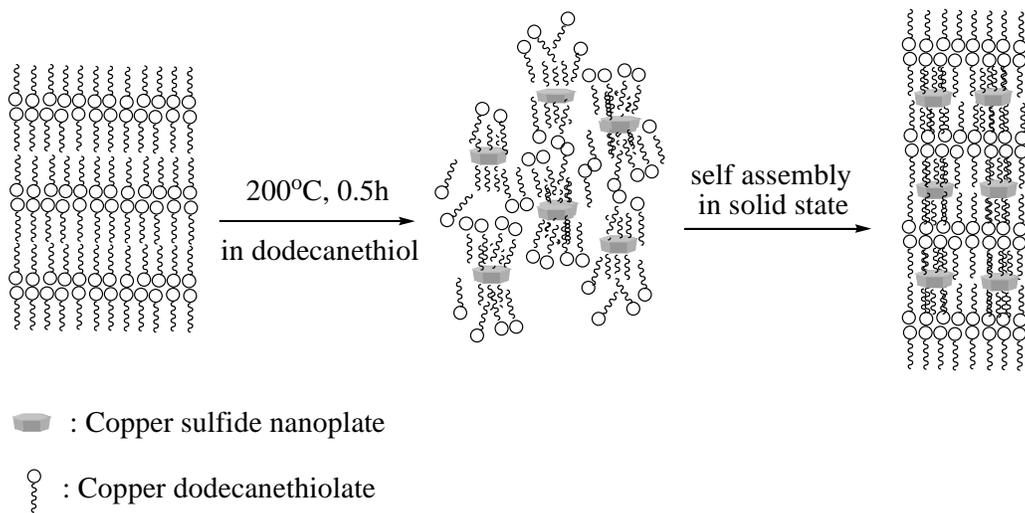
(S2): TEM images of the copper sulfide nanocrystals prepared at 180 °C for 0.3 h.



**S3.** XRD patterns of (a) the copper dodecanthiolate precursor, and (b) the products prepared at 200 °C for 1 h.



**S4.** DSC traces of the products prepared at 200 °C for 1 h.



**S5. Illustration of the proposed growth and self assembly process of copper sulfide nanoplates.**