

## Supporting Information

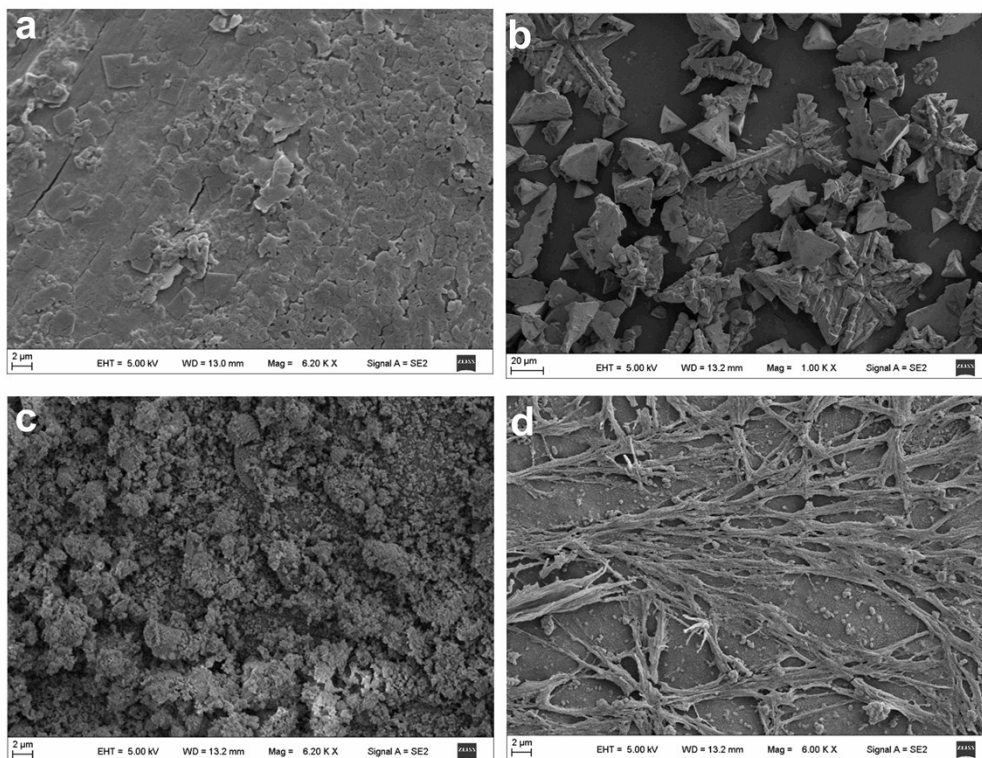


Fig S1. SEM images of  $\text{CuCl}_2$  (a),  $\text{CuCl}$  (b),  $\text{Cu}_2(\text{OH})_3\text{Cl}$  (c) and  $\text{Cu}(\text{OH})_2$  (d) provided in the chemical transformation process of as-prepared  $\text{CuO}$  nanorods preparation.

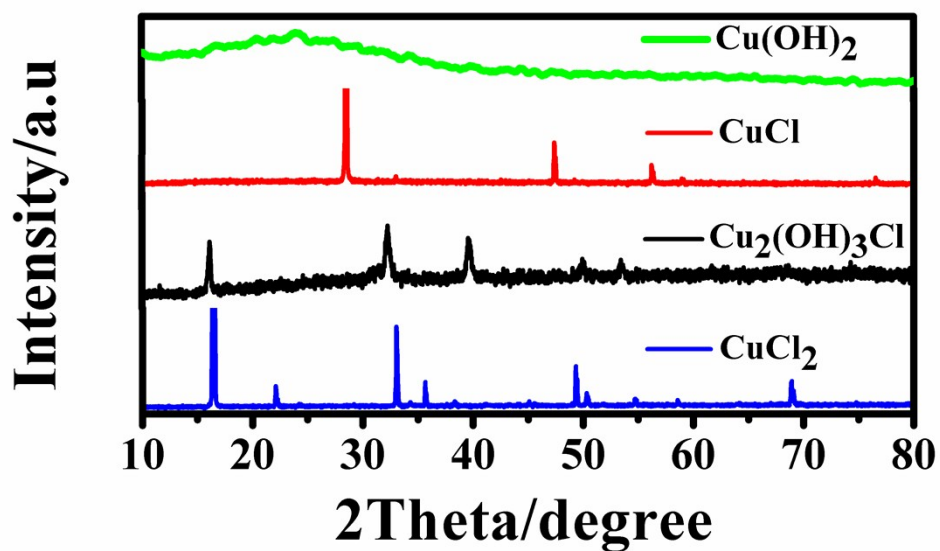


Fig S2. XRD patterns of  $\text{CuCl}_2$ ,  $\text{CuCl}$ ,  $\text{Cu}_2(\text{OH})_3\text{Cl}$  and  $\text{Cu}(\text{OH})_2$  provided in the chemical transformation process of as-prepared  $\text{CuO}$  nanorods preparation.