Electronic Supplementary Information (ESI)

High-response Transparent Heater Based on CuS nanosheets Film with Superior Mechanical Flexibility and Chemical Stability

Shuyao Xie[a]†, Teng Li[a]†, Zijie Xu[a], Yanan Wang[a], Xiangyang Liu[ab], Wenxi Guo*[a]

a Research Institute for Soft Matter and Biomimetics, Fujian Provincial Key Laboratory for Soft Functional Materials Research, Department of Physics, Xiamen University, Xiamen 361005, China.
b Department of Physics, Faculty of Science, National University of Singapore, Singapore, 117542, Singapore

Corresponding Authors

*E-mail: wxguo@xmu.edu.cn.

Supplementary Figures and Videos

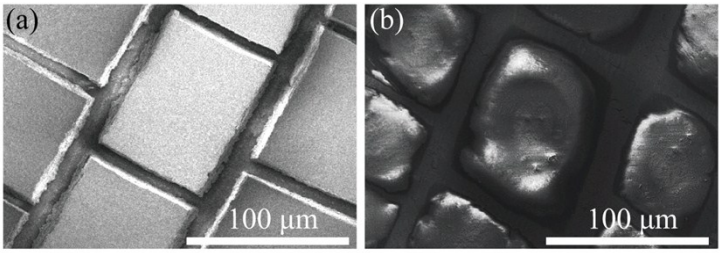

Fig. S1. High-resolution SEM images of uniform TiO_2 template on the PET substrate (a) without and (b) with Cu .

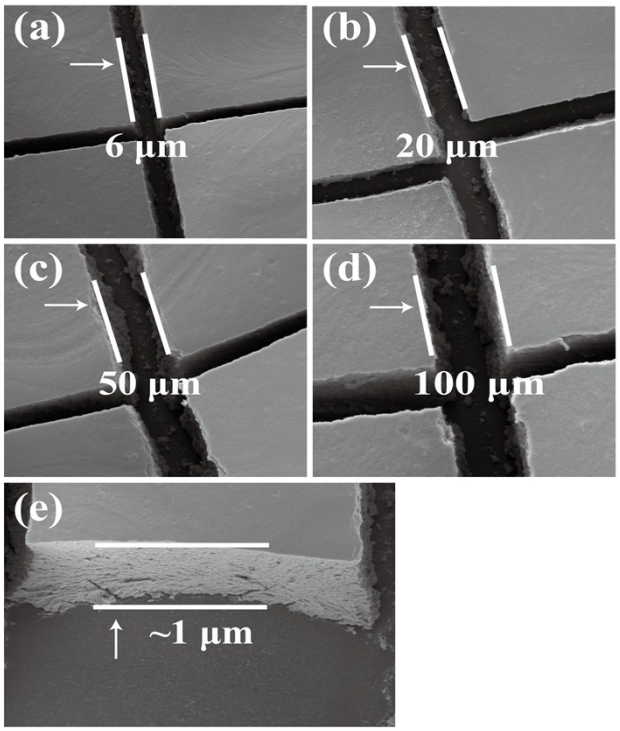

Fig. S2. Controllable and large-scale fabrication of flexible transparent conducting films (TCFs). (a-d) The SEM images of the formation crackles with different widths. (e) the SEM image of the thickness of the colloid pattern.

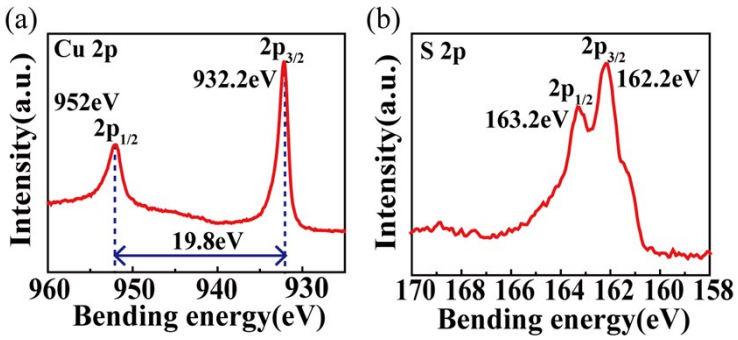

Fig. S3. High resolution XPS spectra of Cu 2p (a) and S 2p (b).

Video S1. Bending tests for CuS TCFs.