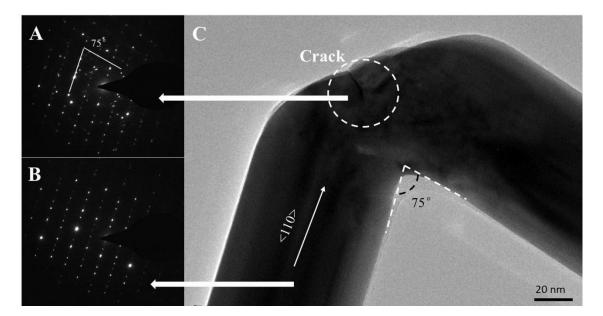
Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2016

## **Supporting Information.**

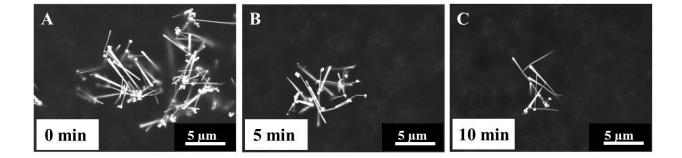
**Title**: Spotlight on ultrasonic fracture behaviour of nanowires: their size-dependent effect and prospect for controllable functional modification



Han Dai, Tianyue Wang and Meicheng Li\*

**Figure S1** Crack in the bending point. (A) SAED pattern of the bending point. (B) SAED pattern away from the bending point. (C) TEM image of the Ag nanowire.

A crack occurrs in the bending point of Ag nanowire. Large amounts of lattice distortions around the crack can be observed from the selected area electron diffraction (SAED) pattern.



**Figure S2** SEM images of Cu nanowires. (A) Original morphology of Cu nanowires. (B), (C) Morphology of Cu nanowires sonicated after 5 and 10 min, respectively

Sonication reduced the aggregation of Cu nanowires, however no evident structural transformations can be found within a short time.