

## Supporting information

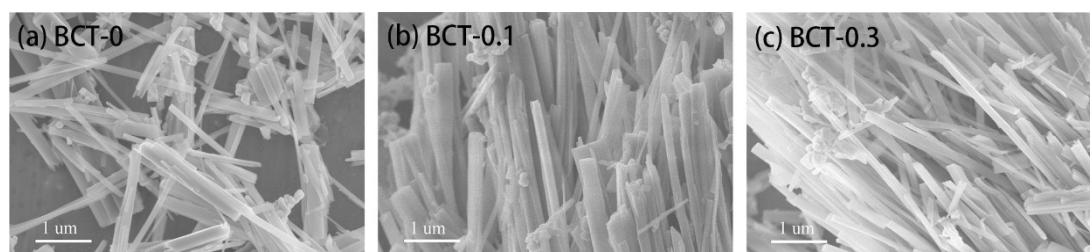
# Enhanced piezocatalytic, photocatalytic and piezo-/photocatalytic performance of diphasic $\text{Ba}_{1-x}\text{Ca}_x\text{TiO}_3$ nanowires near solubility limit

Enzhu Lin, Jiang Wu, Ni Qin\*, Baowei Yuan, Zihan Kang and Dinghua Bao\*

State Key Laboratory of Optoelectronic Materials and Technologies, School of Materials Science and Engineering, Sun Yat-Sen University, Guangzhou 510275, China

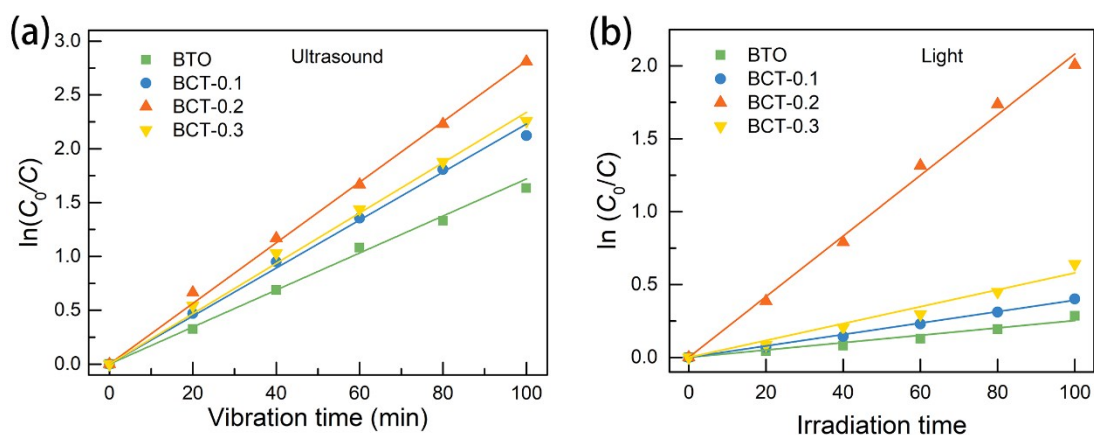
Supporting information 1:

Fig. S1a, b and c is the SEM images of BTO, BCT-0.1 and BCT-0.3, respectively. As shown in Fig. S1, all the samples are nanowires with diameter around 100 nm.



Supporting information 2:

Fig. S2a and b are the  $\ln(C/C_0) \sim t$  plots of piezocatalysis and photocatalysis, respectively.



Supporting information 3:

Fig. S3a is the SEM image of BCT-0.2 sample after five piezo-/photocatalytic recycle measurements. Fig. S3b shows the XRD patterns before and after five piezo-/photocatalytic recycle measurement. Both SEM and XRD results indicates that no obvious changes were observed before and after five piezo-/photocatalytic recycle measurement.

