## **Supplementary Data**

## Exploring novel bismuth-based material for energy storage applications

Feng Lia,b,c, Tao Jianga, Jiwei Zhaia, Bo Shena, Huarong Zengb

a. Key Laboratory of Advanced Civil Engineering Materials of Ministry of Education, Functional Materials Research Laboratory, School of Materials Science
& Engineering, Tongji University, 4800 Caoan road, Shanghai 201804, China
b. Key Laboratory of Inorganic Functional Materials and Devices, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai 200050, China
c. University of Chinese Academy of Sciences, Beijing 100049, People's Republic of China



**Figure S1** The evolution of P-E loops (a) MPB composition with tetragonal-pseudocubic phase and (b) ergodic phase composition with pseudo-cubic phase for BKT-LMT systems. Both the ceramics exhibits poor energy storage properties by CS.

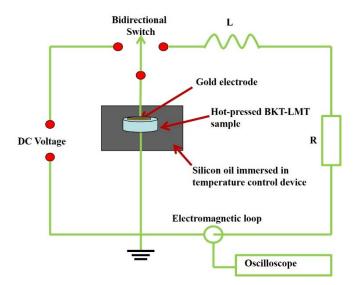


Figure S2 Schematic diagram of the charge-discharge device.