Supplementary materials for

A Highly Thermostable In₂O₃/ITO Thin Film Thermocouple Prepared via Screen Printing for High Temperature Measurements

Yantao Liu ^{1,3}, Wei Ren ^{1,*}, Peng Shi ^{1,*}, Dan Liu¹, Yijun Zhang ¹, Ming Liu ¹, Zuo-Guang Ye ^{1,4}, Weixuan Jing ², Bian Tian ², and Zhuangde Jiang ²

- ¹ Electronic Materials Research Laboratory, Key Laboratory of the Ministry of Education & International Center for Dielectric Research, Xi'an Jiaotong University, Xi'an 710049, China
- ² International Joint Laboratory for Micro/Nano Manufacturing and Measurement Technologies, Xi'an Jiaotong University, Xi'an 710049, China
- ³ Department of Electronic Engineering, Xi'an University of Technology, Xi'an 710048, China
- ⁴ Department of Chemistry and 4D LABS, Simon Fraser University, Burnaby, BC V5A 1S6, Canada
- * Corresponding authors' E-mail addresses: wren@mail.xjtu.edu.cn and spxjy@mail.xjtu.edu.cn, Tel.: +86-29-82665670

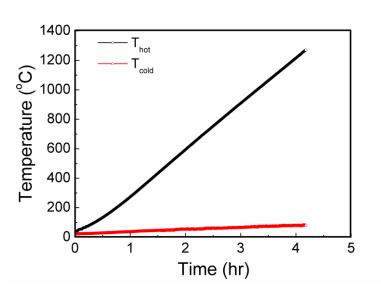


Figure S1. The temperature changes of the cold and hot junctions of thermocouple in the heating process.

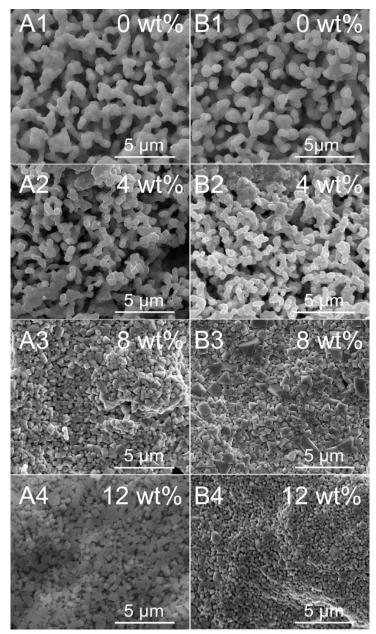


Figure S2. SEM surface images of ITO and In₂O₃ films with different glass additives annealed at 1250 °C for 2 h. (**A**) ITO film, (**B**) In₂O₃ film.