Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2020

**Electronic Supplementary Information** 

## Crystallization of ZnO thin films without polymer substrate deformation

## via thermal dissipation annealing method for next generation wearable

## devices

Dongwan Kim<sup>1</sup> and Jae-Young Leem<sup>1,\*</sup>

<sup>1</sup>Department of Nanoscience & Engineering, Inje University, 197, Inje-ro, Gimhae-si,

Gyeongsangnam-do 621-749, Republic of Korea

\*Corresponding authors.

E-mail addresses: jyleem@inje.ac.kr

Tel.: +82-55-320-3716. Fax: +82-55-320-3631

(a) PEN substrate	(b) Furnace	(c) IR lamp
인제대학교 INJE UNIVERSITY	인제 <b>바</b> 학교 INJE UNIVERSITY	
	Powder	Substrate melting

**Fig. S1.** Photographic image of (a) PEN substrate and sol-gel spin-coated ZnO thin films annealed by using (b) furnace and (c) IR lamp without dissipation system.