

Supporting Information for:

Sintering Copper nanoparticles with photonic additive for printed conductive patterns by intense pulsed light

Wan-Yu Chung¹, Yi-Chin Lai¹, Tetsu Yonezawa^{2,}, Ying-Chih Liao^{1,*}*

¹ Department of Chemical Engineering, National Taiwan University, Taipei, Taiwan

² Division of Materials Science and Engineering, Hokkaido University, Sapporo,
Hokkaido, Japan

Contents:

1. Thermogravimetric analysis of PVP.
2. UV-vis absorbance spectrum comparison of various composition.
3. SEM images of sintered Cu/CuO film with different sintering intensity.

Figure S1

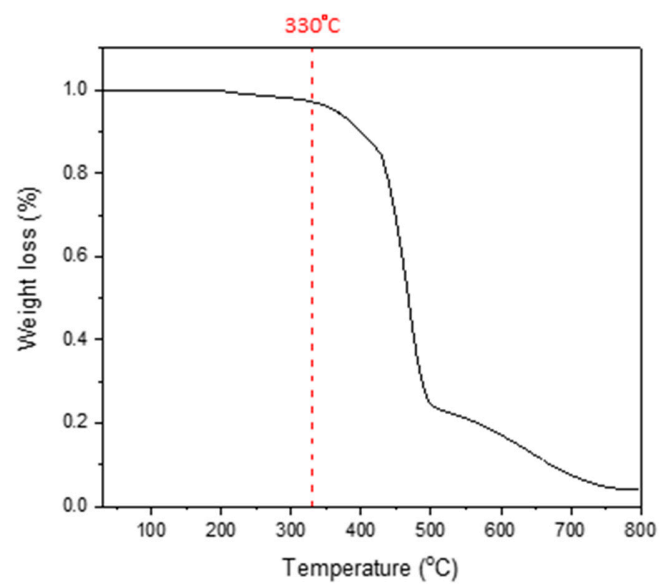


Figure S1 Thermogravimetric analysis of PVP.

Figure S2

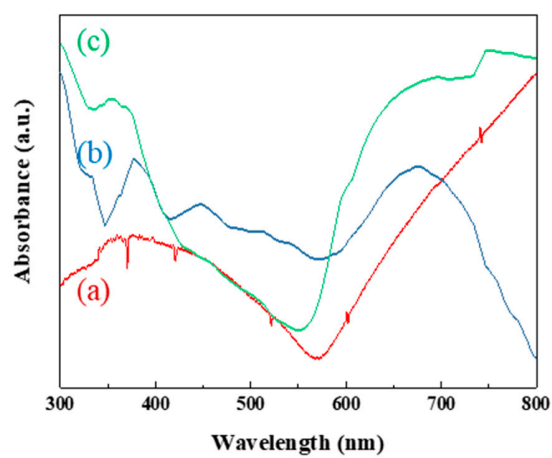


Figure S2. UV-vis absorbance spectrum comparison of (a) CuNP, (b) CuONPs and (c) CuONP/CuNP mixture with a weight ratio of 1/80.

Figure S3

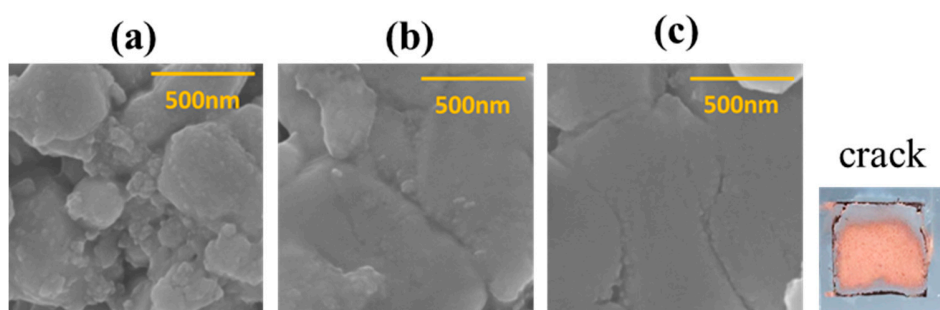


Figure S3. SEM images of sintered Cu/CuO film with sintering intensity at (a) 2.36J/cm², (b) 3.08 J/cm² and (c) 3.23 J/cm².