

Figure S1. A schematic diagram of the aerosol printing system

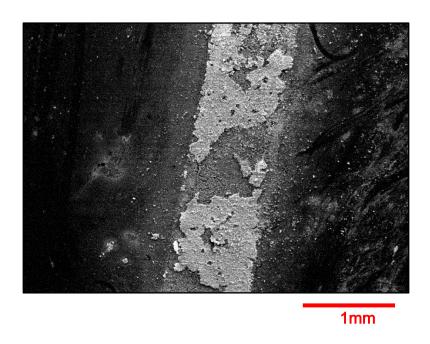


Figure S2. Delamination of a sintered pattern at large photonic energy

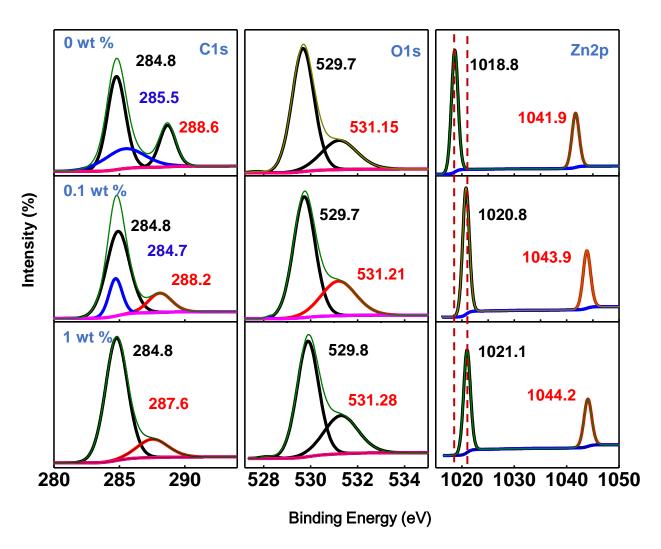


Figure S3. XPS Spectra of the printed Zn NPs with 0wt %, 0.1 wt% and 1 wt% PVP, annealed in Argon environment with flash energy of 20.7 J/cm²

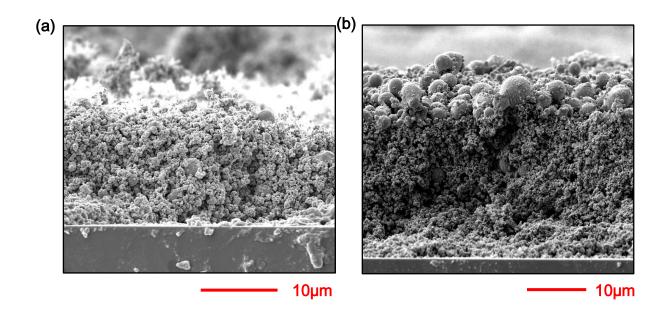


Figure S4. Cross-sectional SEM with sintered pattern of (a) thin and (b) thick films. A thicker layer has higher temperature build up which leads to more melting

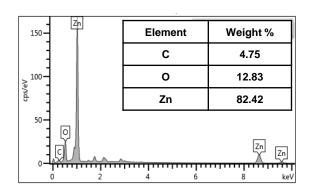


Figure S5. EDS analysis of the composition of dendrites formed due to photonic sintering in air.