Supplementary Information section

Nanoparticles of Cu_2ZnSnS_4 as Performance Enhancing Additives for Organic Field-Effect Transistors


aSchool of Chemistry, The University of Manchester, M13 9PL, UK
bSchool of Materials, The University of Manchester, M13 9PL, UK
cWestCHEM, Department of Pure and Applied Chemistry, University of Strathclyde, G1 1XL, UK

**Figure S1**: (a) are the p-XRD patterns of the CZTS nanoparticles synthesised at 180, 220 and 250°C. Peaks are indexed according to the Kesterite structure (ICDD: 04-015-0223) of CZTS (stick patterns). The * mark shows unknown peaks. (b)-(d) are the TEM images of CZTS nanoparticles synthesised at 180, 220 and 250°C respectively.
Figure S2: Output and transfer characteristics (left and right columns, respectively) for OFETs fabricated using P3HT + 5% oleylamine [(a) and (b)] and P3HT + 10% oleylamine [(c) and (d)]
Figure S3: TGA analysis of the samples [Cu(S₂CNEt₂)₂] (1), [Zn(S₂CNEt₂)₂] (2) and [nBu₂Sn(S₂CNEt₂)₂] (3). Analyses of the samples were carried out by a Seiko SSC/S200 model from 10 to 600°C with a heating rate of 10°C min⁻¹ under nitrogen.