

The effect of structural properties of Cu₂Se /polyvinylcarbazole nanocomposites on the performance of hybrid solar cells

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Supporting information

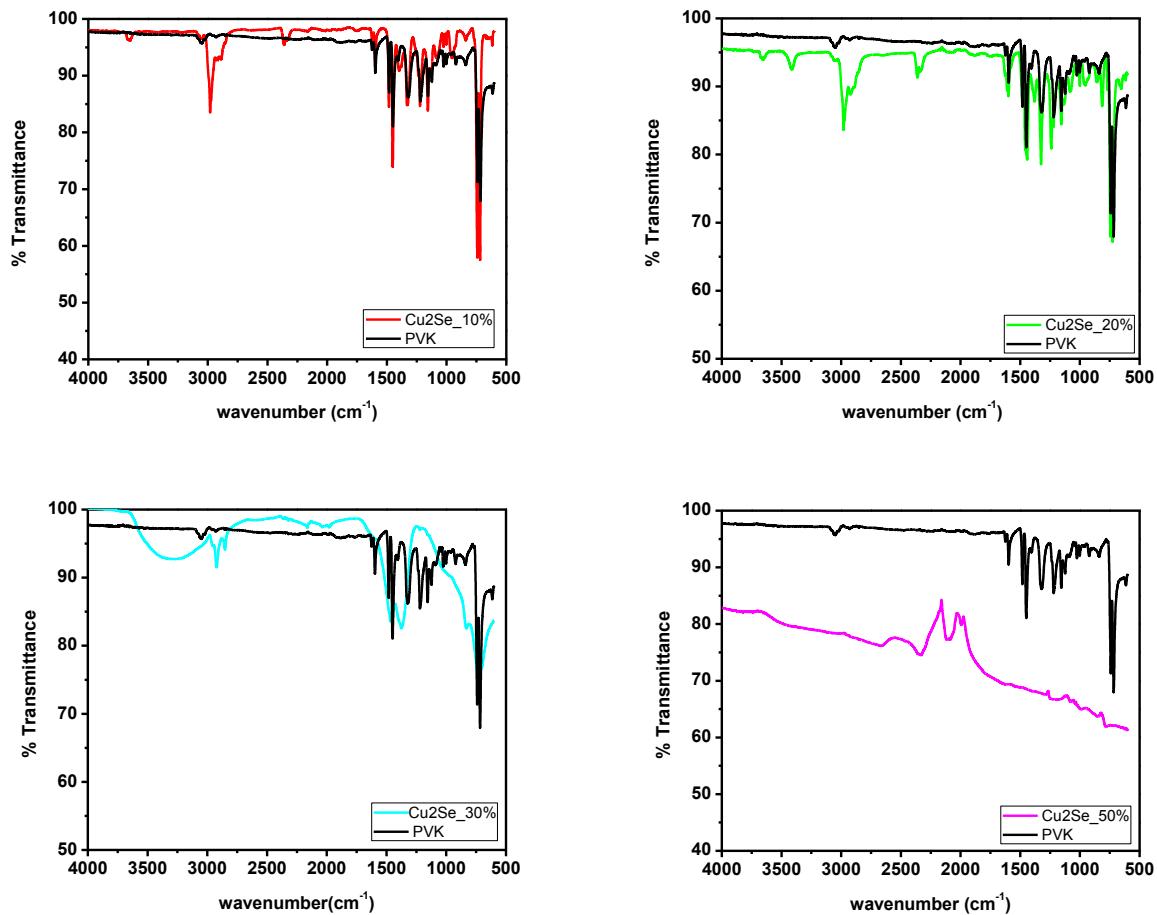


Figure S1: The IR spectrum of the varying weight percentages of Cu₂Se

The FTIR shows that as more copper selenide nanoparticles are added the more the nanocomposite structure deviates from the pure polymer. Small changes are observed in the 10 % nanocomposites whilst the 50 % nanocomposites show drastic changes.

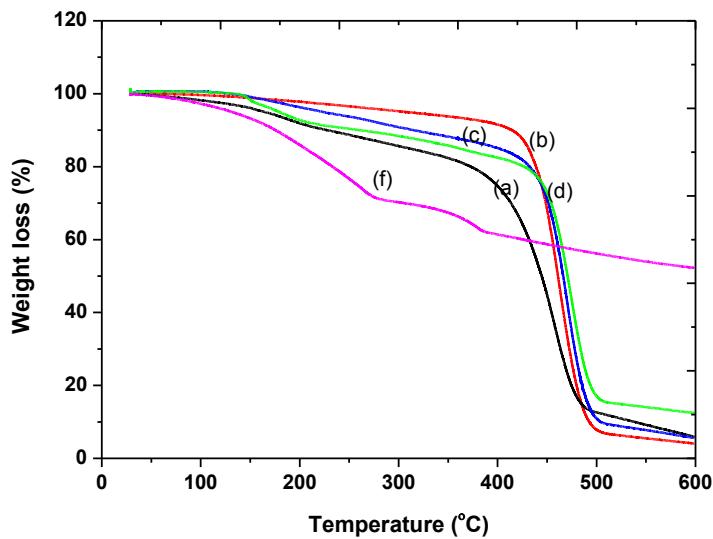


Figure S2: TGA graph of the different weight percentages of Cu₂Se, (a) PVK, (b) 10 %, (c) 20 %, (d) 30 % and (f) 50 % nanocomposites

The TGA graphs show similar patterns with the FTIR spectra where the most significant change is observed for the 50 % nanocomposites.