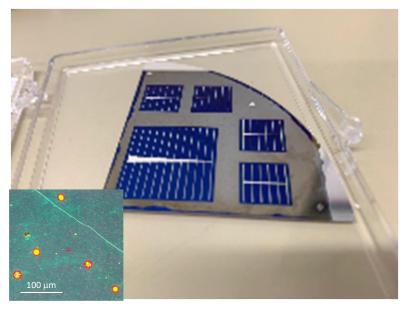




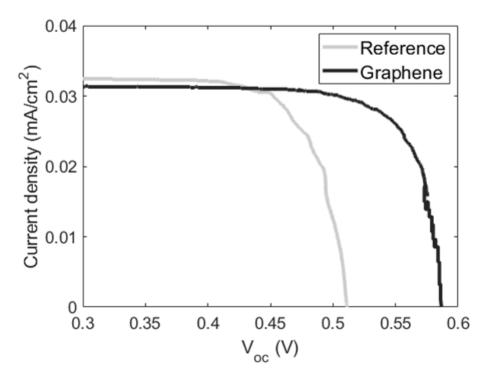
## Supplementary Materials



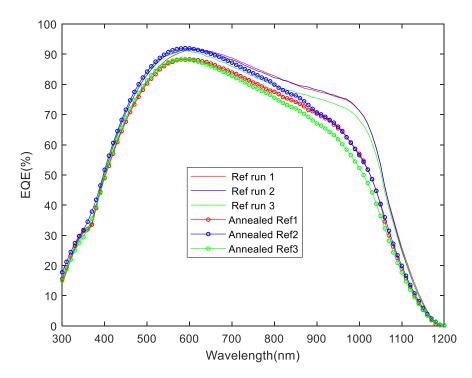
**Figure S1.** Photography of the graphene-based solar cells studied in this work. The inset shows a detail picture of pinholes observed (optical microscopy) on the front electrode after the graphene transference.



Figure S2. Photography of the reference solar cells studied in this work.



**Figure S3.** Pseudo-JV curves calculated from QSSVoc characterization for the reference and graphene-coated solar cells studied in this work.



**Figure S4.** EQE curves of reference solar cells before and after being submitted to a thermal step (150 °C) similar to the one involved in the process for graphene transference. There is a decrease in EQE the infrared region similar to the degradation observed in the graphene-coated solar cell.