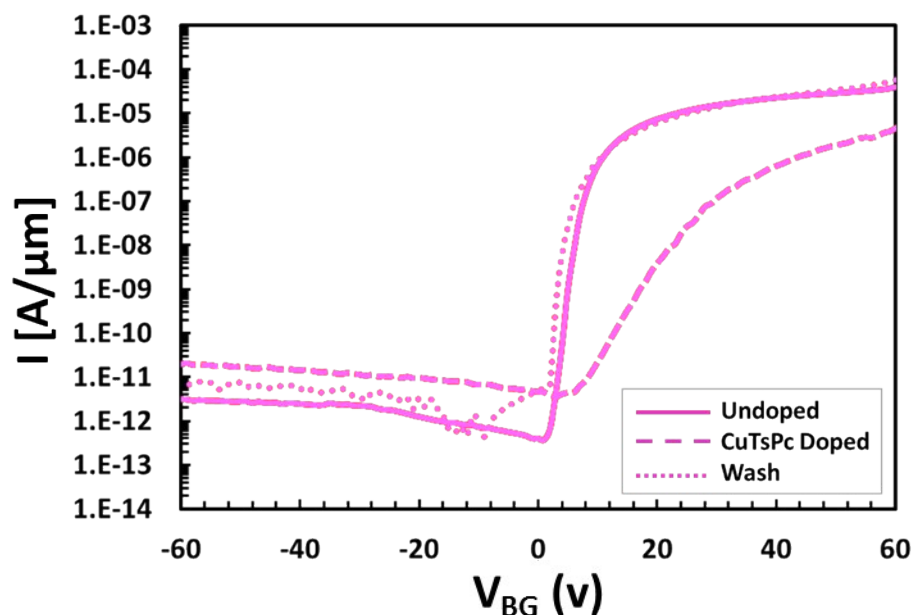


Supplementary Information

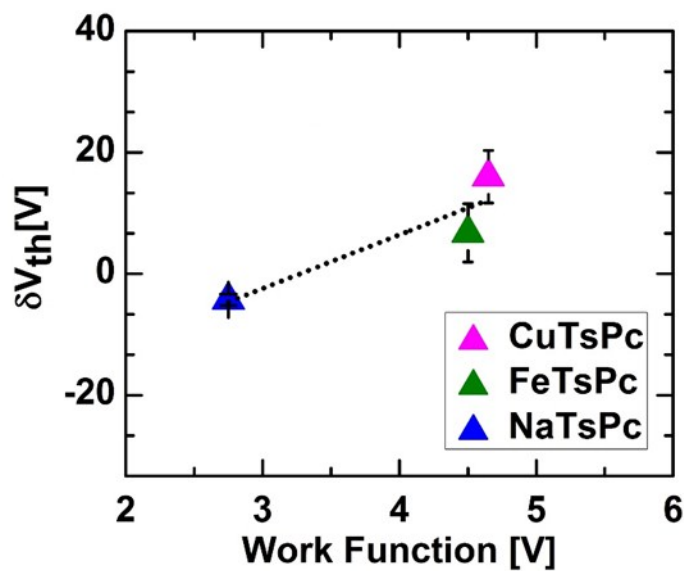
Controlled Doping of Transition Metal Dichalcogenides by Metal Workfunction Tuning in Phthalocyanine Compounds

Christopher J. Benjamin,^{a†} Suki Zhang,^{a†} and Zhihong Chen^a

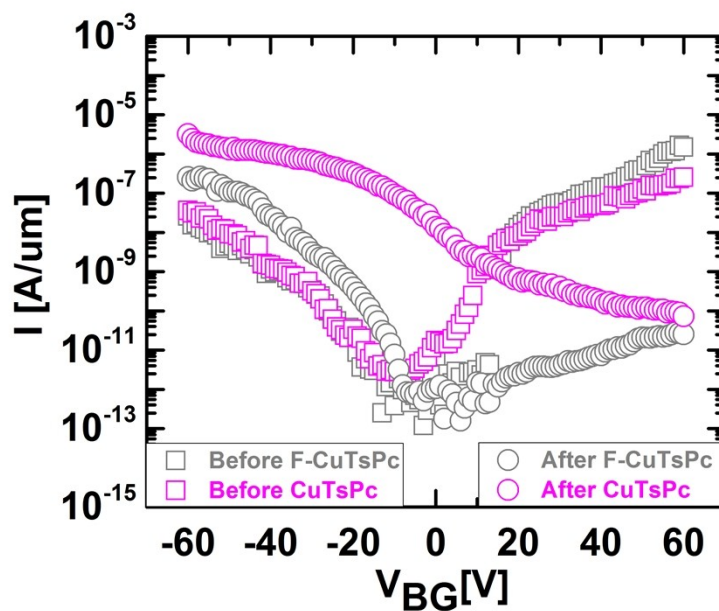
Supplemental Figures



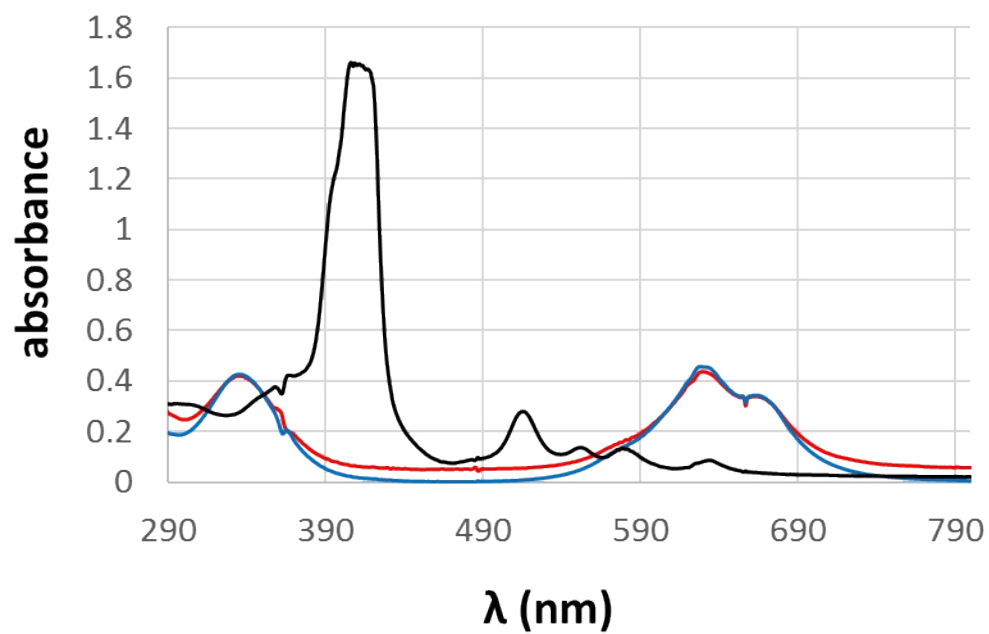
Supplemental Figure 1: Transfer characteristics of a MoS₂ device before and after CuTsPc doping, and removal of the doping effect by resolubilizing the dopants in solvent.



Supplemental Figure 2: The trend of correlating V_{TH} shift after molecular doping with work functions of metal core atoms in MoS₂ devices



Supplemental Figure 3: The Effect of fluorination on Metal-phythalocyanene doping of by comparing doping effect of CuTsPc and F-CuTsPc in WSe₂ devices.



Supplemental Figure 4: UV-vis spectra of metal free phthalocyanine (black), PtTsPc (red), and Na₂TsPc (blue)