## Charge Transport in Imperfect Organic Field Effect Transistors: Effects of Charge Traps

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Figures S1 shows the complete result of simulating  $I_{SD}$  as a function of the trap concentration while varying the seed percentage between 1% and 100% (homogeneous) for both traps and barriers. Figure S2 shows the simulated  $I_{SD}$  at 40% traps or barriers plotted as a function of the seed percentage.

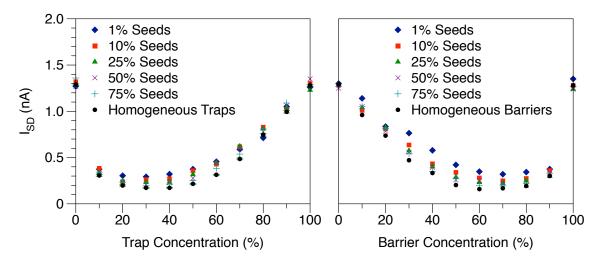
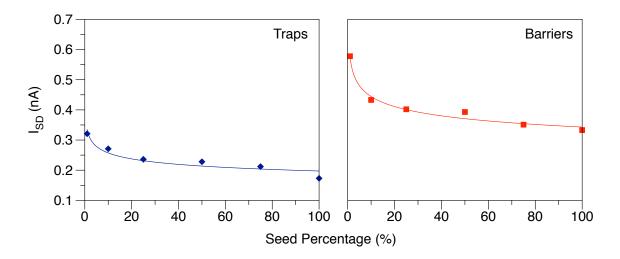


Figure S1:  $I_{SD}$  vs. trap concentration profiles at different seed percentages for traps (left) and barriers (right).  $|\Delta\epsilon| = 0.1$  eV



**Figure S2:**  $I_{SD}$  vs. seed percentage for traps (left) and barriers (right). 40% traps/barriers and  $|\Delta \varepsilon| = 0.1$  eV.