Table S1. Energy levels of NiO layer

HIL	Valence band onset (eV)	HOMO (eV)	Bandgap (eV)	LUMO (eV)
NiO	5.73	5.34	3.59	1.75

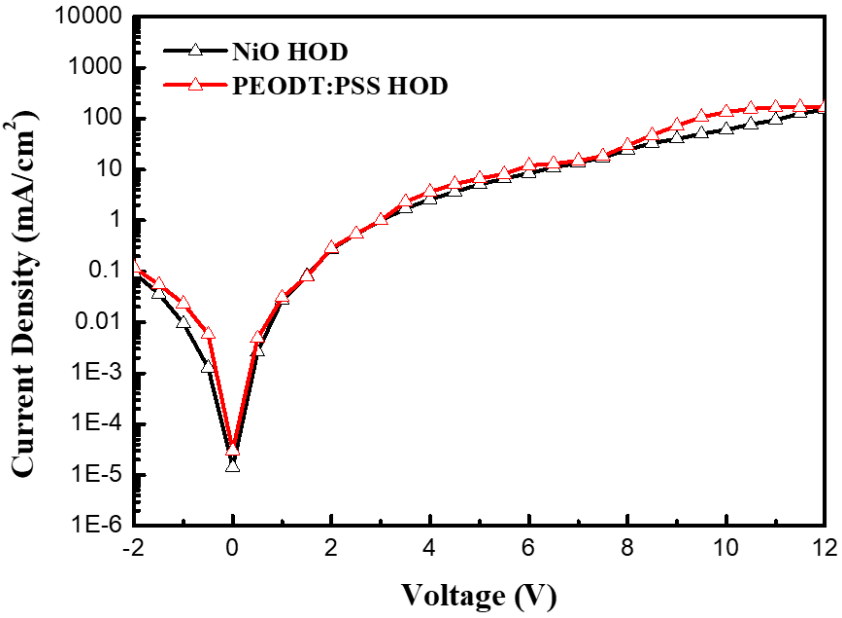


Figure S1. Current density–voltage characteristics of hole-only devices (HODs) using NiO or PEDOT:PSS.

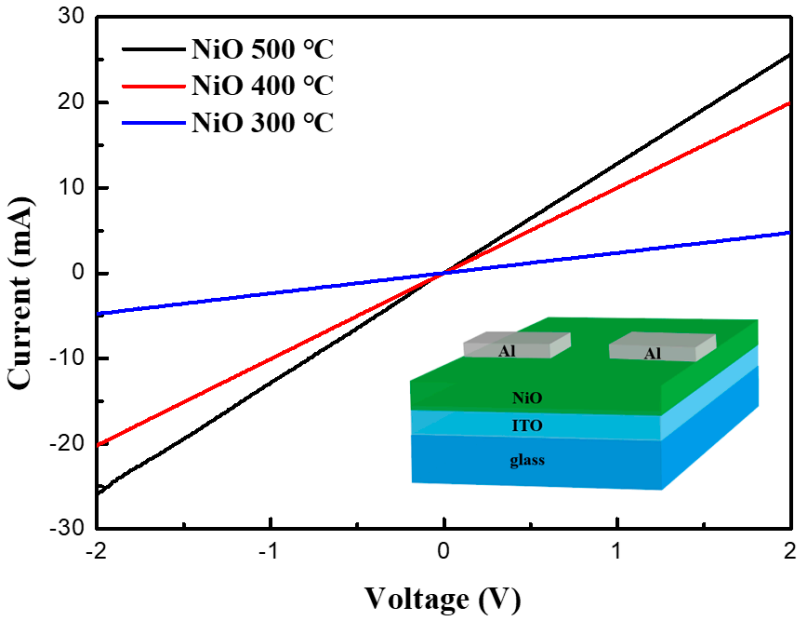


Figure S2. Current–voltage characteristics of NiO films annealed at various temperatures.