

Supporting Information

Enhancement of Polymer Bulkheterojunction Solar Cells Employing Multifunctional Iridium Complexes

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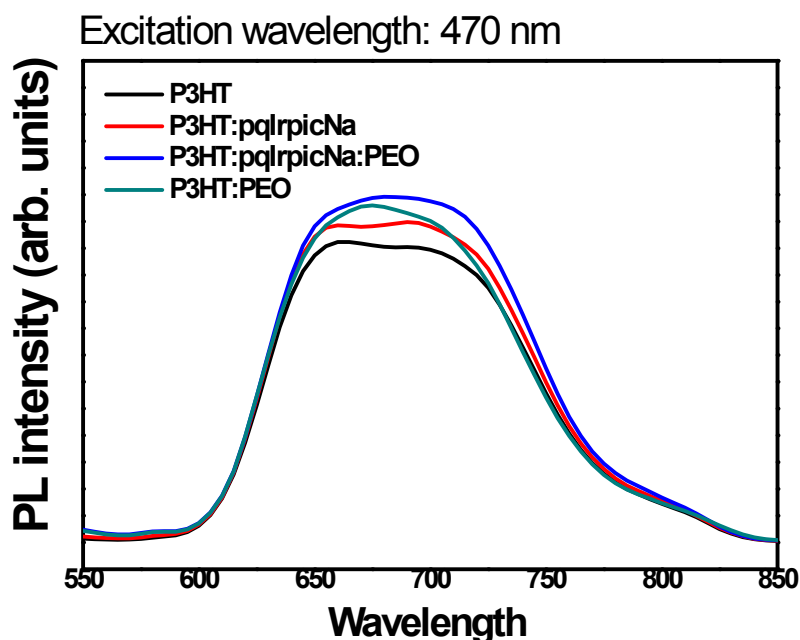


Figure S1. Emission spectra of P3HT:PCBM composite with pqIrpicNa: PEO (The emission maximum $\lambda_{\text{max}}=670$ nm) .

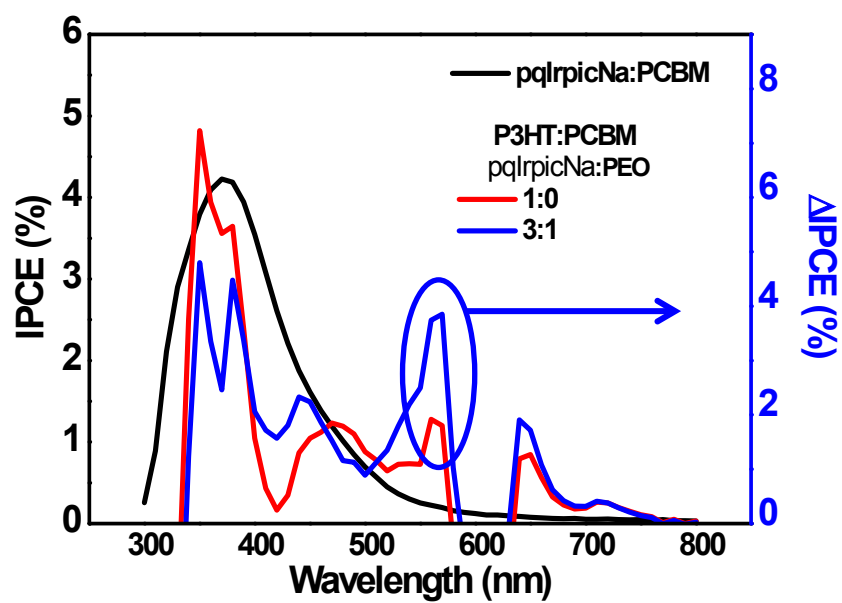
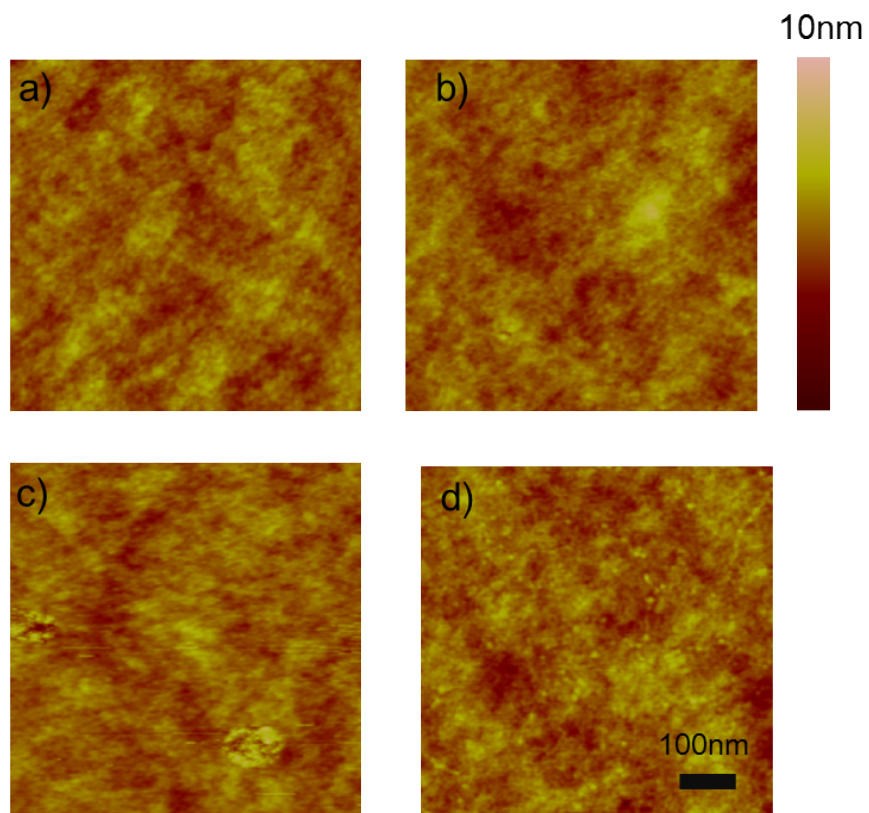


Figure S2. IPCE data of pqIrpicNa and PCBM and Δ IPCE of P3HT:PCBM with 1:0 and 1:3 of pqIrpicNa to PEO

Table S1. Exciton Lifetime of pqIrpicNa, P3HT, P3HT: pqIrpicNa, P3HT:Ir complex:PEO and P3HT:PEO

Decay time	pqIrpicNa (ex 470 nm)	P3HT (ex 470 nm)	P3HT:pqIrpicNa (ex 470 nm)	P3HT:pqIrpicNa :PEO (ex 470 nm)	P3HT:PEO
τ_1	209	0.817	0.840	0.787	0.841
p_1	468.1	756.3	485.5	810.3	511.5
τ_2	338	0.421	0.401	0.430	0.426
p_2	1467.8	1427.0	1458.5	1205.5	1607
$\tau_{ave}(ns)$	307.04	0.507	0.510	0.598	0.534



FigureS 3. AFM height images of P3HT with a) pqIrpicNa, b) 3:1 ratio of Ir:PEO, c) 1:3 ratio of Ir:PEO, and d) PEO.