

Ternary bulk heterojunction solar cells: Addition of soluble NIR dyes for photocurrent generation beyond 800 nm

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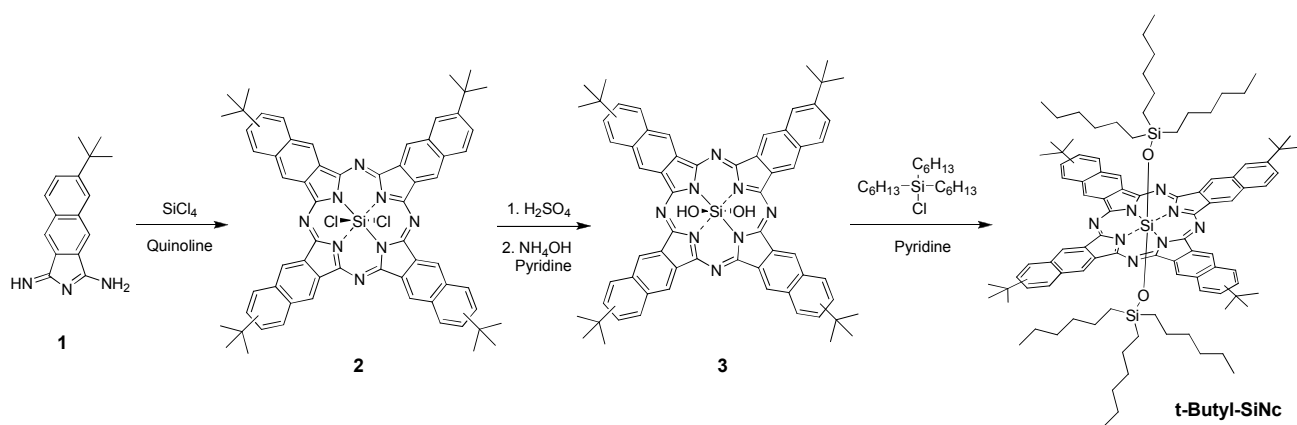
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Supporting Information



Scheme S1. Synthesis of *t*-butyl SiNc molecule.

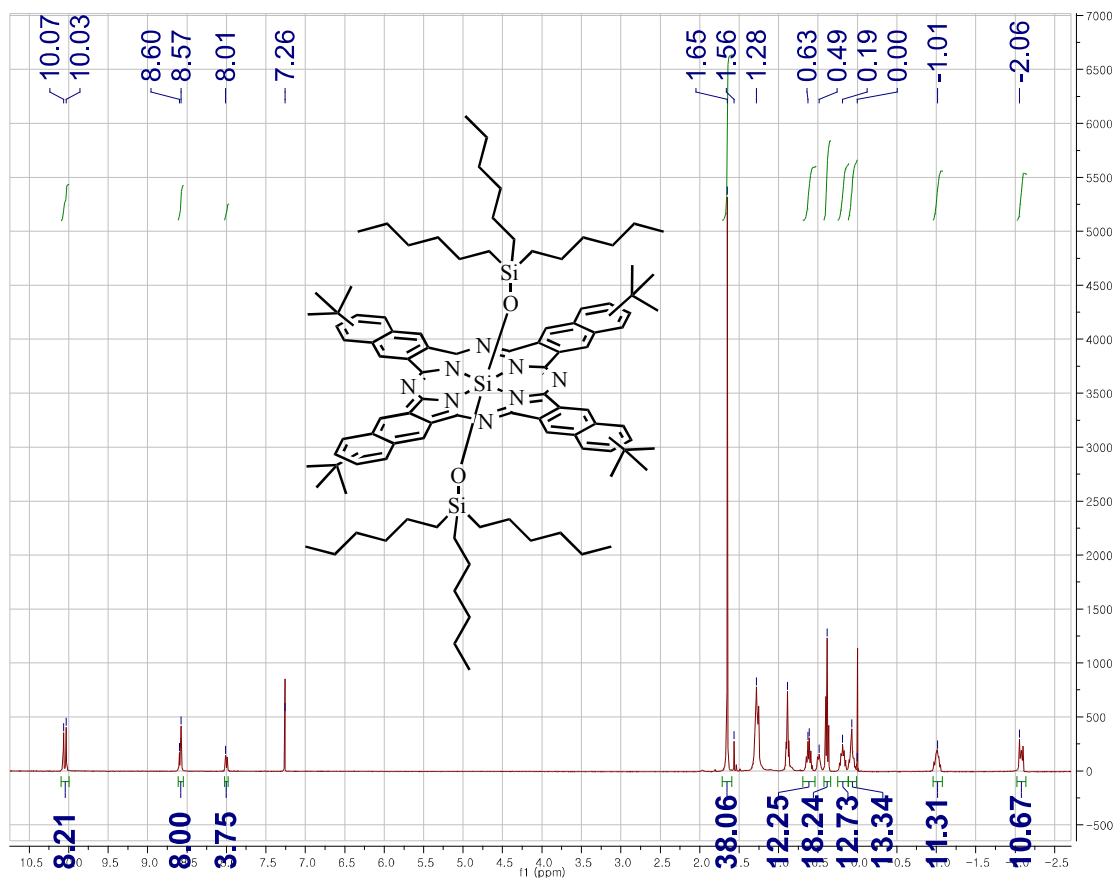


Figure S1. ^1H NMR Spectrum for *t*-butyl SiNc.

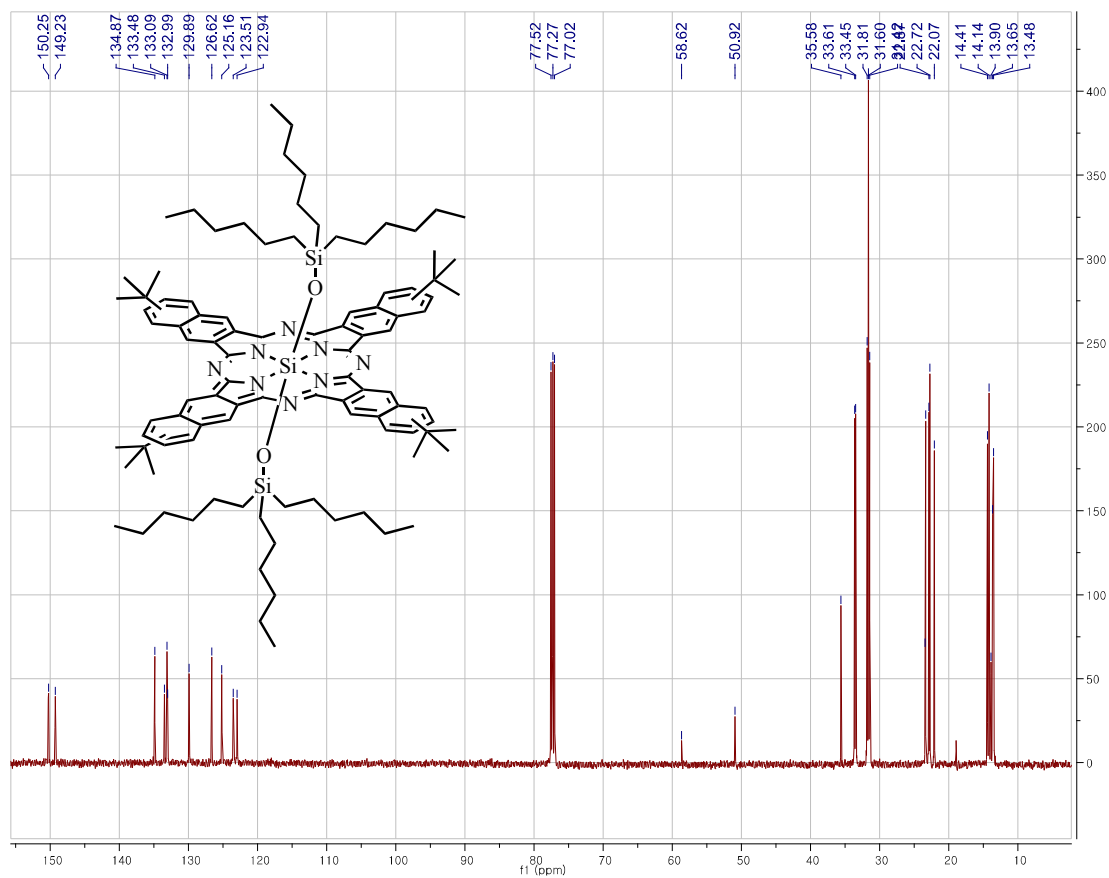


Figure S2. ^{13}C NMR Spectrum for *t*-butyl SiNc.

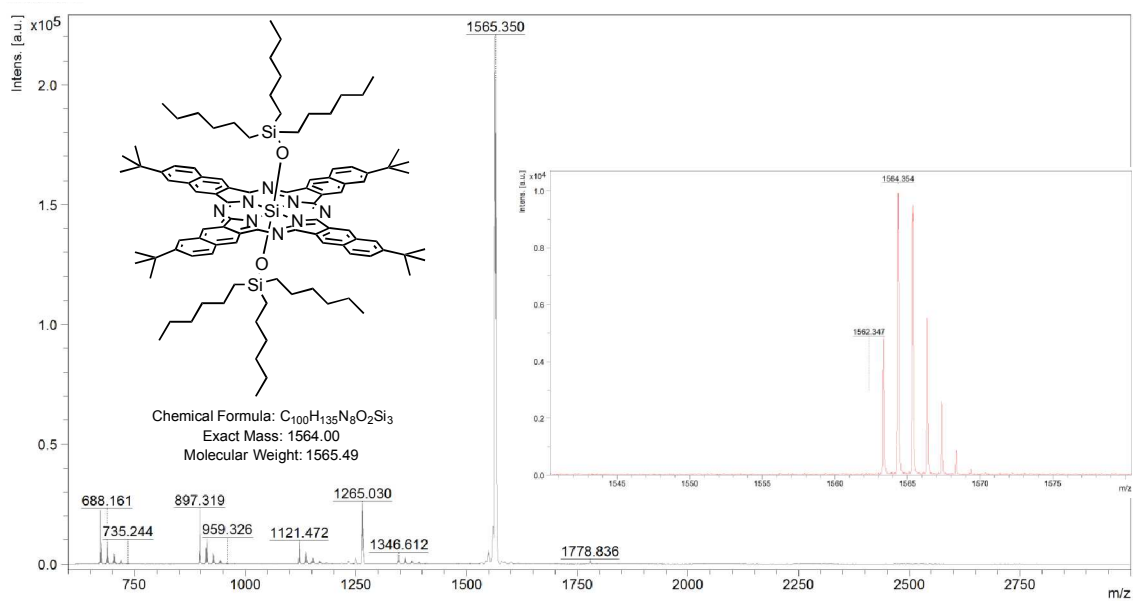


Figure S3. MALDI-TOF spectra (linear mode), inset reflection mode of M^+ peak for *t*-butyl SiNc.

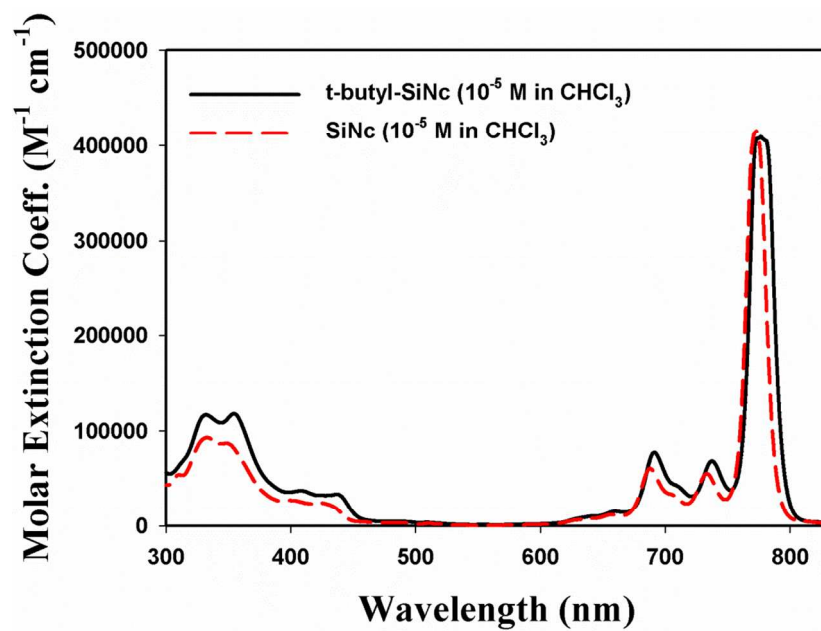


Figure S4. Absorption spectra of unfunctionalized SiNc (dashed, red) and *t*-butyl functionalized SiNc (solid, black).

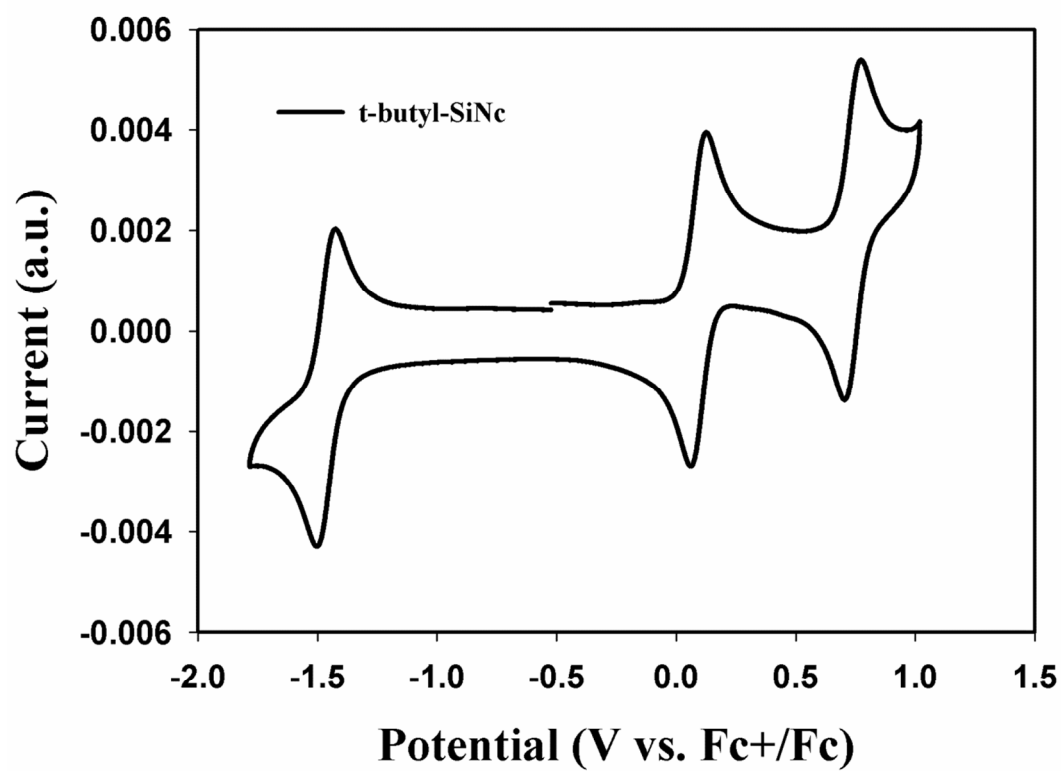


Figure S5. Cyclic voltammogram of *t*-butyl SiNc.

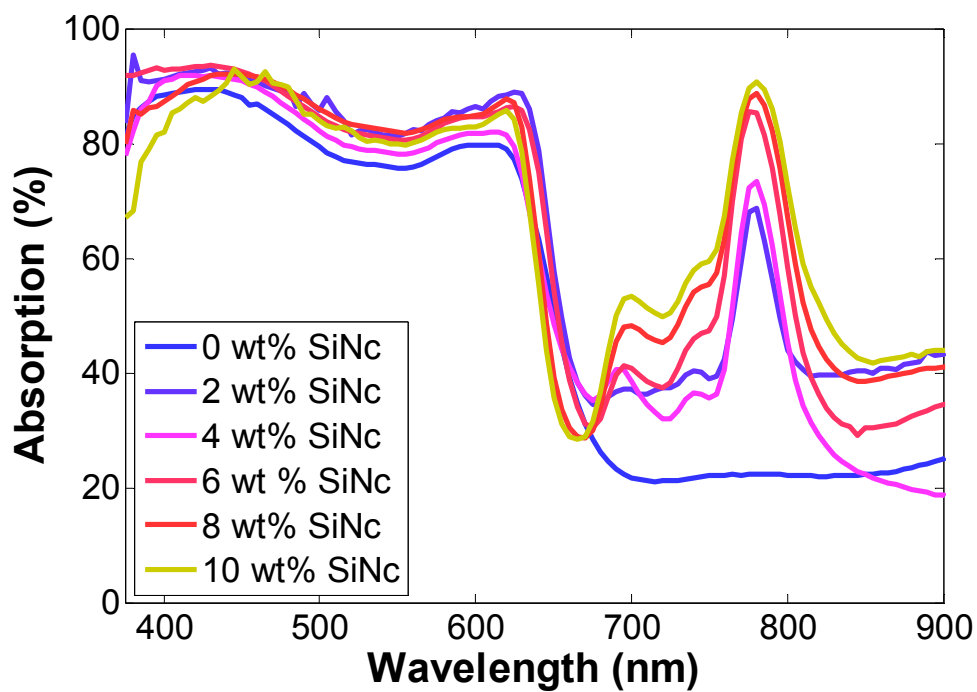


Figure S6. Absorbance scans of BHJ devices with P₃HT and *t*-butyl SiNc only.

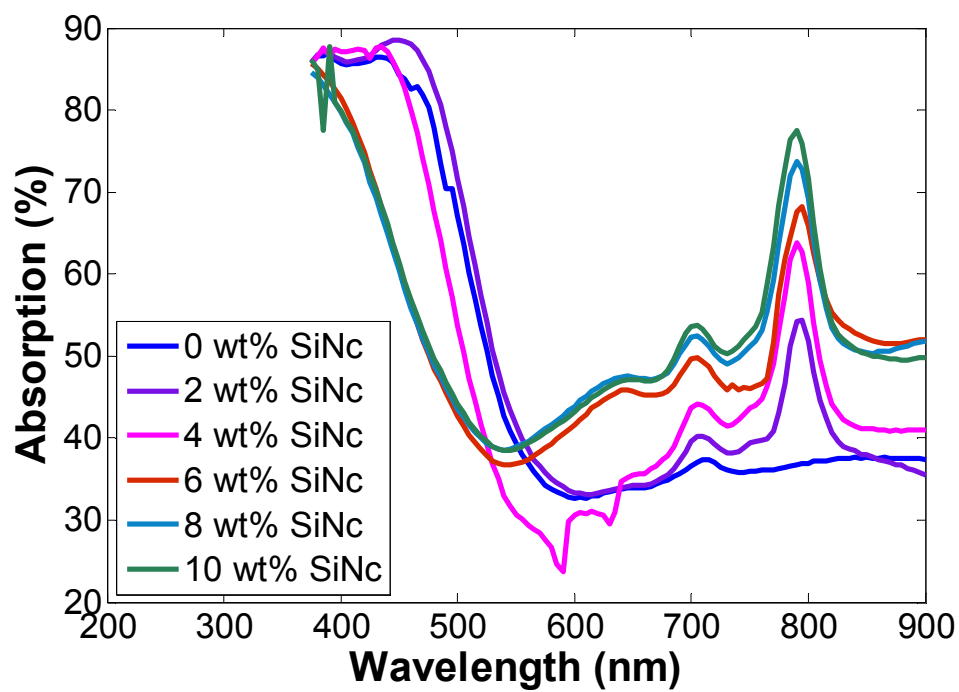


Figure S7. Absorbance scans of BHJ devices with PC₆₀BM and *t*-butyl SiNc only.

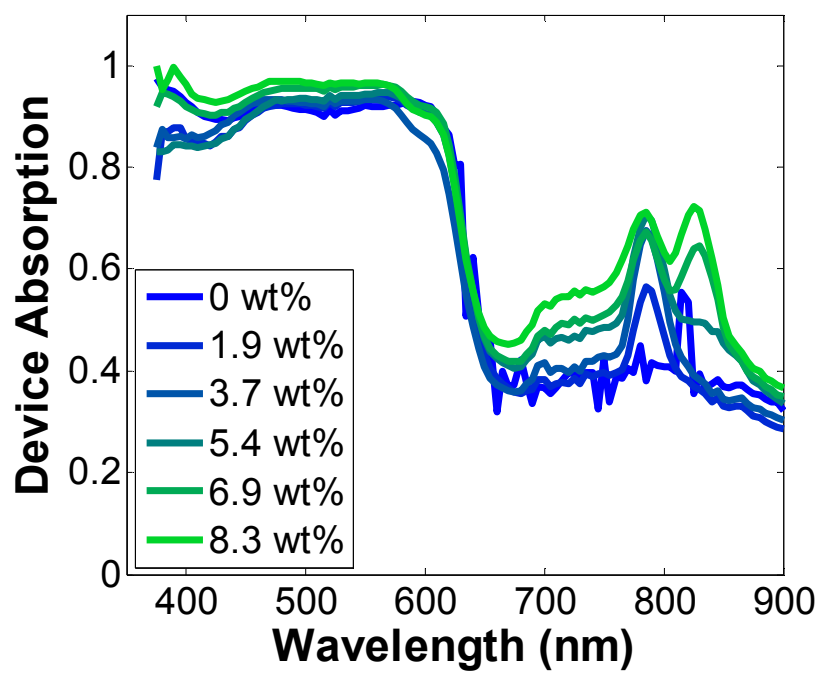


Figure S8. Absorption spectra of PBDTTPD:*t*-butyl SiNc:PC₆₀BM devices.

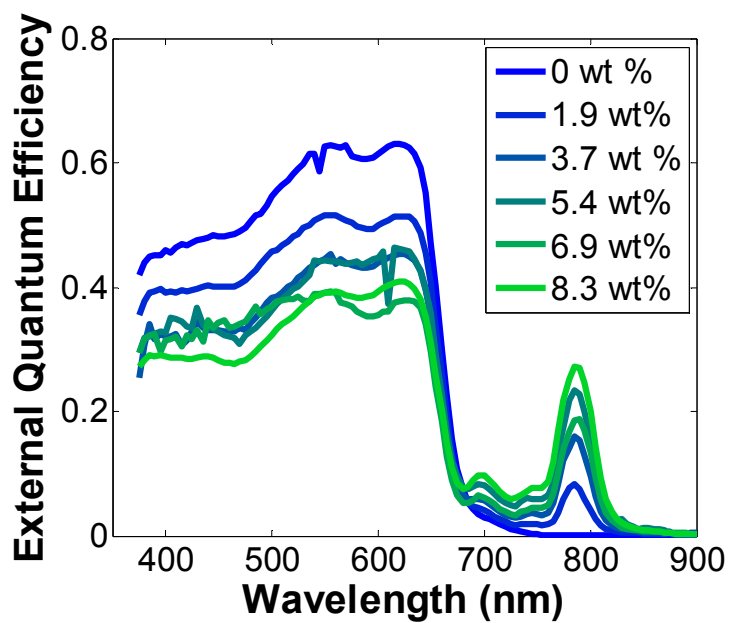


Figure S9. EQE spectra of PBDTTPD:*t*-butyl SiNc:PC₆₀BM devices.

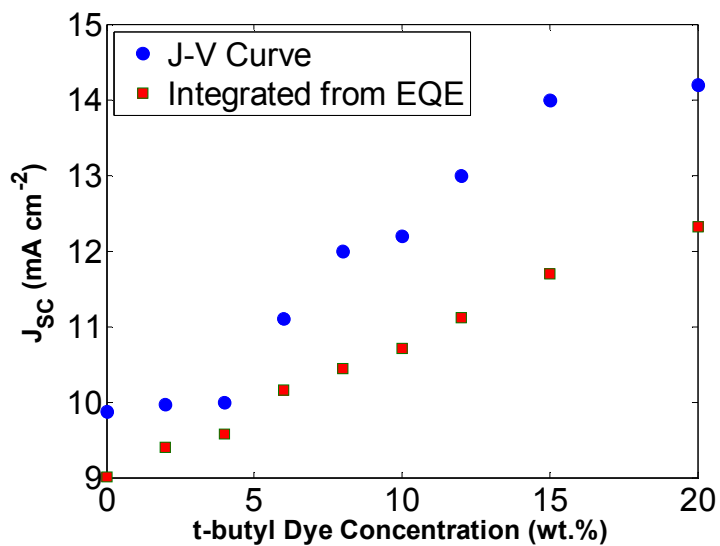


Figure S10. J_{sc} measured from J-V curves using solar simulator (blue dots) and integrated from EQE spectra (red squares) for thermally annealed P₃HT:PC₆₀BM:t-butyl SiNc devices.

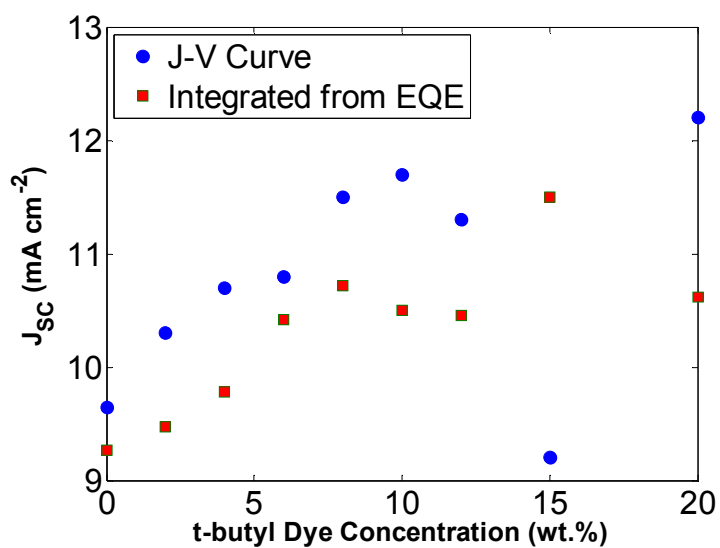


Figure S11. J_{sc} measured from J-V curves using solar simulator (blue dots) and integrated from EQE spectra (red squares) for unannealed P₃HT:PC₆₀BM:t-butyl SiNc devices.