

Supplementary material

Photo-degradation in air of the active layer components in a thiophene-quinoxaline copolymer:fullerene solar cell.

Rickard Hansson,^a Camilla Lindqvist,^a Leif K. E. Ericsson,^a Andreas Opitz,^b Ergang Wang,^c Ellen Moons^a

^aDepartment of Engineering and Physics, Karlstad University, 65188 Karlstad, Sweden

^bDepartment of Physics, Humboldt-Universität zu Berlin, 12489 Berlin, Germany

^cDepartment of Chemistry and Chemical Engineering, Chalmers University of Technology, 41296 Göteborg, Sweden

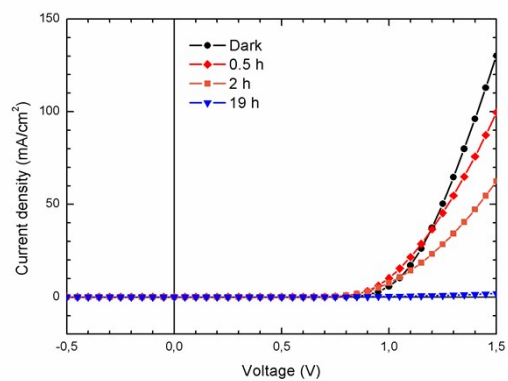


Figure S1. Current-voltage characteristics measured in darkness of IT0/PEDOT:PSS/TQ1:PCBM/LiF/Al devices, unexposed to light and air, as well as exposed to light in air for different times prior to the cathode deposition.

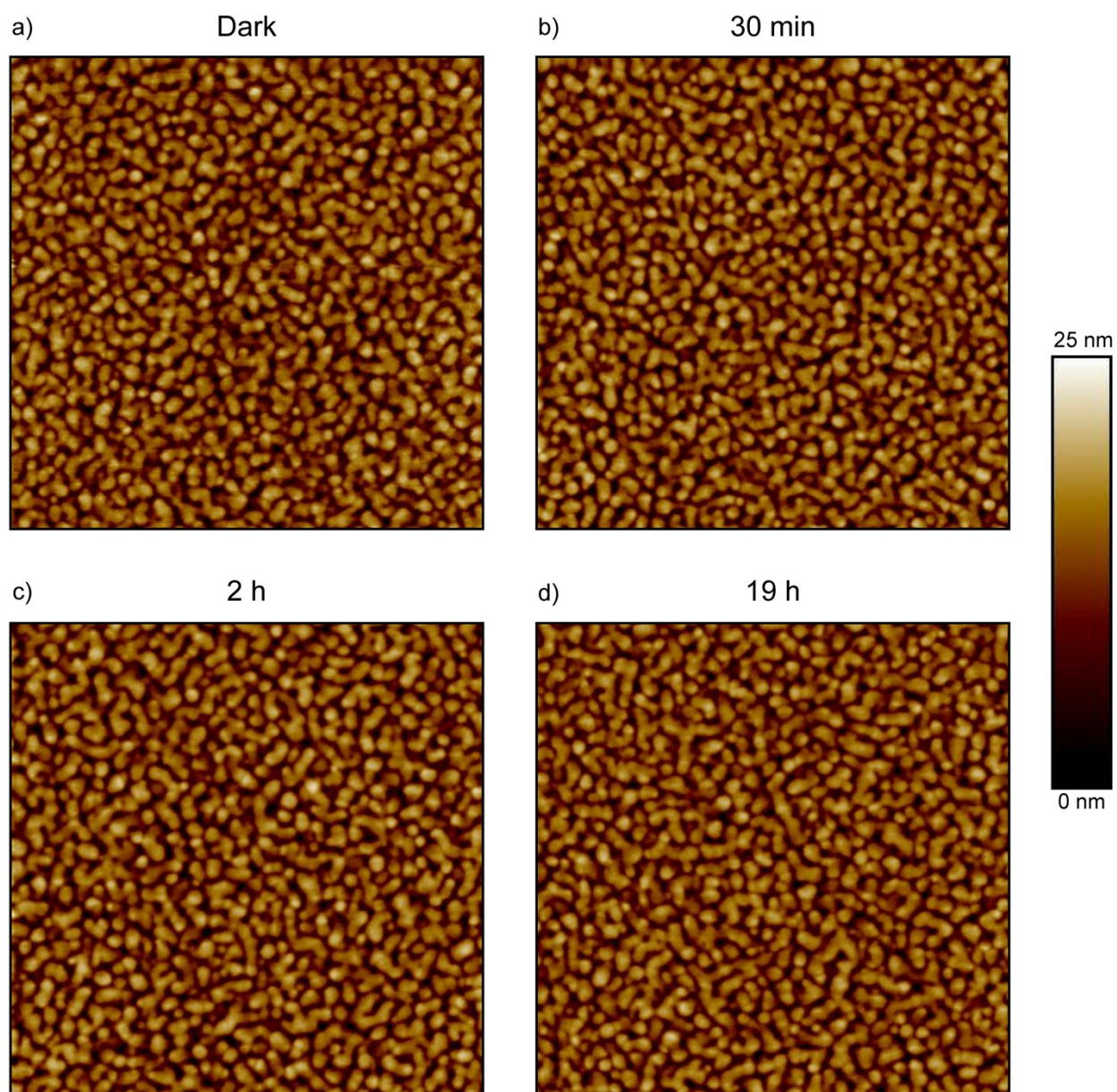


Figure S2. AFM height images ($5 \times 5 \mu\text{m}^2$), of TQ1:PCBM 1:3 w/w, spincoated from CB, unexposed to light and air (a), and exposed to light in air for different times (b-d).

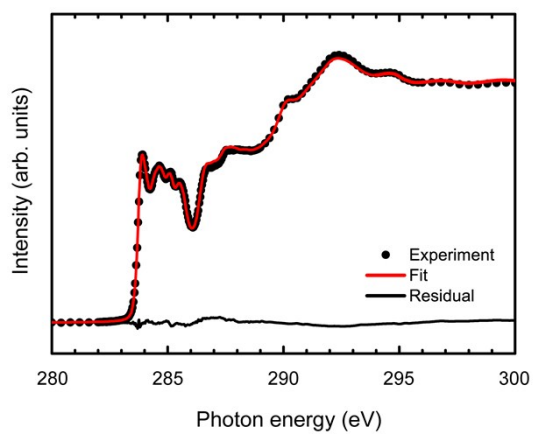


Figure S3. C1s NEXAFS spectra (TEY) measured on a 1:3 w/w TQ1:PCBM blend film, shown together with the fitted linear combination of the pristine components' spectra and the residual.

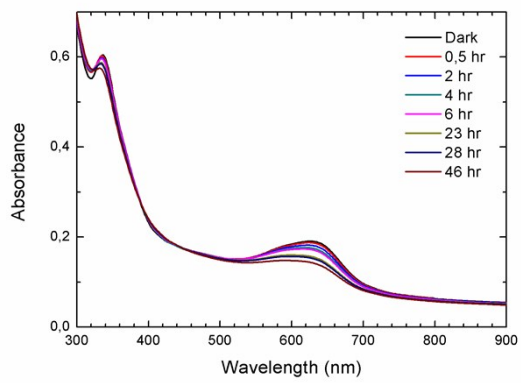


Figure S4. UV-Vis spectrum of a TQ1:PCBM 1:3 w/w blend film unexposed to air and light, and after different exposure times to AM1.5 light in air.