

Supporting Information

to

Enhanced stability of Aluminum nanoparticles doped organic solar cells

Maria Sygletou^{†,‡,^}, George Kakavelakis^{†,⊥}, Barbara Paci^{§*}, Amanda Generosi[§], Emmanuel Kymakis[†] and Emmanuel Stratakis^{†,‡,⊥,*}

[†] Center of Materials Technology and Photonics & Electrical Engineering Department, Technological Educational Institute (TEI) of Crete, Heraklion 71004 Crete, Greece

[‡] Institute of Electronic Structure and Laser, Foundation for Research and Technology - Hellas, P. O. Box 1527, 711 10 Heraklion Crete, Greece

[^] Department of Physics, University of Crete, Heraklion, 710 03 Crete, Greece.

[§] CNR - Istituto di Struttura della Materia, Area di Ricerca di Tor Vergata, Via del fosso del cavaliere, 100, 00133, Rome, Italy.

[⊥] Department of Materials Science and Technology, University of Crete, Heraklion, 710 03 Crete, Greece.

Corresponding authors: Emmanuel Stratakis: stratak@iesl.forth.gr

Barbara Paci: barbara.paci@ism.cnr.it

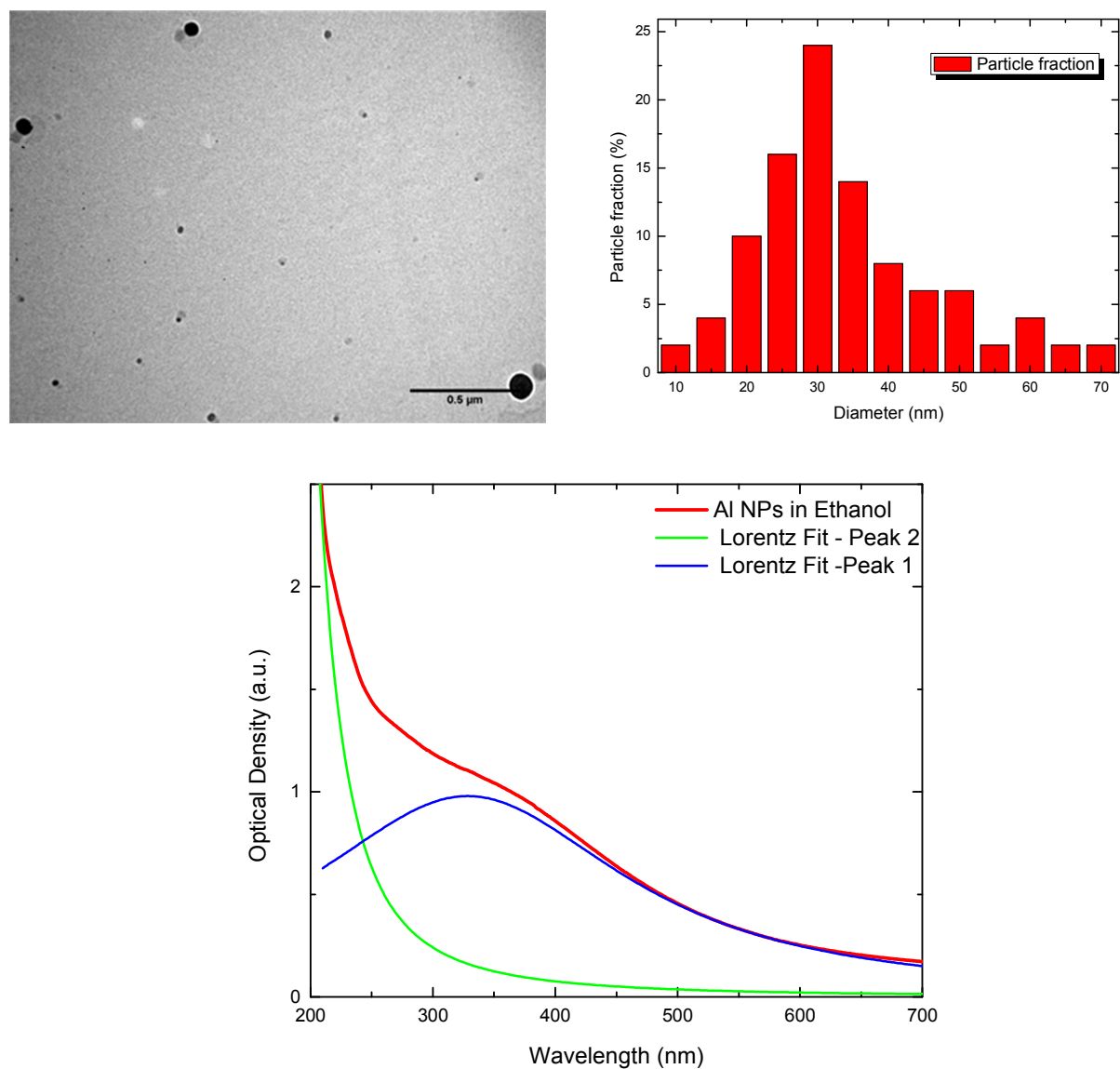


Figure S1. TEM image of the fabricated Al NPs (Top left) and size distribution of the fabricated nanoparticles (Top right). UV-Vis absorption spectrum of Al NPs in Ethanol (Bottom). The respective curve fit, performed via Lorentzian peak analysis, is additionally presented.

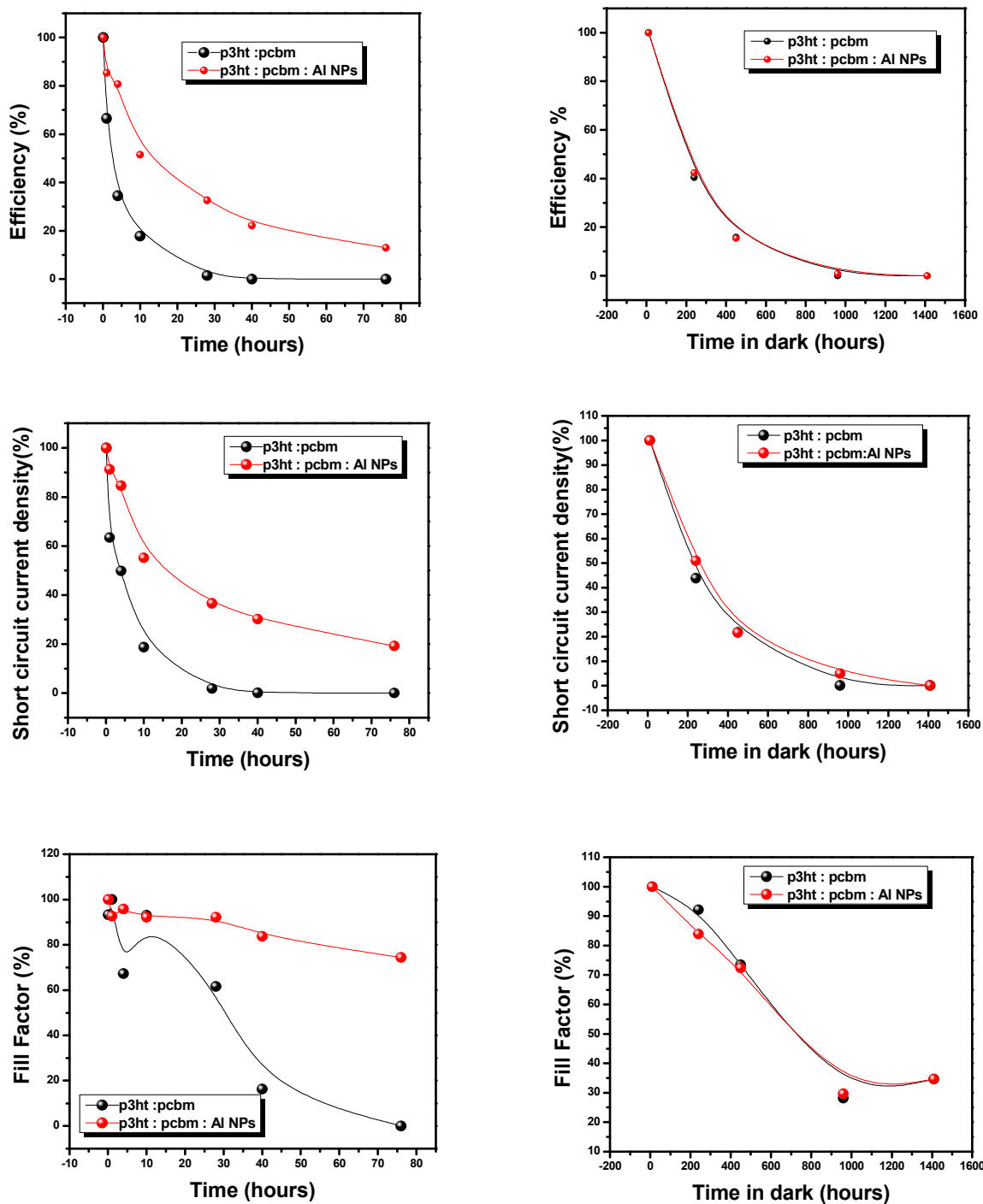


Figure S2: PCE, J_{sc} and FF changes with time in OPV devices with (light) and without (dark) solar illumination for P3HT:PCBM based devices

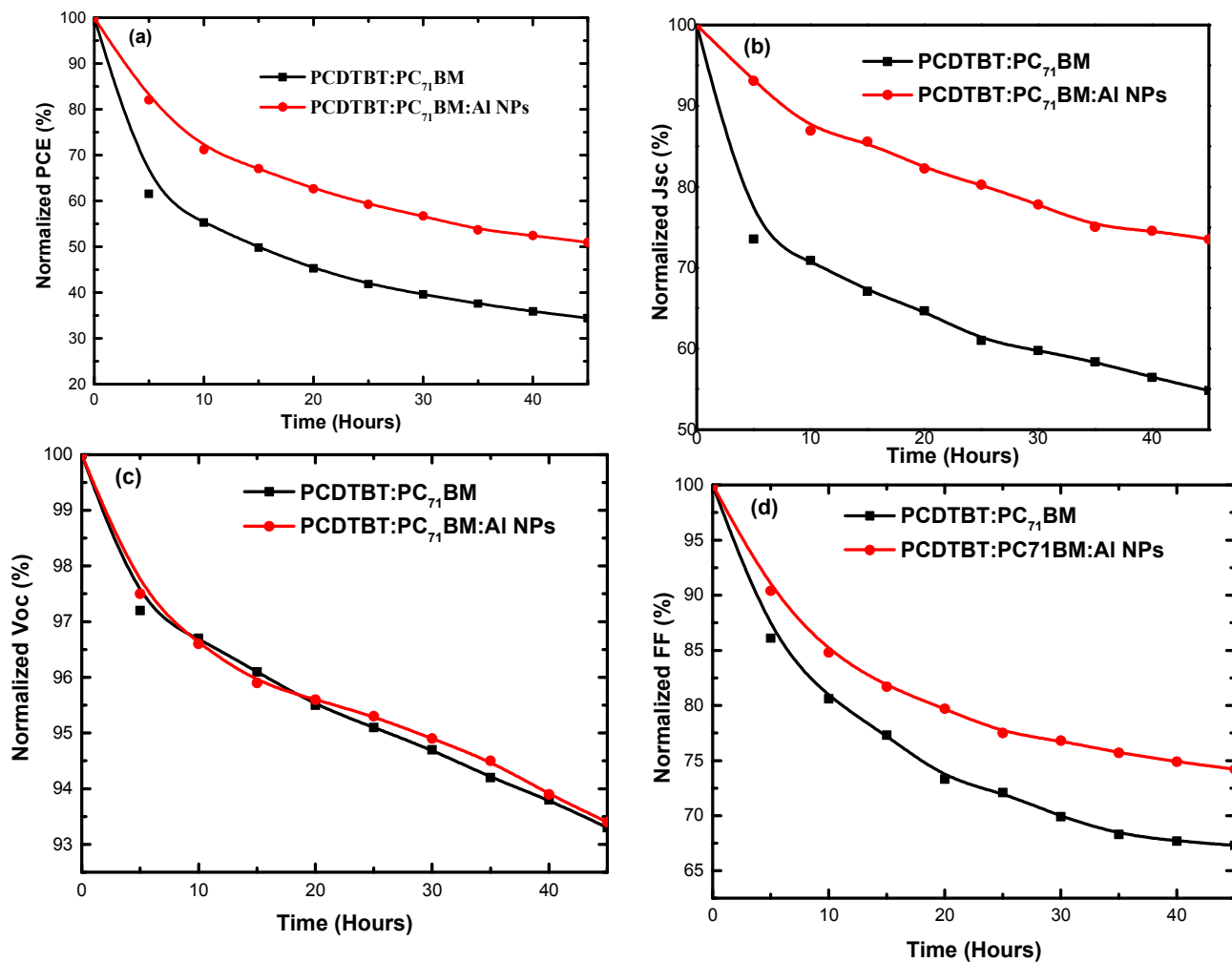


Figure S3: PCE (a), J_{sc} (b), V_{oc} (c) and FF (d) changes with time in OPV devices with under continuous solar illumination for PCDTBT:PC₇₁BM based devices.