Supporting Information: A generic surfactant-free approach to overcome wetting limitations and its application to improve inkjet-printed P3HT:non-fullerene acceptor PV

Philipp Maisch¹*, Lena M. Eisenhofer¹, Kai Cheong Tam¹, A. Distler¹, Monika M. Voigt^{1,**}, Christoph J. Brabec^{1,2} and Hans-Joachim Egelhaaf^{1,2}

¹Bavarian Centre for Applied Energy Research (ZAE Bayern), Fürther Str. 250, 90429 Nuremberg, Germany

**present address: Institute of Polymer Materials (LSP), Friedrich-Alexander University Erlangen-Nuremberg, Martensstraße 7, 91058 Erlangen, Germany

²Institute of Materials for Electronics and Energy Technology (i-MEET), Friedrich-Alexander University Erlangen-Nuremberg, Martensstraße 7, 91058 Erlangen, Germany

*Correspondence should be addressed to Philipp Maisch (email: philipp.maisch@zae-bayern.de).

As mentioned in the manuscript the long time interaction of surfactants with the film components is a major concern for printed electronic devices.



SI Figure 1: Surface tension and conductivity of PEDOT:PSS F HC Solar with different amounts of fluorosurfactant CFS.

Wetting promoters may change the physical properties of the coated films. One such example is provided in SI Figure 1. The addition of 0.5 %wt fluorosurfactant CFS to PEDOT:PSS F HC Solar leads to an effective decrease of the ink surface tension from 27 mN/m to 20 mN/m. However, we find an associated drop of conductivity by more than 10 %.