Supporting Information

Improved charge transport and injection in the

meso-superstructured solar cell by a tractable pre-spin coating

process

Nan Li,^a Haoyuan Li,^a Yu Li,^b Shufeng Wang,^b and Liduo Wang^{*a}

^aKey Lab of Organic Optoelectronics and Molecular Engineering of Ministry of Education, Department of Chemistry, Tsinghua University, Beijing, 100084, China ^bState Key Laboratory for Mesoscopic Physics, Department of Physics, Peking University, Beijing, 100871, China

*To whom correspondence should be addressed: <a href="mailto:chidwang@mailto:c



Fig. S1 UV-vis spectra of the final perovskite/*mp*-Al₂O₃ film with and without the pre-spin coating process.



Fig. S2 The steady-state PL spectra of (a) glass/*mp*-Al₂O₃/perovskite films and (b) FTO/c-TiO₂/*mp*-Al₂O₃/perovskite films.



Fig. S3 Performance parameters extracted from current density-voltage data for a batch of solar cells with and without the pre-spin coating process.



Fig. S4 *J-V* curves under simulated AM1.5G solar irradiation of devices based on mp-TiO₂ scaffolds.