Electronic Supplementary Information

Shape- and Morphology-controlled Metal Organic Framework Template for High Efficiency Solid-state Dye-sensitized Solar Cells

Won Seok Chi‡, Dong Kyu Roh‡, Chang Soo Lee and Jong Hak Kim*

Department of Chemical and Biomolecular Engineering, Yonsei University, 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749, South Korea

*Author to whom correspondence should be addressed: jonghak@yonsei.ac.kr

Fig. S1. Surface SEM images of photoanodes prepared by the doctor blading technique; (a) hier1-TiO_2, (b) hier2-TiO_2, (c) hier3-TiO_2, and (d) hier4-TiO_2.

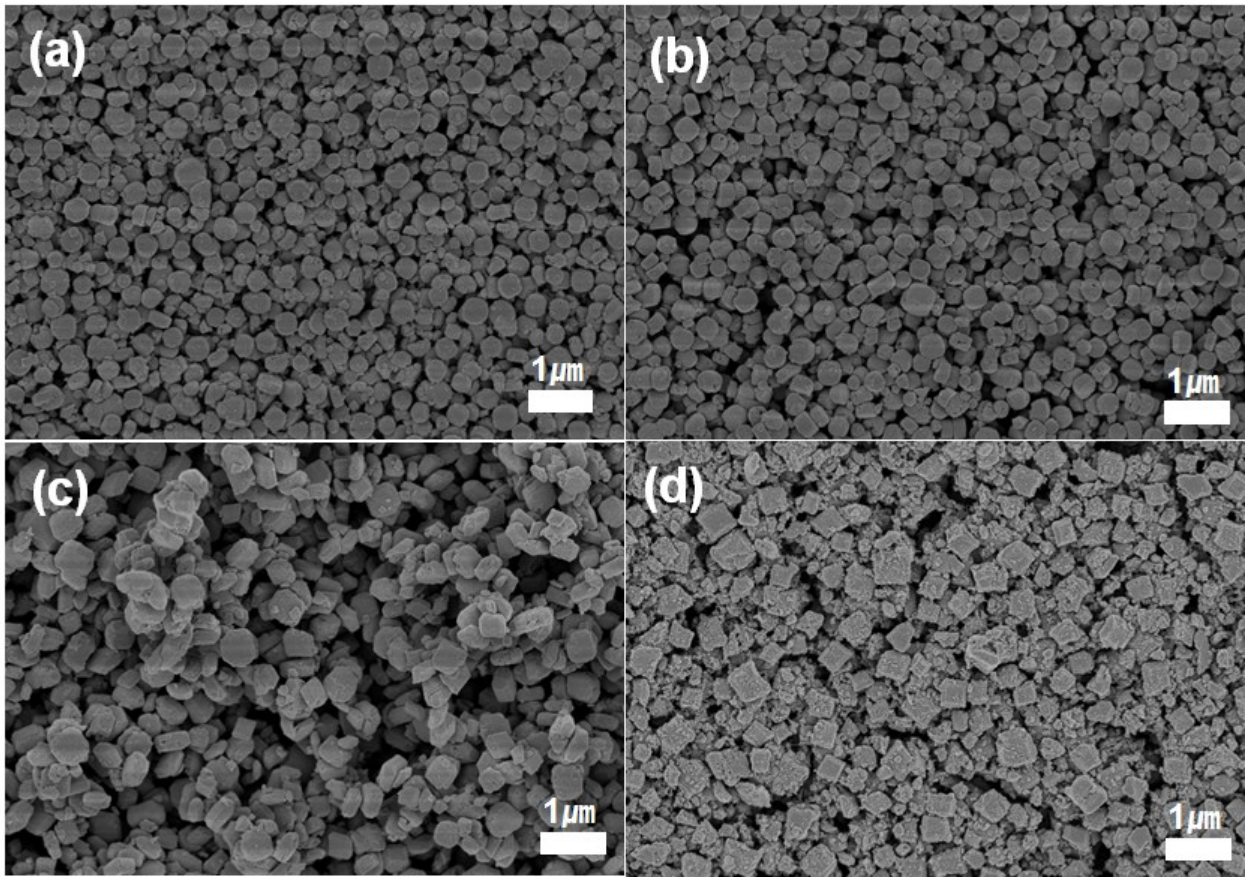

Fig. S2. Cross-sectional SEM images of photoanodes prepared by the doctor blading technique; (a) hier1-TiO_2, (b) hier2-TiO_2, (c) hier3-TiO_2, and (d) hier4-TiO_2.

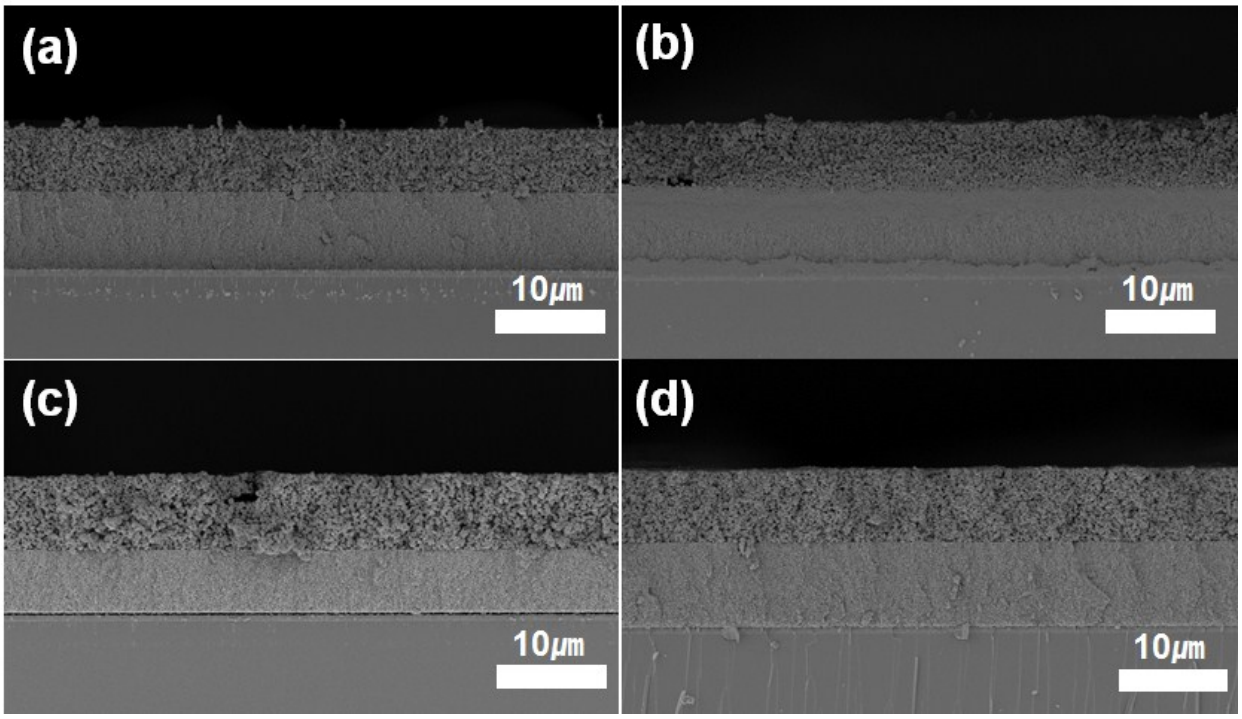

Fig. S3. Normalized IPCE curves of DSSCs fabricated with a quasi-solid-state polymer electrolyte and different photoanodes under one sun illumination condition (100 mW/cm^2).

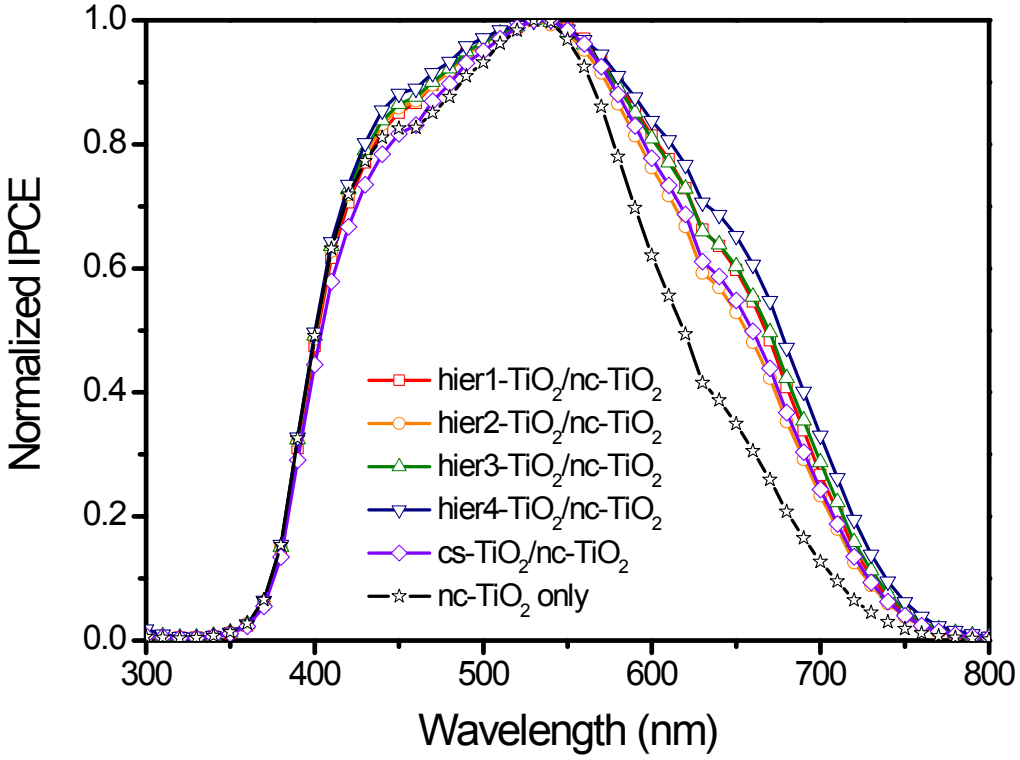

Table S1. Surface area and pore diameter of MIL-125(Ti) and hier-TiO_2.

	Surface area (m^2/g)	Average pore diameter (nm)
MIL-125(Ti)1	1,435	2.0
MIL-125(Ti)2	1,371	2.0
MIL-125(Ti)3	1,444	1.8
MIL-125(Ti)4	1,976	1.8
hier1-TiO_2	113	9.2
hier2-TiO_2	107	9.1
hier3-TiO_2	108	6.5
hier4-TiO_2	100	6.9