Supporting Information

Spectral characteristics of light harvesting, electron injection, and steady state charge collection in pressed TiO_2 dye solar cells

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Title running head: Spectral characteristics of dye solar cells

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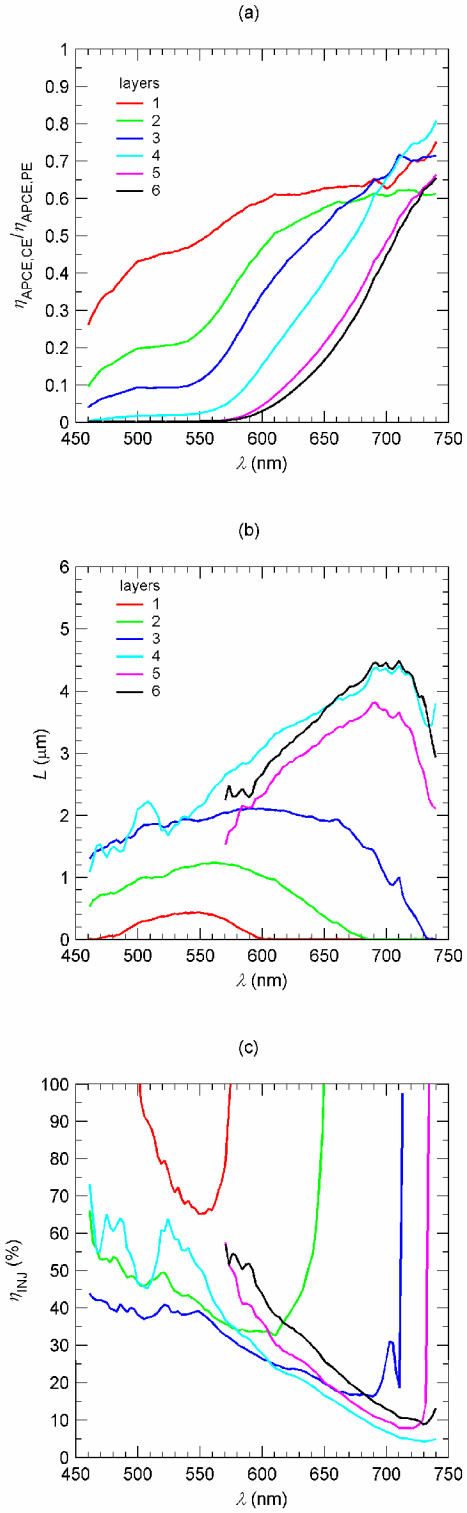
Figure Captions

Figure S1. Results of the η_{APCE}-ratio method for the P cells. (a) experimental $\eta_{APCE,CE}/\eta_{APCE,PE}$ data; (b) L and (c) η_{INJ}, estimated by eqs B1 and B2 using experimental values for d, α, and $\eta_{APCE,CE}/\eta_{APCE,PE}$. For the 5 and 6 layer films, the L and η_{INJ} estimates below 570 nm are inaccurate, most likely due to very low $\eta_{APCE,CE}/\eta_{APCE,PE}$ values and are thus excluded from the figures (b) and (c) for clarity. The method fails above certain wavelength, as indicated by the rapid increase of η_{INJ} estimate as λ increases. The wavelength at which this occurs is the shorter the thinner the photoelectrode film.

Figure S1


(a)
layers
1
2
3
4
5
6
$\eta_{APCE,CE}/\eta_{APCE,PE}$
λ (nm)
(b)
layers
1
2
3
4
5
6
L (μm)
λ (nm)
(c)
η_{INJ} (%)
λ (nm)