Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supporting Information

Double Acceptor Organic Dye Design for p-Type DSSCs: High Photocurrents and Observed Light Soaking Effect.

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Figure S1. Cyclic voltammagram of 0.1mM BH series dyes in methylene chloride with a 0.1M tetrabutyl ammonium hexafluorophosphate supporting electrolyte. The scan rate was 100mV/s.

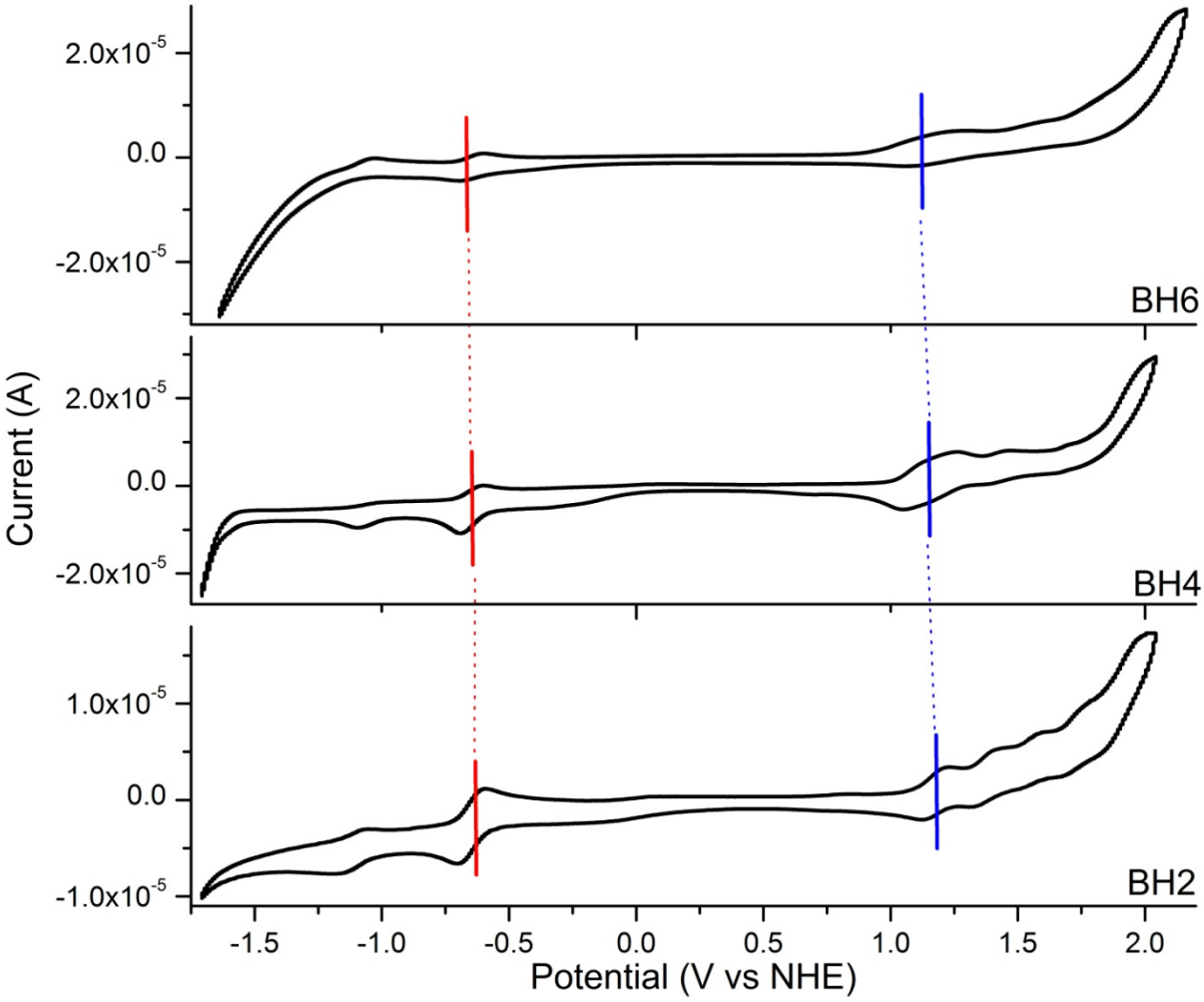

Table S2. Summary of all oxidation and reduction peaks of electrochemical measurements of dyes.

Dye	E_{Red2} [V]	E_{Red1} [V]	E_{ox1} [V]	E_{ox2} [V]	E_{ox3} [V]	E_{ox4} [V]	ΔE_{CV}[b]
BH2	**-1.13**	**-0.65**	**1.18**	**1.37**	**1.55**	**1.73**	**1.83**
BH4	**-1.09**[a]	**-0.64**	**1.16**	**1.48**[a]	**1.70**[a]	**N/A**	**1.80**
BH6	**1.03**[a]	**-0.65**	**1.14**	**1.56**[a]	**N/A**	**N/A**	**1.79**

[V] vs NHE. (a) Denotes irreversible oxidation/reduction peaks. (b) ΔE_{CV} calculated by $E_{ox1} - E_{Red1}$.

Figure S3. Normalized absorption and Fluorescence in 0.01mM methylene chloride solution taken at room temperature.

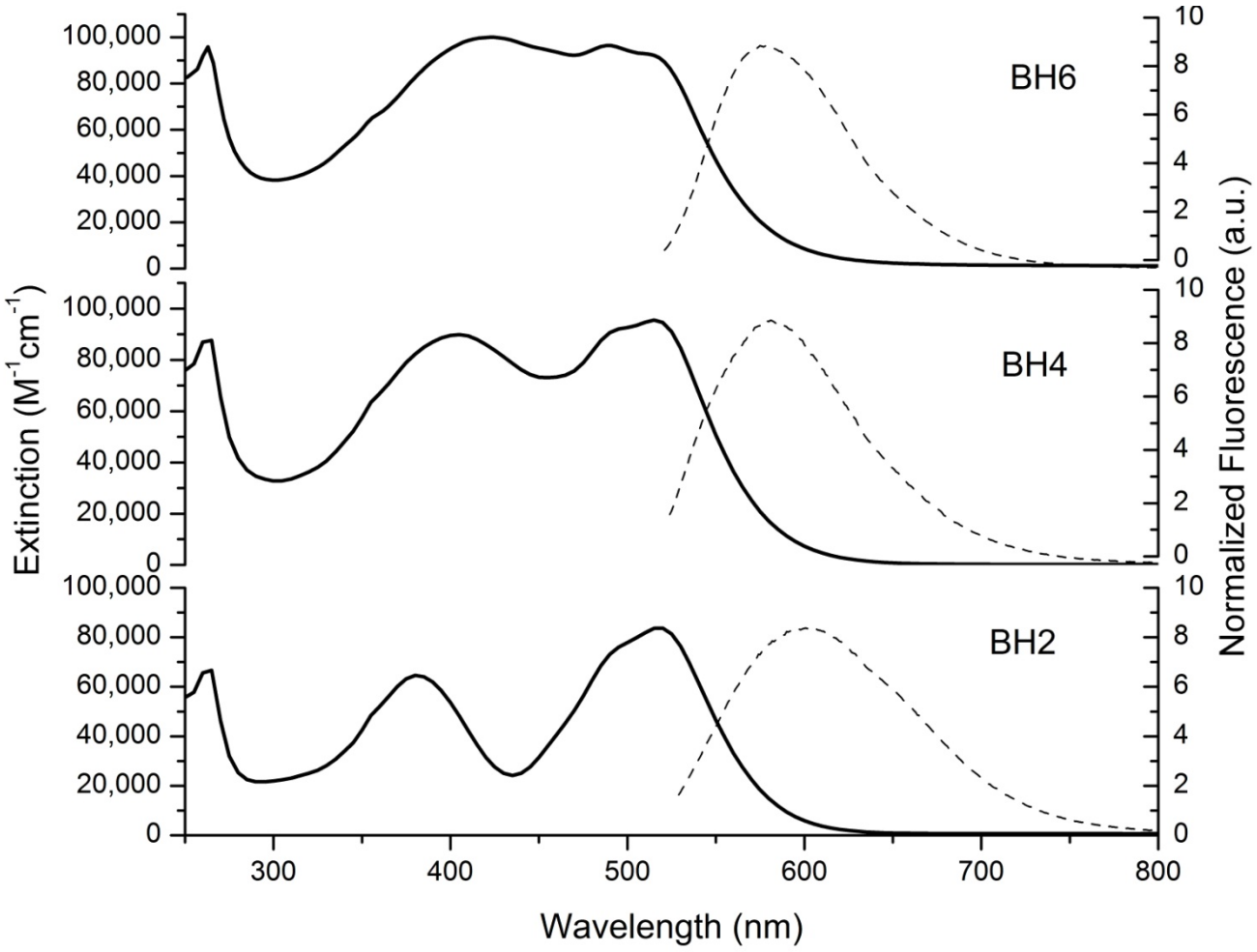

Figure S4. Voc as a function of light soaking process and time.

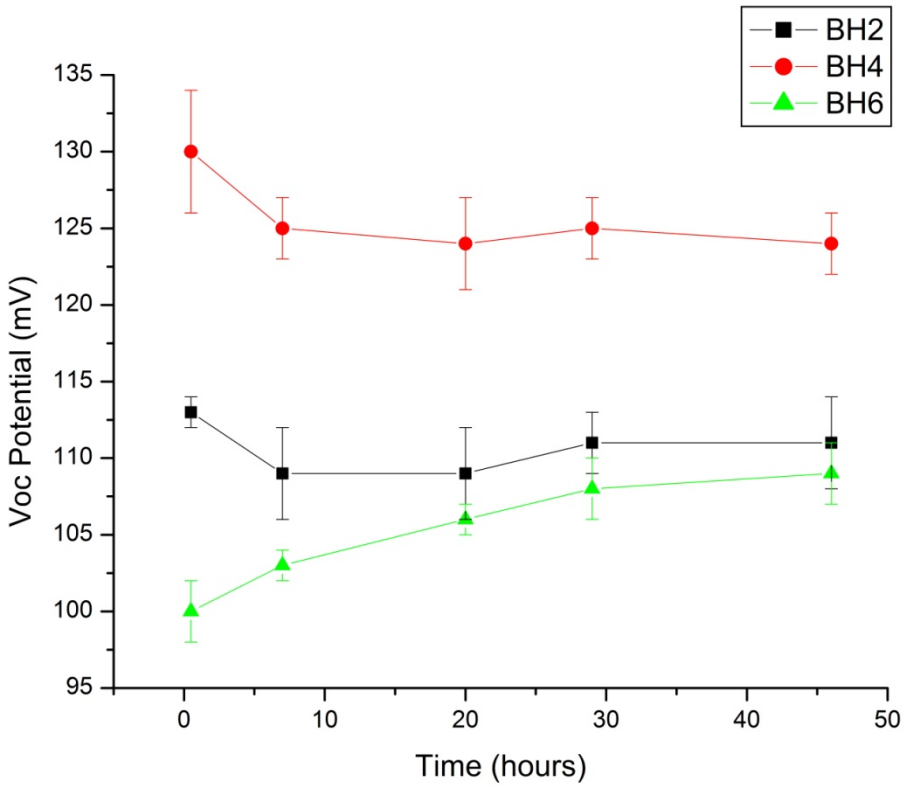

Figure S5. Capacitance measured at Voc for BH4 cells described in Table 4 and Figure 4. D is DMHII, L is LiI, and T is TBAI.