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Effects of 4-tert-Butylpyridine on the Quasi-Fermi Levels of TiO₂ Films in the Presence of Different Cations in Dye-Sensitized Solar Cells

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Table S1. Variation of $V_{\rm OC}$, $J_{\rm SC}$, and QFL shifts with added TBP concentration in cells containing 0.1 M Li⁺ or 0.1 M TBA⁺ ions.^a

	TBP conc. (M)	J_{SC} (mA/cm ²)	$E_{ ext{QFL,OC}}(V_{ ext{OC}})$ (V)	$E_{ ext{QFL,SC}}$ (V)	$\Delta E_{ m QFL,OC} (V_{ m OC})$ (V)	$\Delta E_{\text{QFL,SC}}$ (V)
Cells with	0	10.62	0.58	0.32	_	_
0.1 M Li ⁺	0.1	10.01	0.68	0.42	0.10^{b}	0.10^{b}
	0.2	9.92	0.71	0.45	0.13^{b}	0.13^{b}
	0.3	9.85	0.72	0.45	0.14^{b}	0.13^{b}
	0.5	9.08	0.73	0.47	0.15 ^b	0.15^{b}
Cells with	0	8.20	0.70	0.52		
0.1 M TBA ⁺	0.3	6.32	0.78	0.65	0.08^{c}	0.13^{c}
	0.5	5.83	0.78	0.64	0.08^{c}	0.12^{c}

^aAll the potentials were measured with respect to the equilibrium redox potential of the electrolyte.

 $^{^{}b}\Delta E_{QFL,OC}$ (V_{OC}) and $\Delta E_{QFL,SC}$ refer to the values at various TBP concentrations with respect to those at 0 M TBP in cells containing 0.1 M Li $^{+}$ $^{c}\Delta E_{QFL,OC}$ (V_{OC}) and $\Delta E_{QFL,SC}$ refer to the values at various TBP concentrations with respect to those at 0 M TBP in cells containing 0.1 M TBA $^{+}$