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Electronic Supplementary Information (ESI)

Dye-Sensitized Solar Cells using Fluorone-based Ionic Liquids with improved Cell Efficiency

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Thermochemical analysis

DSC curves were obtained using a Setaram, model DSC 131. The temperature range vary from −100 to 100 °C and a scanning rate of 10 °C min^{-1} was adopted, with samples weighing between 9 and 16 mg. Aluminium crucibles were used, and resolution is ±0.2 μW. The calibration of the DSC equipment was made following the recommendation described in the manufacturer's manual. Data have similar profiles to all the samples: an exothermic decomposition of the compounds and almost complete lack of other features.

Table 1 – Thermochemical parameters for dye **b´** to **f´.**

	T_{onset} (°C)	T_{peak} (°C)	M (g/mol)	ΔH (J/g)	ΔH (kJ/mol)
b´	231.1	257.1	971.66	-61.02	-59.33
c´	268.5	275.2	783.65	-74.08	-58.05
d´	277.6	280.6	645.87	-101.54	-65.58
e´	272.6	285.7	578.07	-272.7	-136.8
f´	213.4	234.2	833.88	-90.62	-75.57