FRET-Assisted Deep-Blue Electroluminescence in Intercalated Polymer Hybrids

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Supporting Information

Table S1. Thickness dependence of PF22-based HyPLED performance.

	Device 1	Device 2	Device 3
Thickness (nm)	160	135	124
EQE (%)	0.6	1.2	1.0
LE (cd/A)	0.35	0.6	0.5
CIE 1931 (x, y)	0.159, 0.146	0.158, 0.114	0.156, 0.107

Table S2. Summary of HyPLED performance.

compound	EQE (%)	CIE 1931 (x, y)
PF1.2	0.02	0.16; 0.11
PF0.6	<0.01	0.21; 0.20
Blend22	0.15	0.23; 0.36

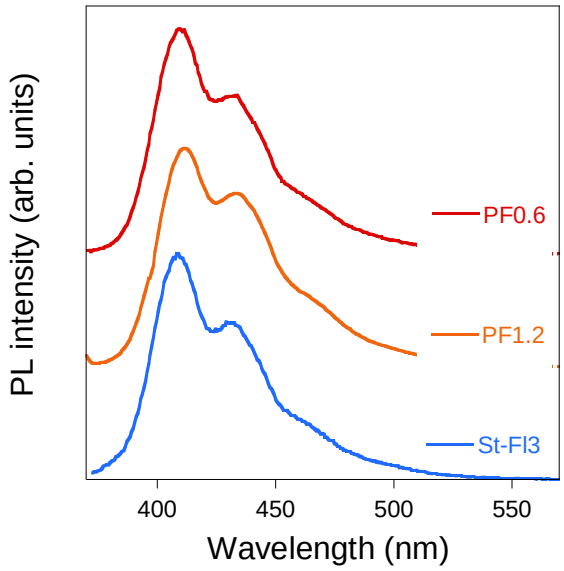

Figure S1. PL spectra of PF0.6, PF1.2 and St-Fl_3 solutions.

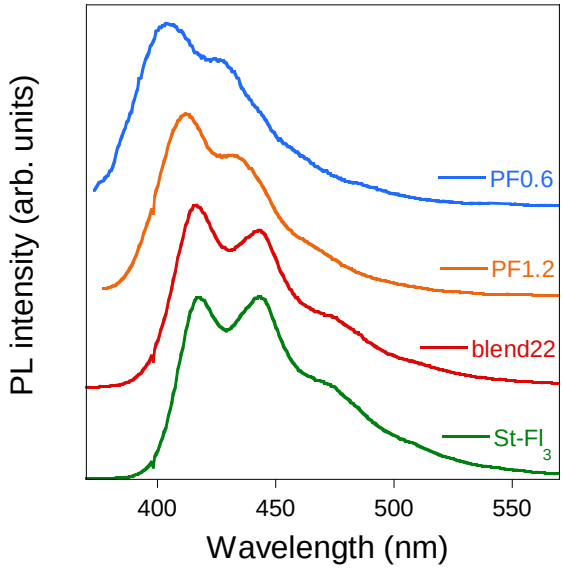

Figure S2. PL spectra of PF0.6, PF1.2, St-Fl_3 and blend22 films.

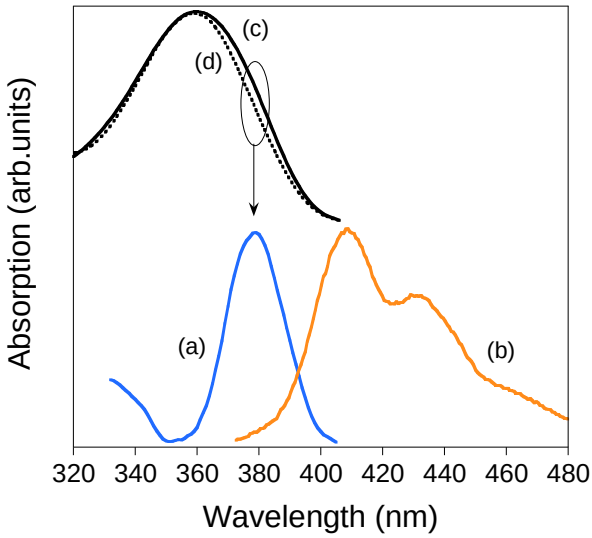

Figure S3. Spectral overlap, required for resonant energy transfer, between absorption of intercalated planar chains (a) and emission of not intercalated chains (b) is shown. To achieve the absorption spectrum of intercalated planar chains (a), PF22 polymer hybrid is centrifuged at 10K rpm for 1 min to separate the more soluble part containing small intercalated hybrid (c), from the less soluble and large tactoids wrapped by free polymer chains (d). The spectrum (a) is obtained by subtracting spectrum (d) from (c).

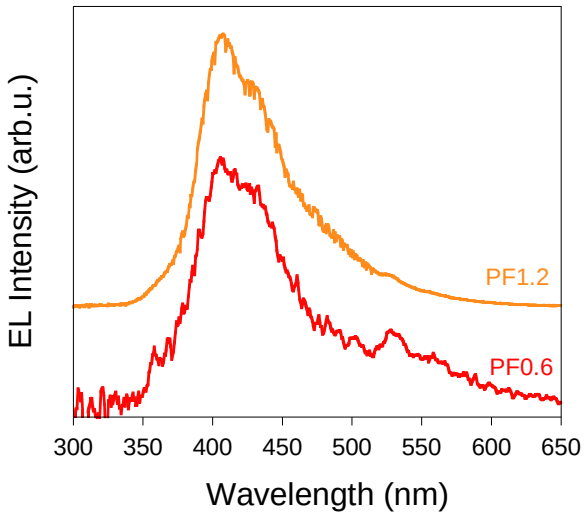

Figure S4. EL spectra of ITO/PEDOT:PSS/(PF0.6 and PF1.2)/Ba/Al HyPLED devices.