Supplementary Information

(Co)Polymers Containing Boron Difluoride 3-Cyanoformazanate Complexes: Emission Enhancement via Random Copolymerization

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**Fig. S1**  Wavelength-dependent emission correction provided by Photon Technology International.

**Fig. S2**  $^1$H NMR spectrum of monomer BF2N in CDCl$_3$. 
Fig. S3 $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of monomer BF2N in CDCl$_3$.

Fig. S4 $^1$H NMR spectrum of PDND in CDCl$_3$. 
Fig. S5  $^1$H NMR spectrum of PBF2N in CDCl$_3$.

Fig. S6  $^{19}$F NMR (left) spectrum and $^{11}$B NMR (right) of PBF2N in CDCl$_3$. 
Fig. S7 $^1$H NMR spectrum of $(\text{PDND})_m-r-(\text{PBF2N})_n$ ($f_{\text{BF2N}} = 0.50$) in CDCl$_3$.

Fig. S8 $^1$H NMR spectrum of $(\text{PDND})_m-r-(\text{PBF2N})_n$ ($f_{\text{BF2N}} = 0.15$) in CDCl$_3$. 
**Fig. S9** $^1$H NMR spectrum of (PDND)$_m$-$r$-(PBF$_2$N)$_n$ ($f_{BF2N} = 0.08$) in CDCl$_3$.

**Fig. S10** Representative $^{11}$B NMR and $^{19}$F NMR for random copolymers (PDND)$_m$-$r$-(PBF$_2$N)$_n$ and block copolymers (PDND)$_m$-$b$-(PBF$_2$N)$_n$ in CDCl$_3$. 
Fig. S11  Relationship between number average molecular weight ($M_n$) of homopolymers PBF2N (a,b) and PDND (c,d) and reaction time.
Fig. S12  $^1$H NMR spectrum of (PDND)$_m$-$b$-(PBF$_2$N)$_n$ ($f_{\text{BF}2\text{N}} = 0.48$) in CDCl$_3$.

Fig. S13  $^1$H NMR spectrum of (PDND)$_m$-$b$-(PBF$_2$N)$_n$ ($f_{\text{BF}2\text{N}} = 0.13$) in CDCl$_3$. 
Fig. S14  $^1$H NMR spectrum of (PDND)$_{m}$-$b$-(PBF$_2$N)$_n$ ($f_{BF2N} = 0.07$) in CDCl$_3$.

Fig. S15  GPC traces recorded for random copolymers (PDND)$_{m}$-$r$-(PBF$_2$N)$_n$ (a), and block copolymers (PDND)$_{m}$-$b$-(PBF$_2$N)$_n$ (b) in DMF.
Fig. S16  TGA data recorded for homopolymers PBF2N and PDND, random copolymers (PDND)$_m$-$r$-(PBF2N)$_n$ (a), and block copolymers(PDND)$_m$-$b$-(PBF2N)$_n$ (b) under a N$_2$ atmosphere.

Fig. S17  UV-vis absorption spectra of monomer BF$_2$N, homopolymer PBF2N, and block copolymers (PDND)$_m$-$b$-(PBF2N)$_n$ recorded for 0.05 mg mL$^{-1}$ CH$_2$Cl$_2$ solutions.
Fig. S18  Cyclic voltammograms of 1 mM (calculated using an average molar mass for blocks and random copolymers) CH$_2$Cl$_2$ solutions of monomer BF$_2$N, homopolymer PBF$_2$N, random copolymer (PDND)$_m$-r-(PBF$_2$N)$_n$ ($f_{BF2N} = 0.50$), and block copolymer (PDND)$_m$-b-(PBF$_2$N)$_n$ ($f_{BF2N} = 0.48$) containing 0.1 M [$n$Bu$_4$N][PF$_6$] as supporting electrolyte recorded at a scan rate of 250 mV s$^{-1}$. Voltammograms were referenced internally against the ferrocene/ferrocenium redox couple.