Supplementary Materials



Figure S1. Cyclic voltammetry of the ligand L and related complexes 1 and 2 in CH_2Cl_2 at a scan rate of 100 mV·s⁻¹. The potentials were measured *versus* a saturated calomel electrode (SCE); Pt wire as the counter electrodes.



Figure S2. Experimental UV-visible absorption spectrum in solid-state (KBr pellets) of L (open gray circles). Respective Gaussian decompositions (dashed lines) and best fit (full black line) (R = 0.9995). The red, orange, and blue dashed lines represent the intra-ligand charge transfer, intra-TTF, and intra-acceptor absorption bands, respectively.



Figure S3. Experimental UV-visible absorption spectrum in solid-state (KBr pellets) of **2** (open gray circles). Respective Gaussian decompositions (dashed lines), and best fit (full black line) (R = 0.9991). The red, orange, blue, and green dashed lines represent the intra-ligand charge transfer, intra-TTF, intra-acceptor, and intra-hfac⁻ absorption bands, respectively.