Electronic Supplementary Information (ESI)

Phosphorescence of free base corroles

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Experimental details

The free base pyrimidinylcorrole compounds studied (**1**–**4**) were prepared by known literature procedures.[1] 5,10,15-Tris(pentafluorophenyl)corrole (**5**) (H_3tpfc) was synthesized according to the protocol reported by Gross *et al*.[2] Compound purification was conducted as reported in literature and evaluated by ^{1}H NMR.

All the emission spectra and emission excitation spectra were measured with a home-made spectrofluorometer, described in detail elsewhere.[3] The fluorescence decay kinetics were measured with a system based on a single photon counting unit (FLA 900, Edinburgh Instruments, UK). All room temperature (293 $\pm$ 2 K) measurements were done in standard rectangular cells (1$\times$1 cm, Hellma) in air-equilibrated solutions. The low temperature (77 K) experiments were carried out in rectangular (1$\times$1 cm) press-blown glass cells with sealing plugs. Sample concentrations (on the order of 10^{-5} M) were determined spectrophotometrically based on known extinction coefficients. The ground state absorption spectra were measured on a Perkin-Elmer Lambda 20 spectrophotometer. All samples were prepared in toluene:EtOD (10:1) mixtures to provide full transparency of the solutions and to exclude any cracks upon freezing.

References

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