

Electronic Supplementary Information

Molecular Doping Guide for Emissive Organic Semiconductor Crystals

Anatoly D. Kuimov, Christina S. Becker, Alina A. Sonina, and Maxim S. Kazantsev

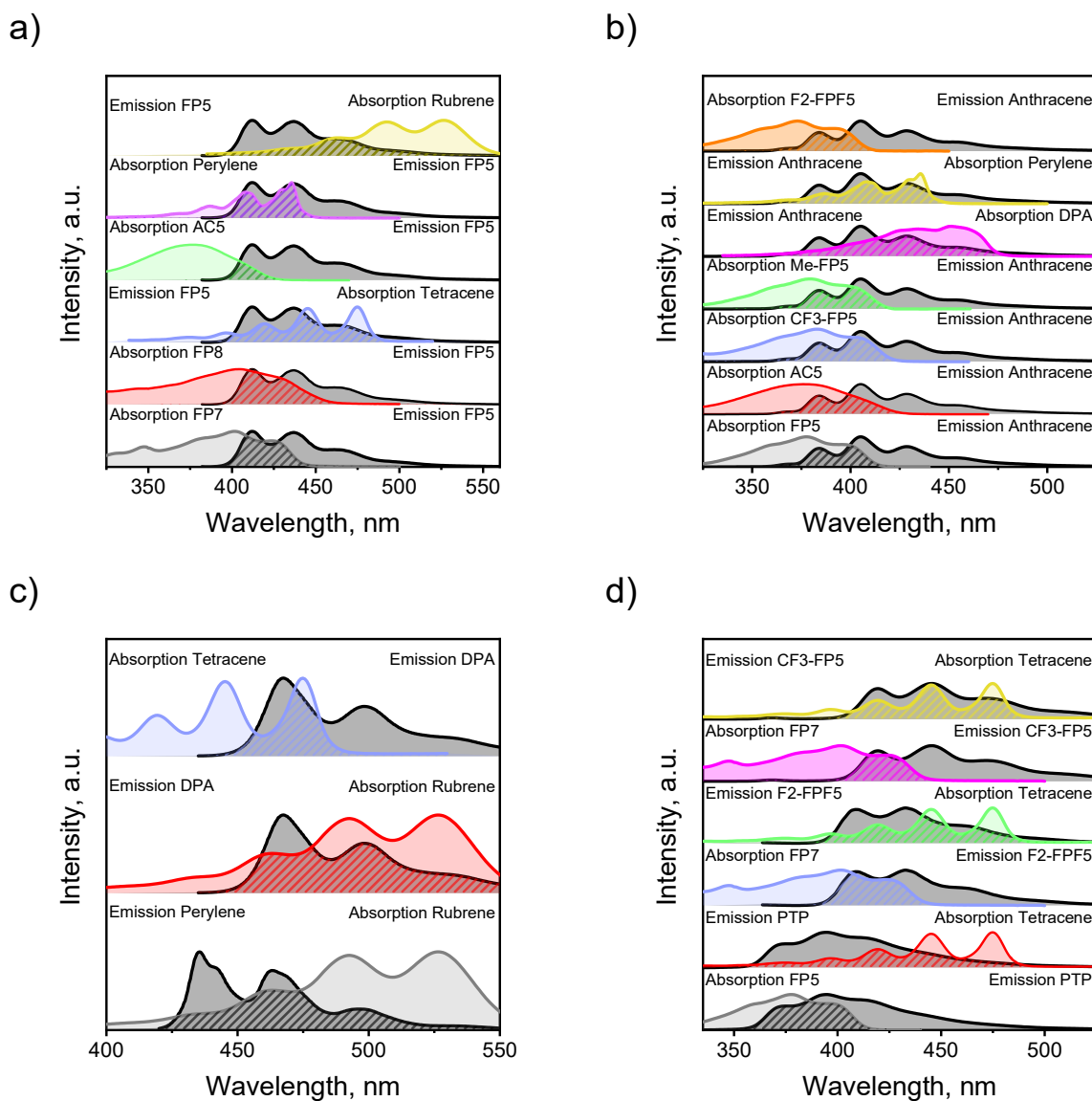


Figure S1. The overlap of the host PL and dopant absorption spectra in THF solution (10^{-5}M). The corresponding compound names and abbreviations are shown in the plots.

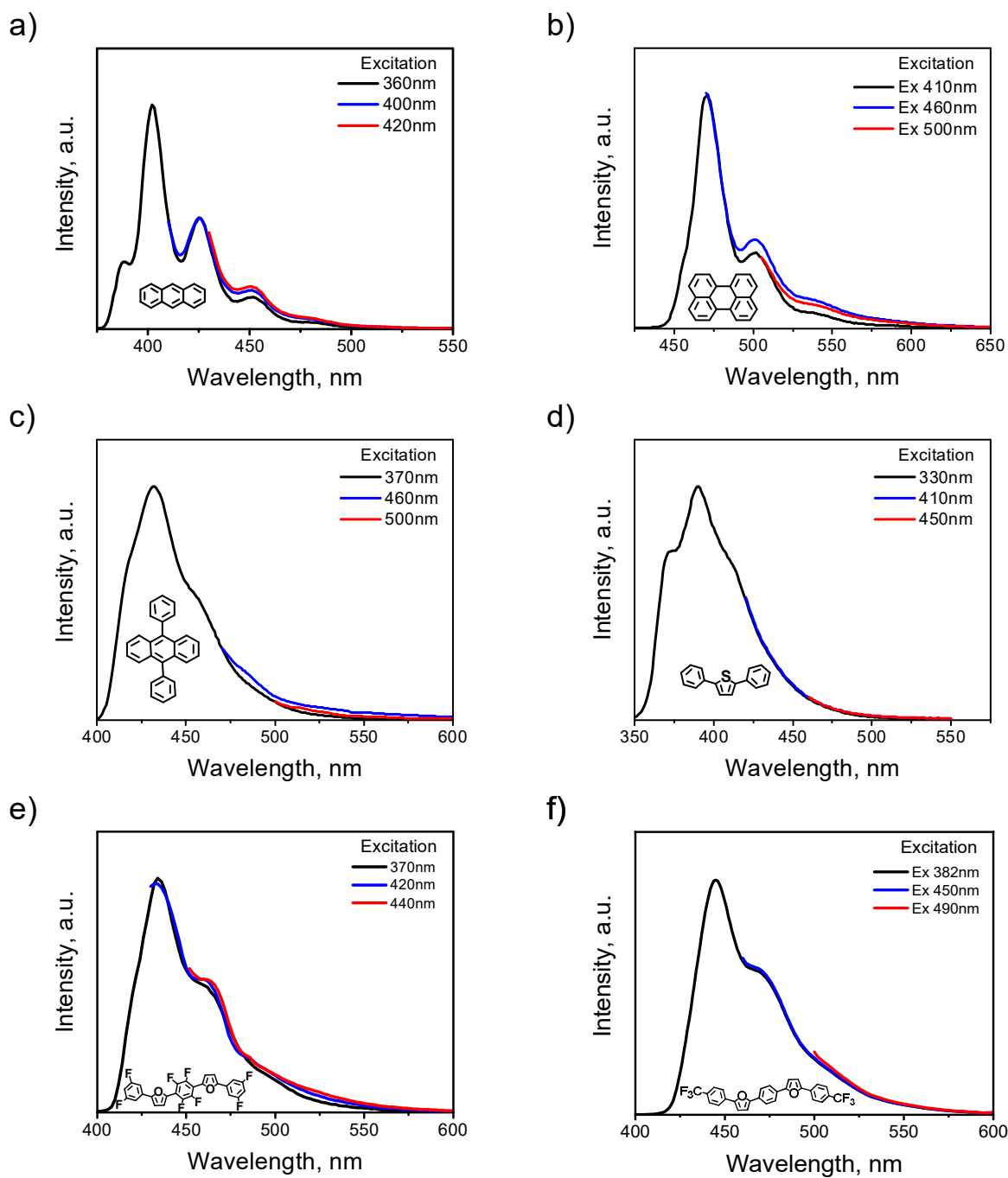


Figure S2. PL spectra of 10^{-3} M solutions of host materials with the excitation at the red flange of absorption spectra (excitation wavelengths shown in the plots).

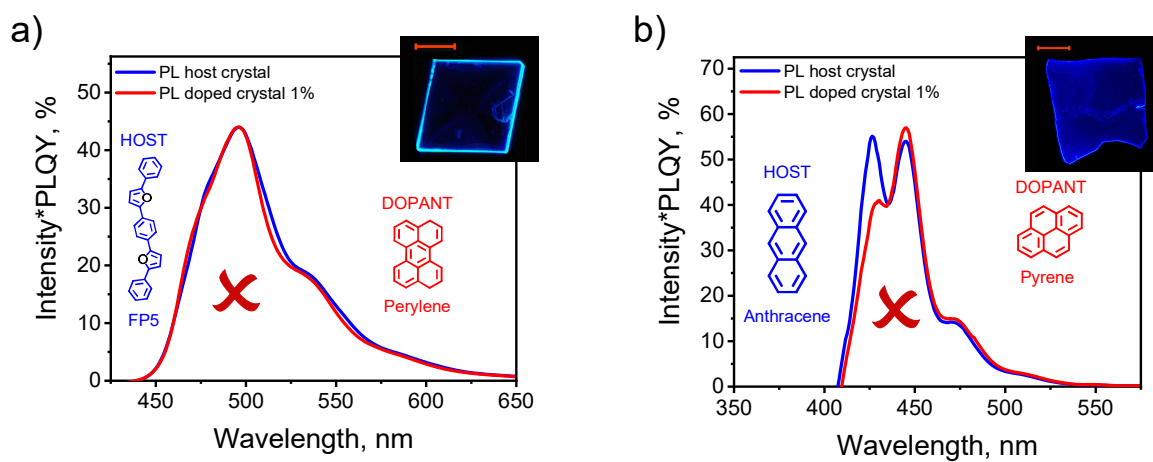


Figure S3. PL spectra of pure crystals (blank experiment, blue) and doped crystals (red) normalized to PLQY; the chemical structures and corresponding concentrations demonstrated in the plots; the insets demonstrate the fluorescent optical images of the crystals; the scale bar corresponds to 200 μm .

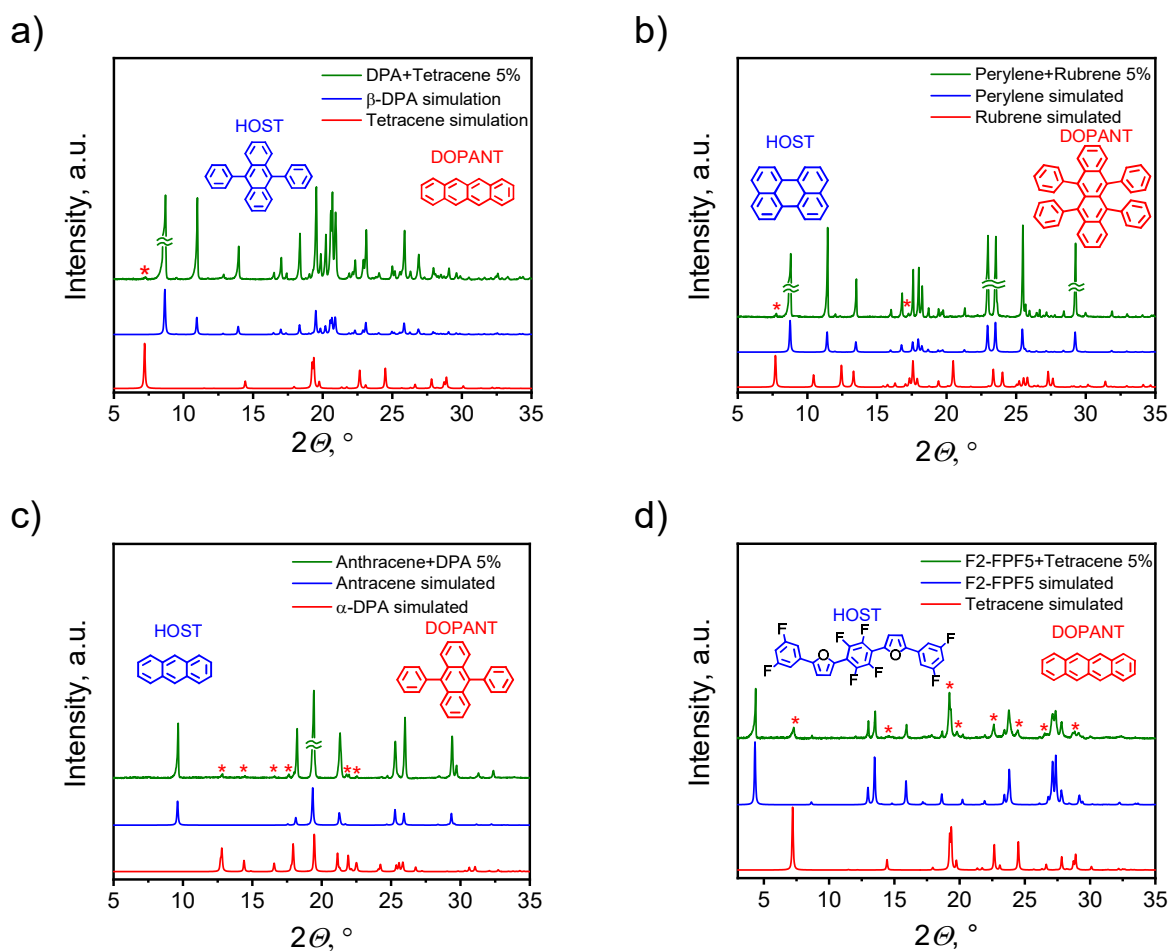


Figure S4. Powder X-ray diffraction patterns of crystallized incompatible materials with 5% dopant concentration (olive) in comparison with single-crystal simulation data of host (blue) and dopant (red). Asterisks demonstrate the peaks of a dopant phase distinguishable on the background of host material; chemical structures and corresponding concentrations demonstrated in the plots.