

Supplementary information

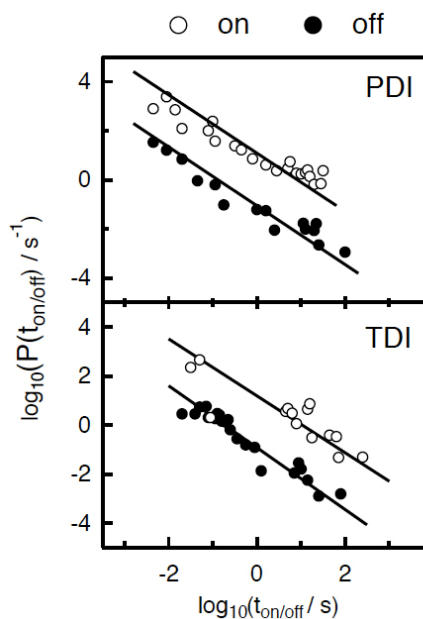


Fig. S1 Distributions of “on” and “off” times for a single (a) PDI and (b) TDI molecule in PMMA under ambient conditions. For clarity the “on” time distributions are shifted vertically. The straight lines indicate a power law behaviour with exponents of $m_{on} = 1.16$ and $m_{off} = 1.26$ for TDI and $m_{on} = 1.19$ and $m_{off} = 1.20$ for PDI.

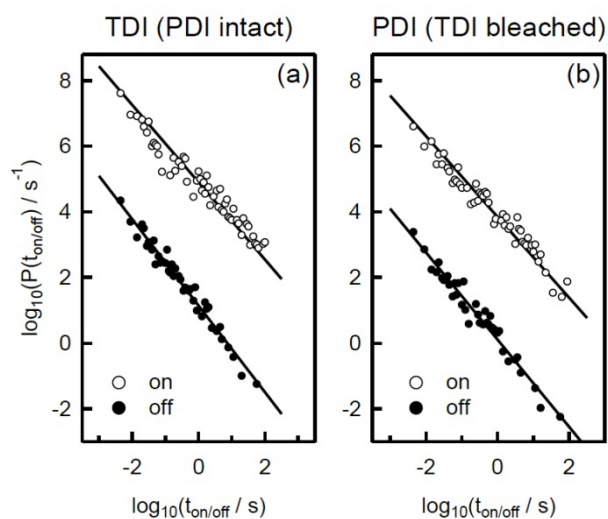


Fig. S2 Ensemble distributions of “on” and “off” times from PDI-3Ph-TDI when (a) TDI and (b) PDI (after bleaching of TDI) is the emitting chromophore. For clarity the “on” time distributions are shifted vertically. The straight lines indicate a power law behaviour with exponents of (a) $m_{on} = 1.18$ and $m_{off} = 1.32$ and (b) $m_{on} = 1.23$ and $m_{off} = 1.33$.

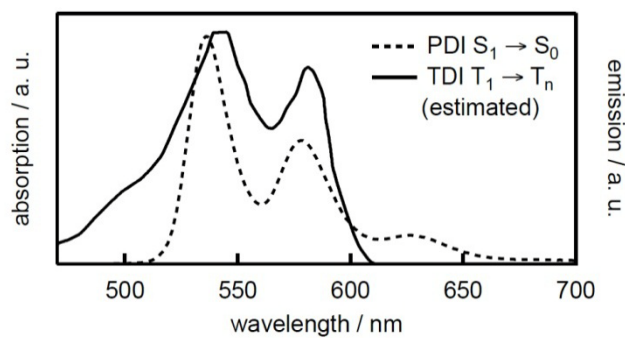


Fig. S3 Spectral overlap of the PDI emission spectrum in toluene (dashed line) and the simulated TDI triplet absorption (solid line) spectrum. (c.f. main text).

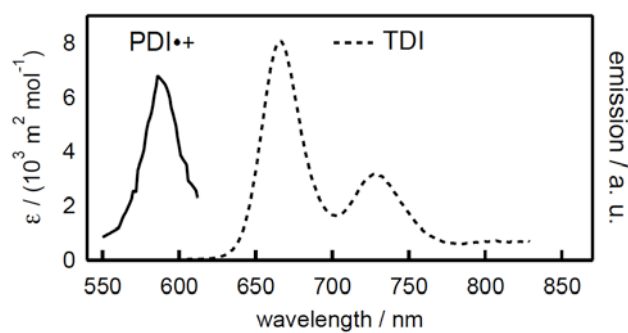


Fig. S4 Absorption spectrum of the radical cation of PDI in acetonitrile (solid line) and the normalized emission spectrum of TDI in toluene (dashed line).