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Electrochemistry, Spectroscopy and Electrogenerated Chemiluminescence of Perylene, Terrylene, and Quaterylene Diimides in Aprotic Solution

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Figure Captions

Figure S1. The scan rate dependence of the redox peak currents of TDI (a) and QDI(b).

Figure S2 UV-vis spectra changes on reduction of PDI-1, (a) decreasing neutral, (b) increasing radical anion and (c) increasing dianion response during the reduction in CH_3CN (electrolyte: 0.1 M TBAPF_6).

Figure S3 UV-vis spectra changes on reduction of TDI, (a) decreasing neutral and (b) increasing radical anion response during the reduction in CH_3CN (electrolyte: 0.1 M TBAPF_6).

S2

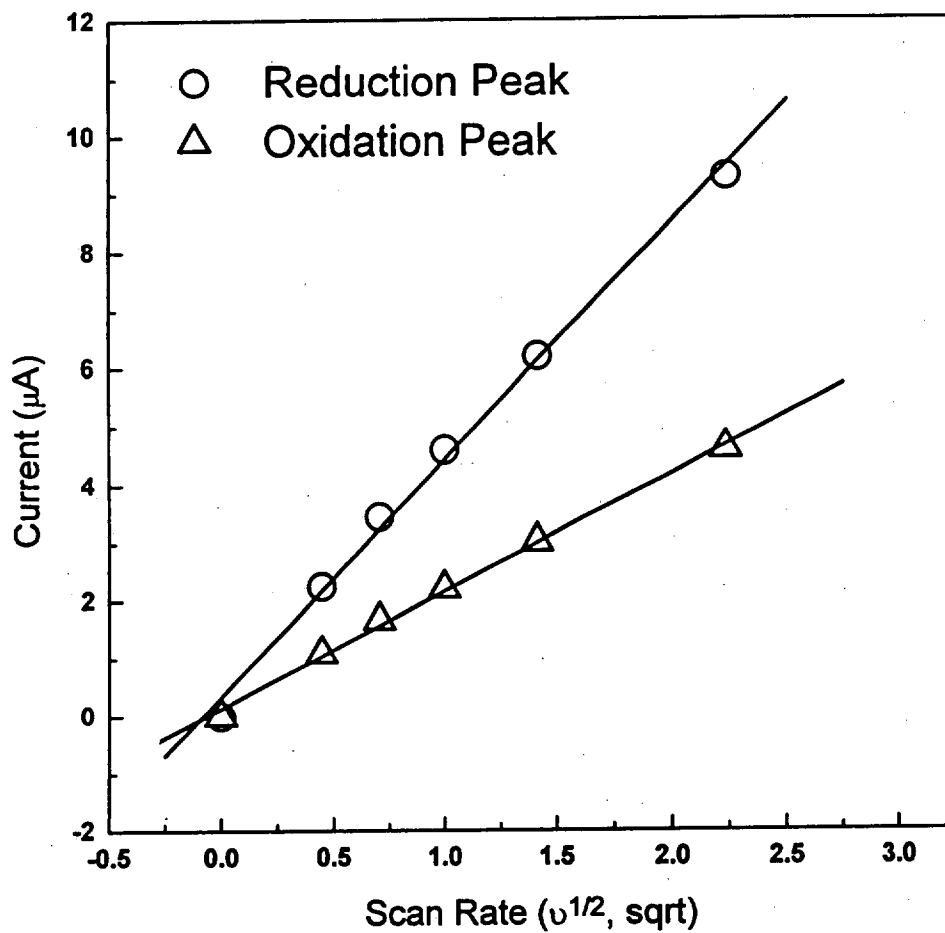


Fig. S1A

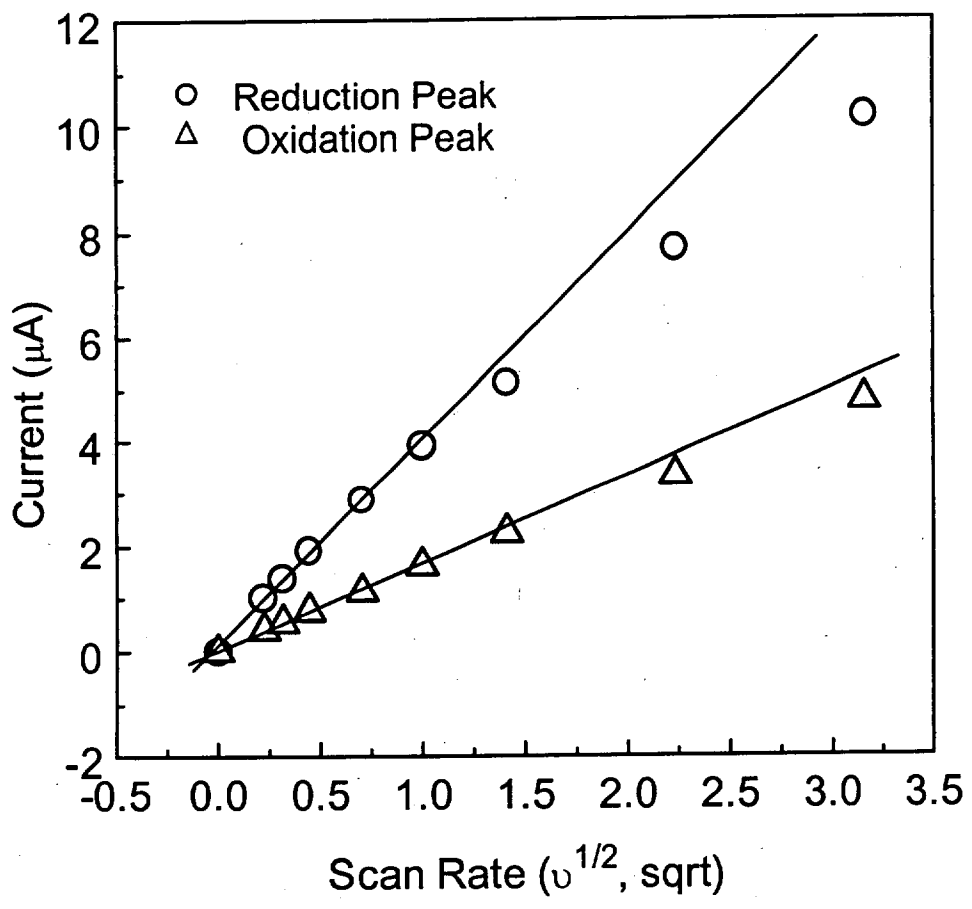


Fig. S1b

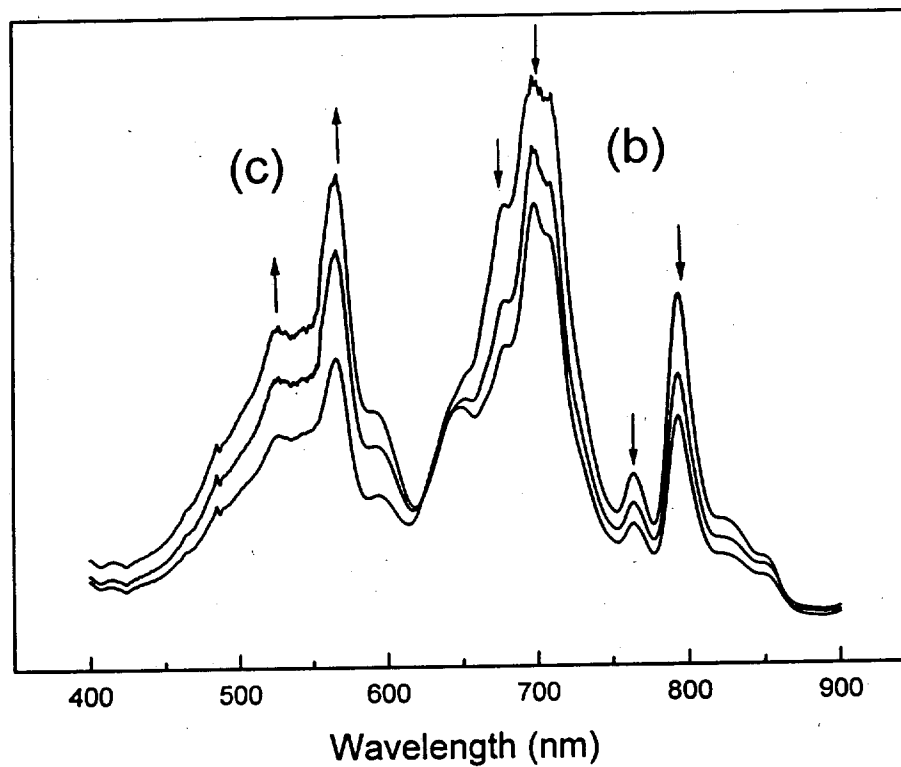
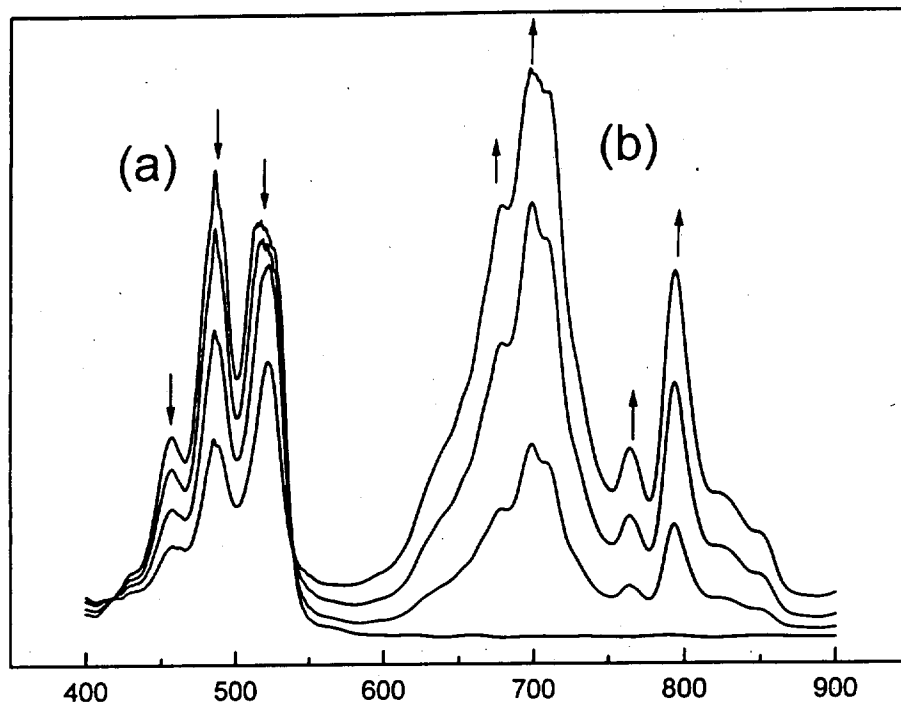


Fig. S2

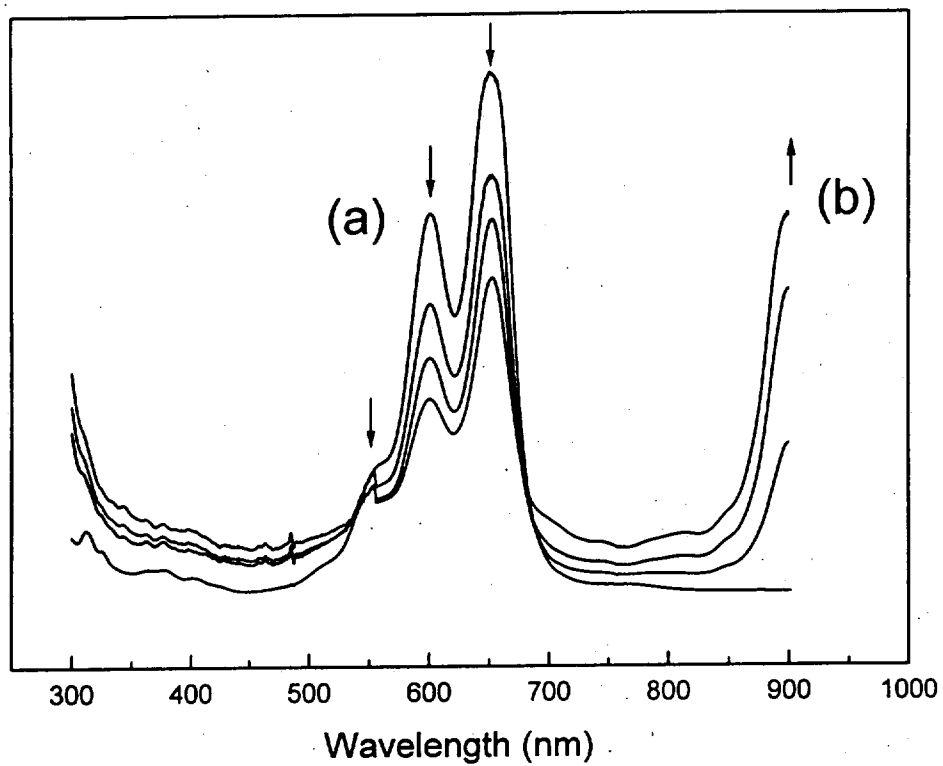


Fig. S3

Table S1. PM3 Calculated Fractional Electron Densities at the Carbonyl Oxygen Atoms (δ_o) in the Diimide Molecules With Different Net Charge (δ)

	δ_o (PDI-1)	δ_o (TDI) ^a	δ_o (QDI)
$\delta = 0$	-0.406	-0.414	-0.418
$\delta = -1$	-0.486	-0.48	-0.473
$\delta = -2$	-0.567	-0.547	-0.530

^aThe electron density at oxygen atom in imide group with N-2,6-di-*iso*-propylphenyl substituent.