

Supporting Information

Electrochemistry and Electrogenerated Chemiluminescence of Some BODIPY

Derivatives

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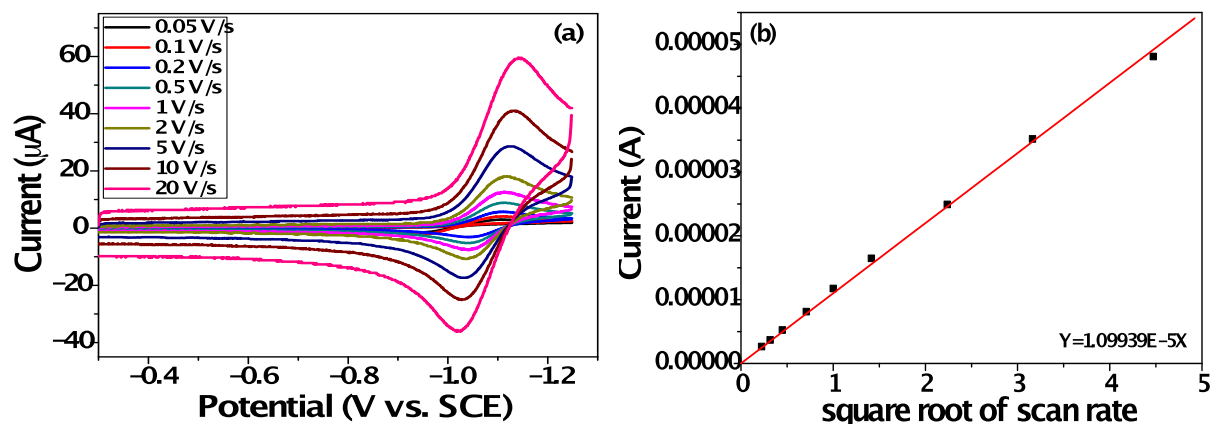


Figure S1. (a) Reduction CV of 0.5 mM MCPB in MeCN at various scan rates (b) reduction peak current versus the square root of the scan rate ($v^{1/2}$).

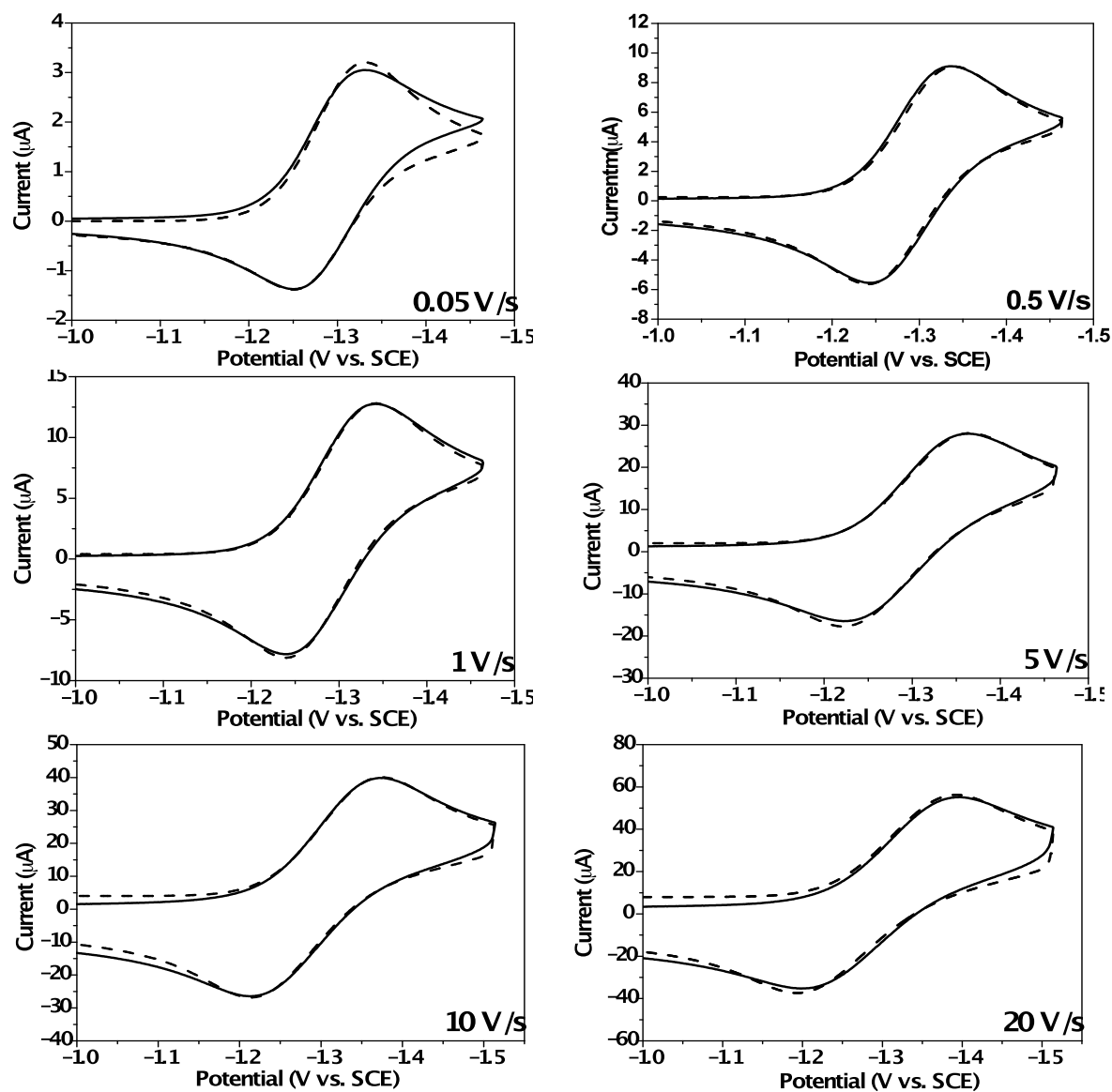


Figure S2. Experimental (solid line) and simulated (dotted line) cyclic voltammograms of 0.5 mM **PB** reduction. The simulation is corrected for resistance (700Ω) and capacitance ($100 \mu\text{F}$): $k_f = 0.1$, $K_{\text{eq}} = 10$, $k^0 = 0.036 \text{ cm/s}$, $\alpha = 0.5$, $D = 3 \times 10^{-5} \text{ cm}^2/\text{s}$.

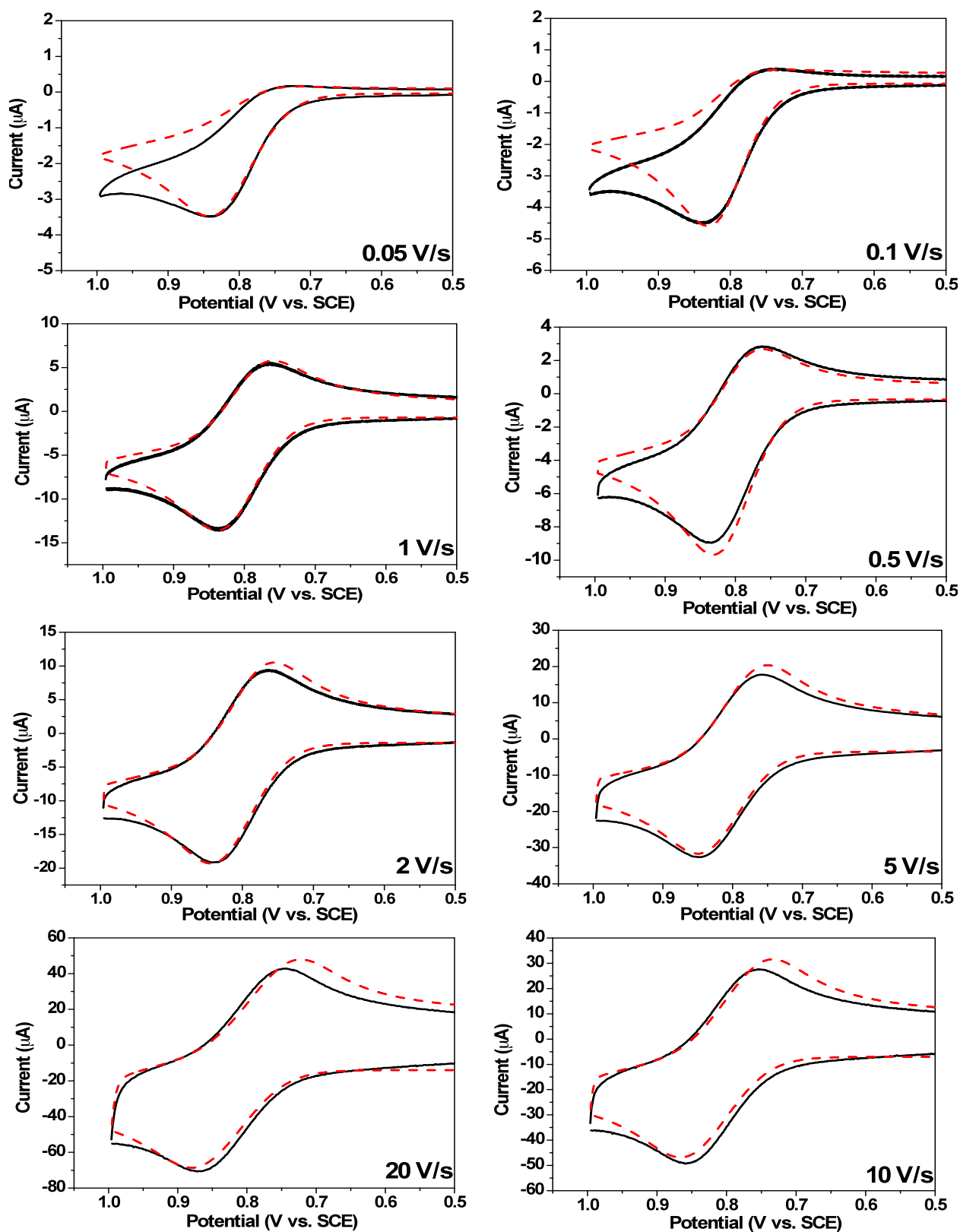


Figure S3. Experimental (solid line) and simulated (dotted line) cyclic voltammograms of 0.5 mM MCPB oxidation. The simulation is corrected for resistance (400Ω) and capacitance ($70 \mu\text{F}$): $k_f = 2$, $K_{\text{eq}} = 15$, $k^0 = 0.1 \text{ cm/s}$, $\alpha = 0.5$, $D = 1.9 \times 10^{-5} \text{ cm}^2/\text{s}$.

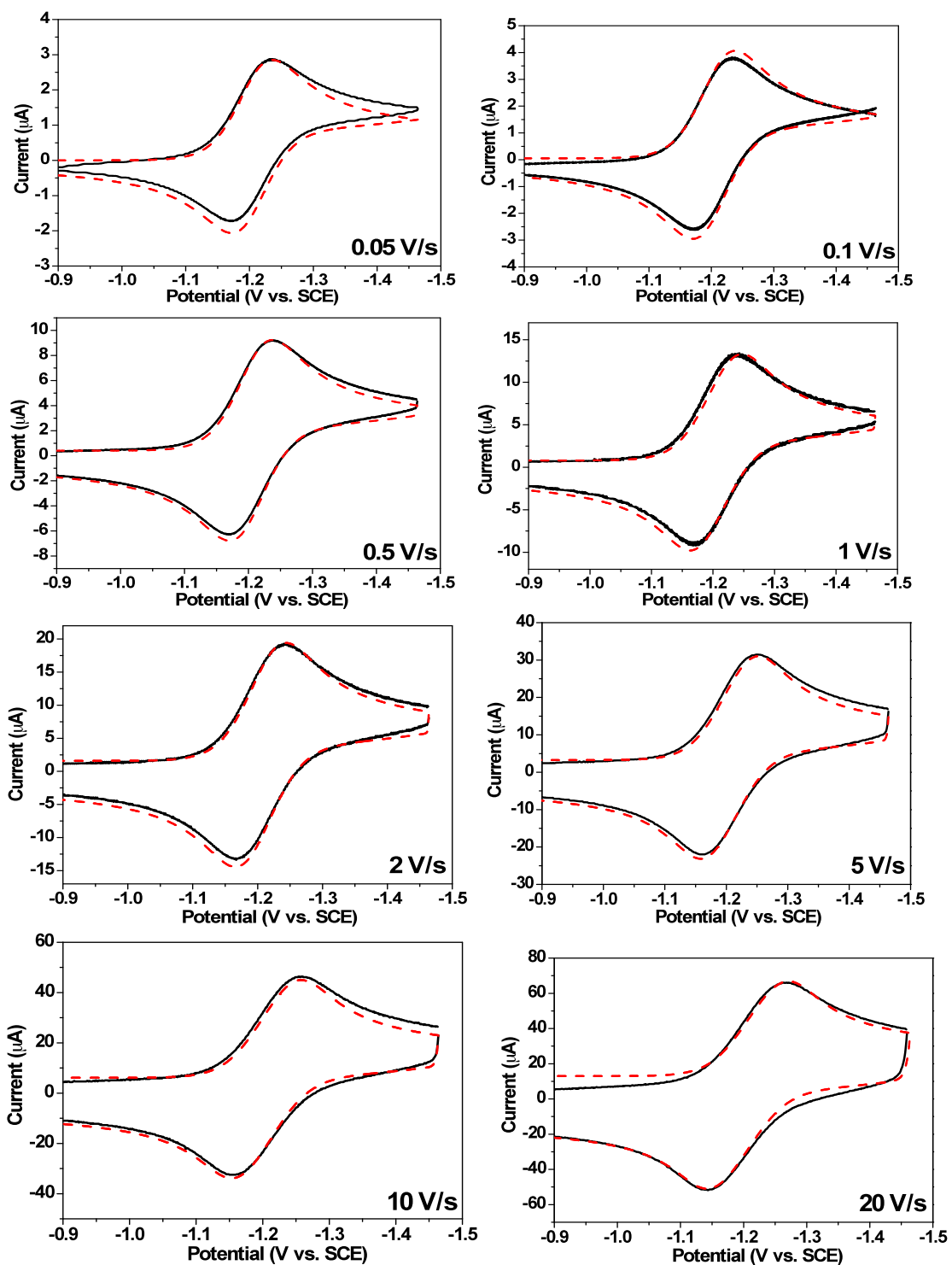


Figure S4. Experimental (solid line) and simulated (dotted line) cyclic voltammograms of 0.5 mM MCPB reduction. The simulation is corrected for resistance (400Ω) and capacitance ($70 \mu\text{F}$): $k^0 > 10^4 \text{ cm/s}$, $\alpha = 0.5$, $D = 1.9 \times 10^{-5} \text{ cm}^2/\text{s}$.

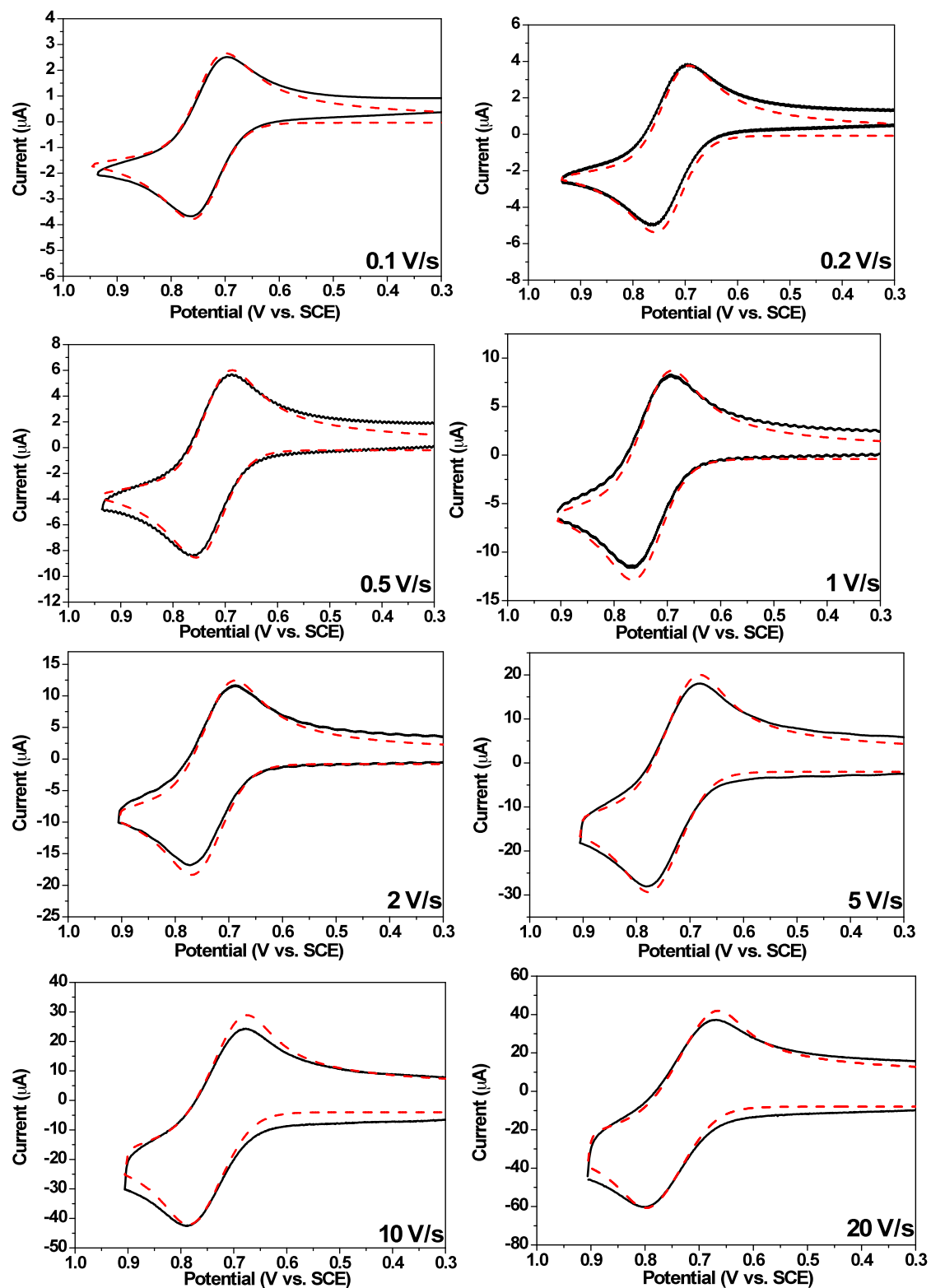


Figure S5. Experimental (solid line) and simulated (dotted line) cyclic voltammograms of 0.5 mM **DCPB** oxidation. The simulation is corrected for resistance (500Ω) and

capacitance ($40 \mu\text{F}$): $k^0 > 10^4 \text{ cm/s}$, $\alpha = 0.5$, $D = 1.6 \times 10^{-5} \text{ cm}^2/\text{s}$.

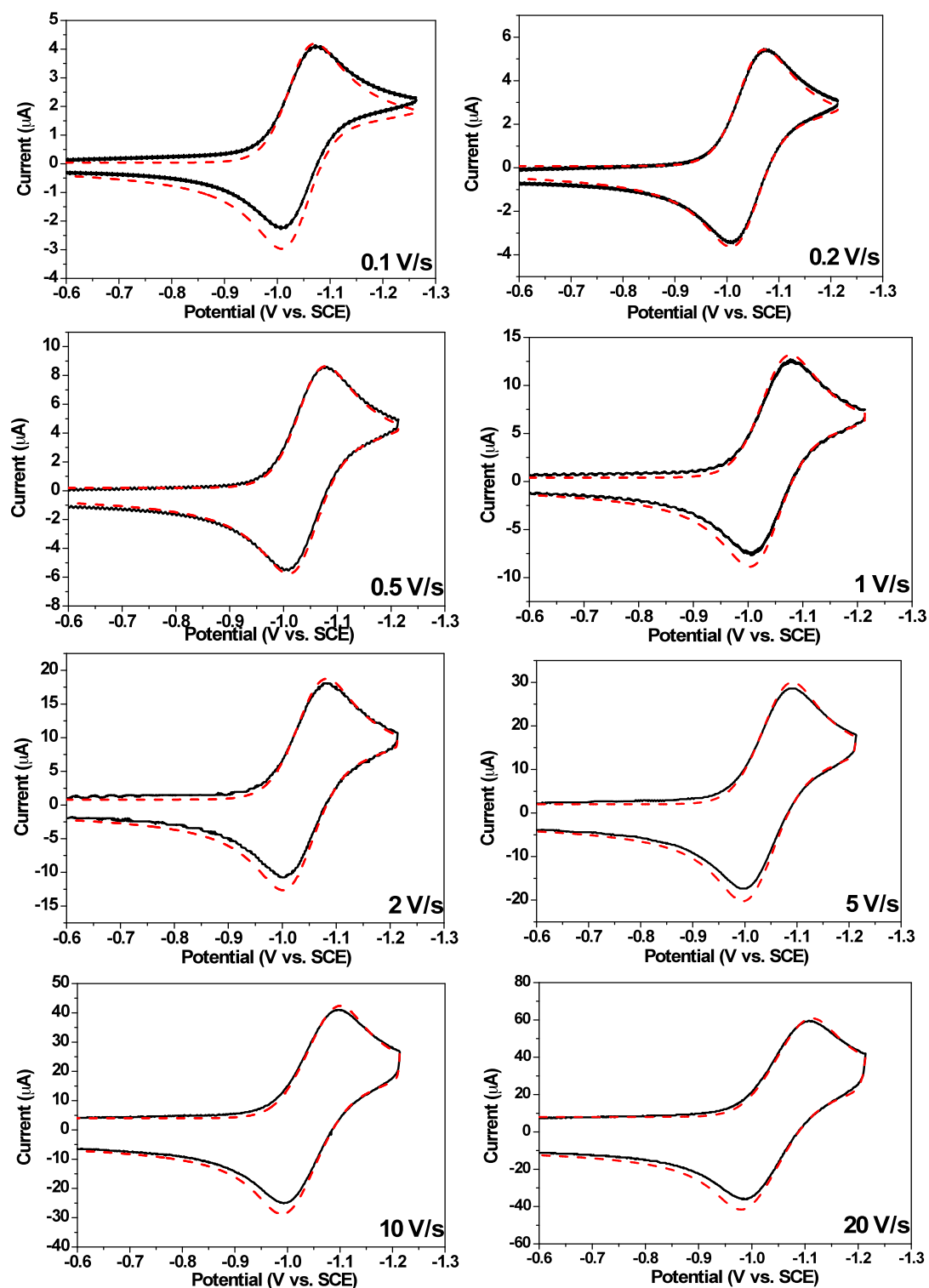


Figure S6. Experimental (solid line) and simulated (dotted line) cyclic voltammograms of 0.5 mM **DCPB** reduction. The simulation is corrected for resistance (500Ω) and

capacitance ($40 \mu\text{F}$): $k^o > 10^4 \text{ cm/s}$, $\alpha = 0.5$, $D = 1.6 \times 10^{-5} \text{ cm}^2/\text{s}$.

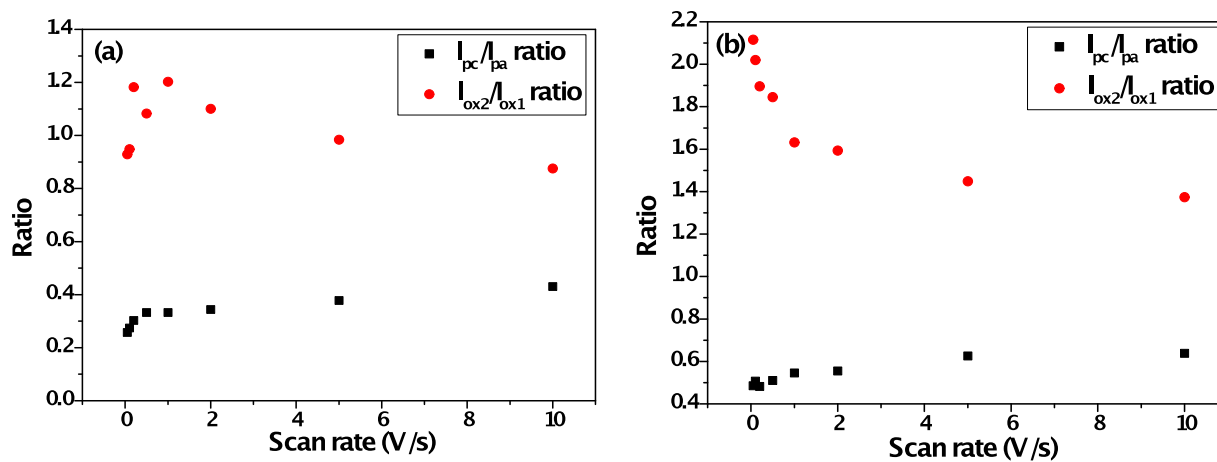


Figure S7. Plots of the peak current ratio between the first and the second oxidation (a) MCPB (b) DCPB.

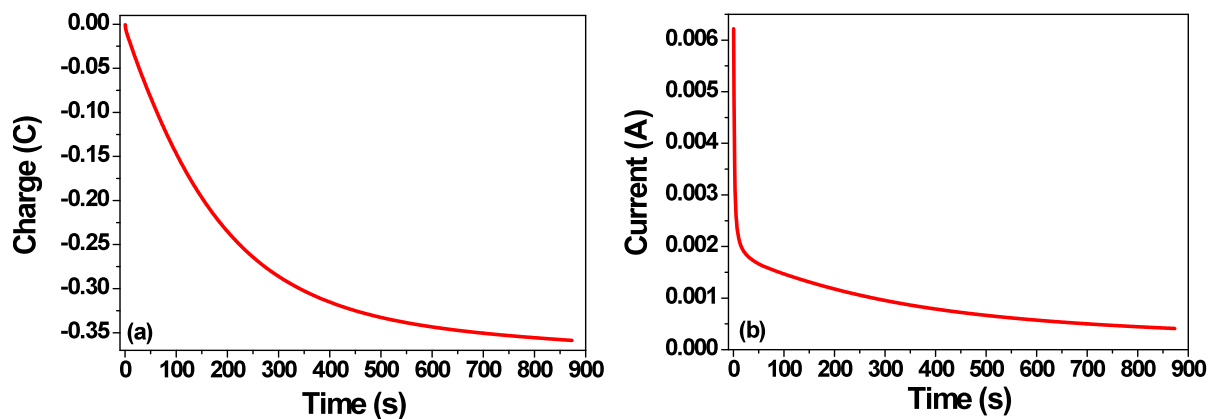


Figure S8. 99.5% completion of bulk reduction electrolysis of 1 mM PB in MeCN. (a) Charge versus time, (b) current versus time.

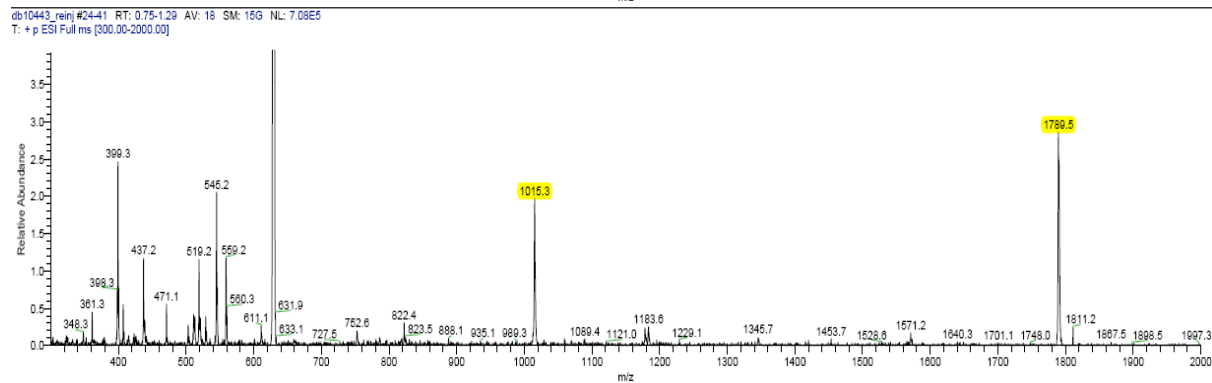
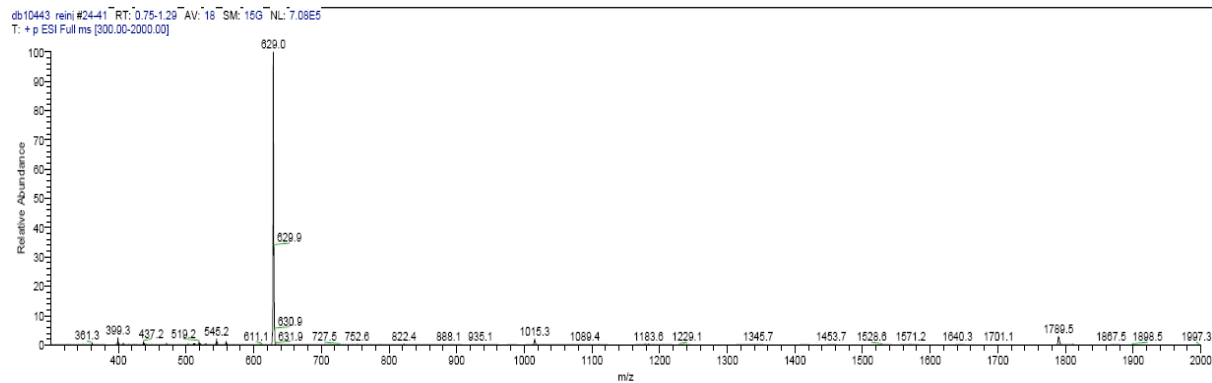


Figure S9. Chemical ionization mass spectra (CI-MS) of reduced product of **PB** after 99.5% completion of bulk electrolysis.

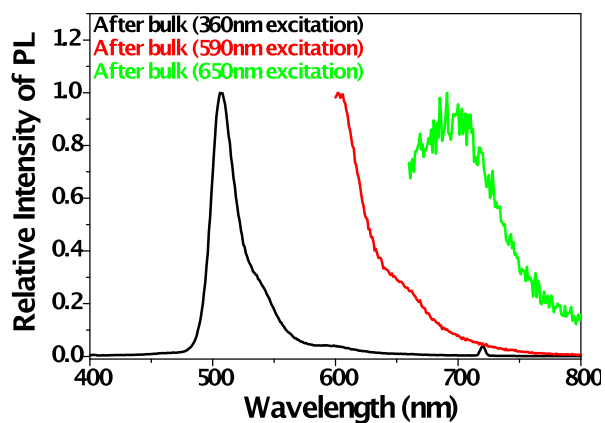


Figure S10. PL spectrum of **PB** after reductive bulk electrolysis. Black line (360 nm excitation), red line (590 nm excitation) and green line (650 nm excitation).

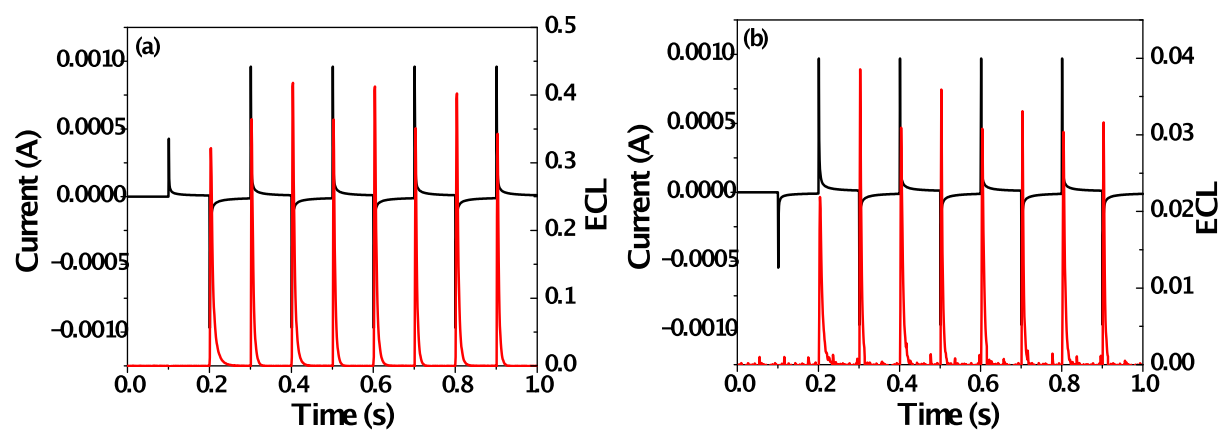


Figure S11. Initial current (black) and ECL light (red) transients for (a) **PB** pulsed between -1.2 V and + 1.5 V versus Ag QRE and (b) **MCPB** pulsed between + 1.45 V and -1.2 V versus Ag QRE. Pulse width is 0.1 s.