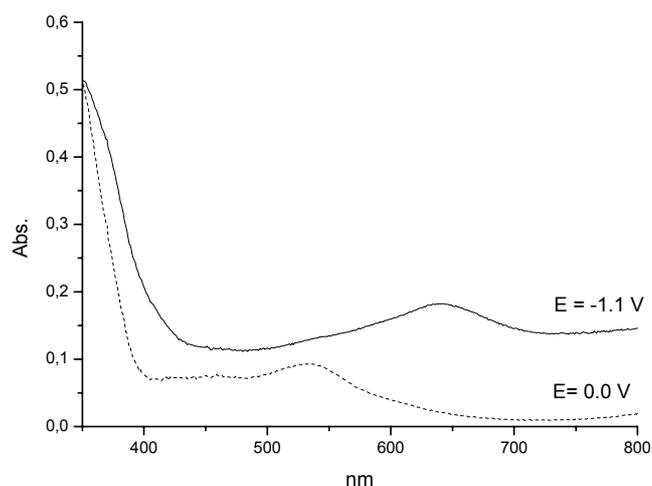


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## Electronic Supplementary Information

*Layer-by-layer Assembly:* ITO-coated glass (on one side, about  $6 \Omega\text{m}$ ,  $7 \times 50 \text{ mm}^2$ ) substrates were cleaned according to standard procedures. Before assembly, the cleaned ITO-coated glass electrodes were functionalized by immersing the substrates into a toluene solution of 3-aminopropyltrimethoxysilane. The electrodes were coated by alternating adsorption of poly(styrenesulfonate) ( $M_w$  70 000, Aldrich; 0.1 M aqueous solution, 0.1 M NaCl) and CoMEPE (~0.1 mM in a water:ethanol (1:1) mixture, 0.05 M  $\text{NaNO}_3$ ).

*UV/vis spectra:* (PSS–CoMEPE)<sub>40</sub> multilayer film at 0.0 V (dashed line) and at -1.1 V (solid line).



*Cyclic Voltammetry*: Dependence of the peak current on the square root of the scan rate

