

Supporting Information for

Greyscale and paper electrochromic polymer displays by UV patterning

Robert Brooke^{1,2}, Jesper Edberg^{1,2}, Xavier Crispin¹, Magnus Berggren¹, Isak Engquist¹, Magnus Jonsson^{1*}

¹ Linköping University, Department of Science and Technology, Laboratory of Organic Electronics, SE-601 74 Norrköping, Sweden

² RISE Acreo, ICT Department, Printed Electronics, Research Institutes of Sweden, Acreo, 601 17, Norrköping Sweden

* Correspondence: magnus.jonsson@liu.se

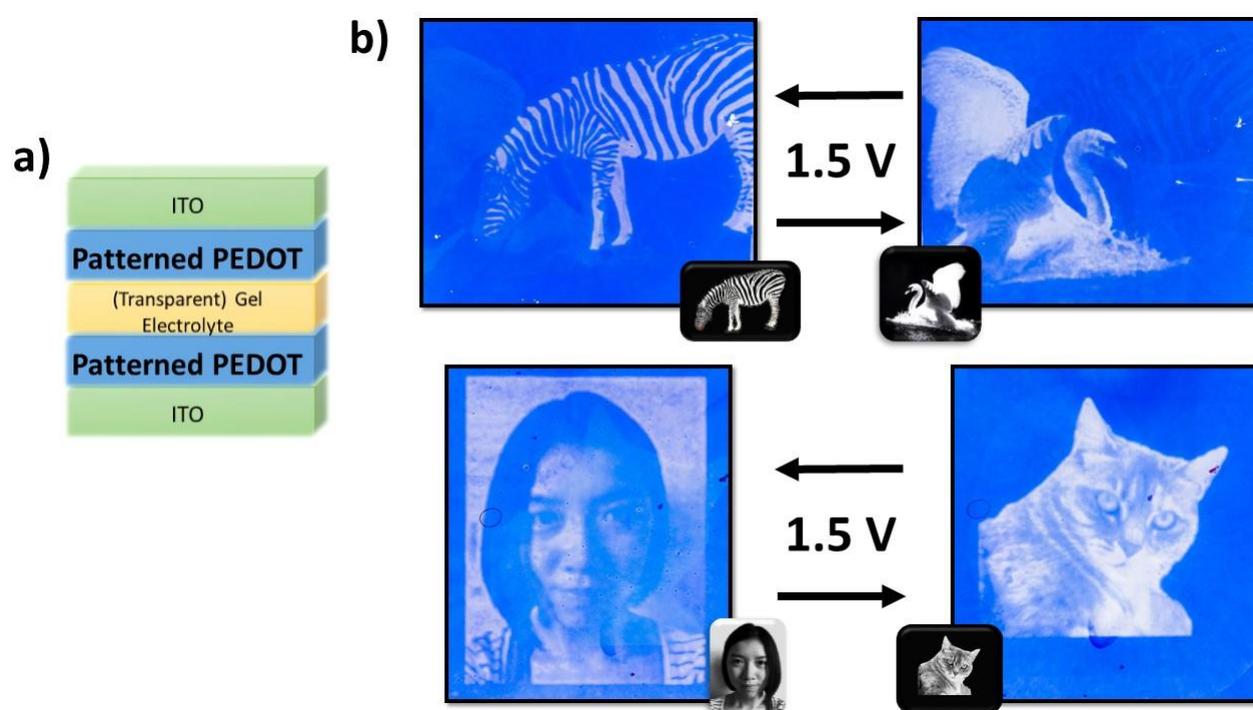


Figure S1. Electrochromic device architecture and additional examples of complex greyscale picture-to-picture electrochromic devices.

Table S11. Complete L*a*b* color space values of the as prepared, oxidized and reduced pristine PEDOT and UV-light treated PEDOT with the oxidant concentration varied.

Sample	Redox state	L*	a*	b*
Pristine PEDOT				
6 wt%	As prepared	71.15	-3.72	-11.62
6 wt%	Oxidized	71.86	-3.94	-9.34
6 wt%	Reduced	59.94	0.46	-14.91
12 wt%	As prepared	49.41	-6.07	-28.09
12 wt%	Oxidized	52.9	-4.94	-27.24
12 wt%	Reduced	28.9	16.68	-53.53
21 wt%	As prepared	23.7	-4.97	-36.72
21 wt%	Oxidized	27.0	-1.69	-38.02
21 wt%	Reduced	3.09	31.12	-38.02
UV-light treated PEDOT				
6 wt%	As prepared	68.72	-0.04	-0.86
6 wt%	Oxidized	68.49	0.26	0.09
6 wt%	Reduced	68.45	0.38	-0.63
12 wt%	As prepared	44.16	-1.43	-6.32
12 wt%	Oxidized	46.93	-3.22	-2.17
12 wt%	Reduced	35.52	4.49	-8.25
21 wt%	As prepared	15.29	-4.06	-12a.74
21 wt%	Oxidized	10.3	5.32	-5.77
21 wt%	Reduced	8.45	7.15	-7.66