Photoluminescence Anisotropy of Uni-axially Aligned Electrospun Conjugated Polymer Nanofibers of MEH-PPV and P3HT

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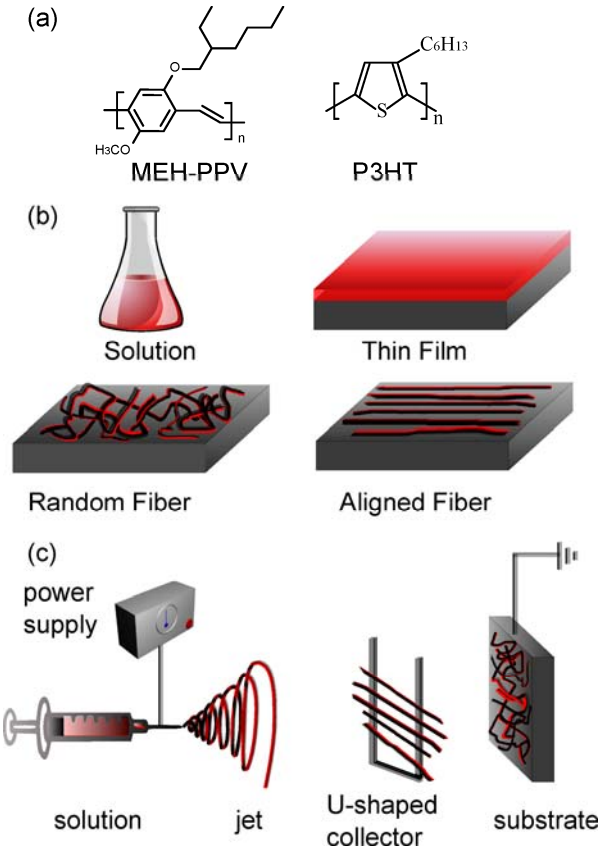

Fig. S1. (a) Chemical structures of poly[2-methoxy-5-(2'-ethyl-hexyloxy)-1,4-phenylene vinylene] (MEH-PPV) and poly(3-hexylthiophene) (P3HT); (b) Schematics of the four different physical states (morphologies) of conjugated polymers; (c) Schematic representations of the electrospinning process and the setups for collection of nanofibers.

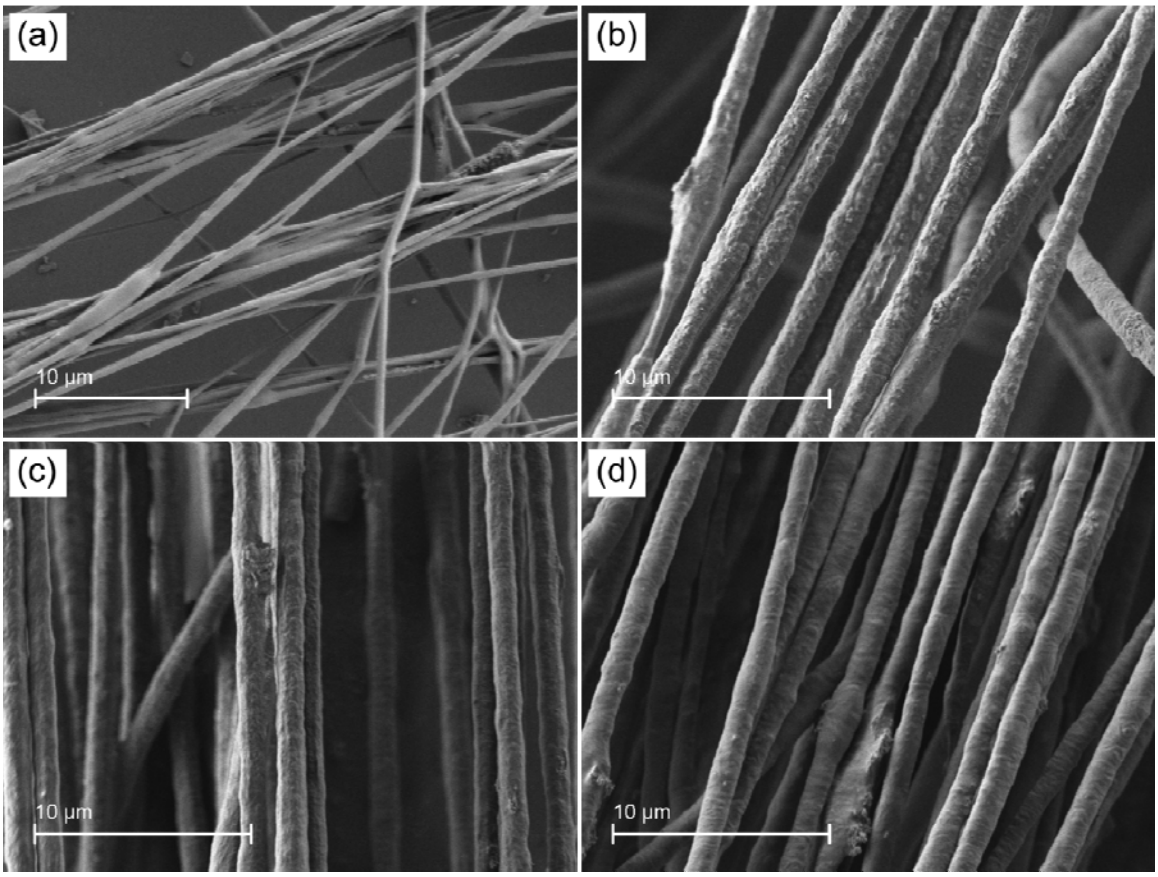

Fig.S2. (a) SEM image of PEO nanofibers electrospun from the solution of 2 wt.% PEO in $CHCl_3$; (b), (c), and (d) SEM images of aligned nanofibers with mass ratios of P3HT/PEO being 1/40, 1/10, and 1/4, respectively.

Table S1. Degrees of emission anisotropy at the emission peak.

	MEH-PPV/PEO				P3HT/PEO			
Mass ratio	1:4	1:10	1:20	1:40	1:4	1:10	1:20	1:40
Thin film	0.04	0.14	0.16	0.26	0.14	0.15	0.24	0.23
Random nanofibers	0.08	0.06	0.12	0.03	0.11	0.082	0.17	0.13
Aligned nanofibers	0.23	0.39	0.50	0.59	0.24	0.43	0.59	0.77
Dilution solution	0.17 (555 nm)				0.13 (575 nm)			