Supporting Information

Naphthalene dithiol additive reduces trap-assisted recombination and improves outdoor operational stability of organic solar cells

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Table S1 Characteristics of organic solar cells with different loading of NDT stabilizing additive.a

NDT loading, %	VOC, mV	JSC, mA/cm2	FF, %	PCE, %
0%	592.6	14.1	60.1	5.0
2.50%	605.0	14.2	53.9	4.6
5%	**602.6**	**15.2**	**55.3**	**5.1**
8%	600.1	14.5	56.4	4.9
10%	588.7	12.4	60.0	4.4

a Average parameters for eight devices

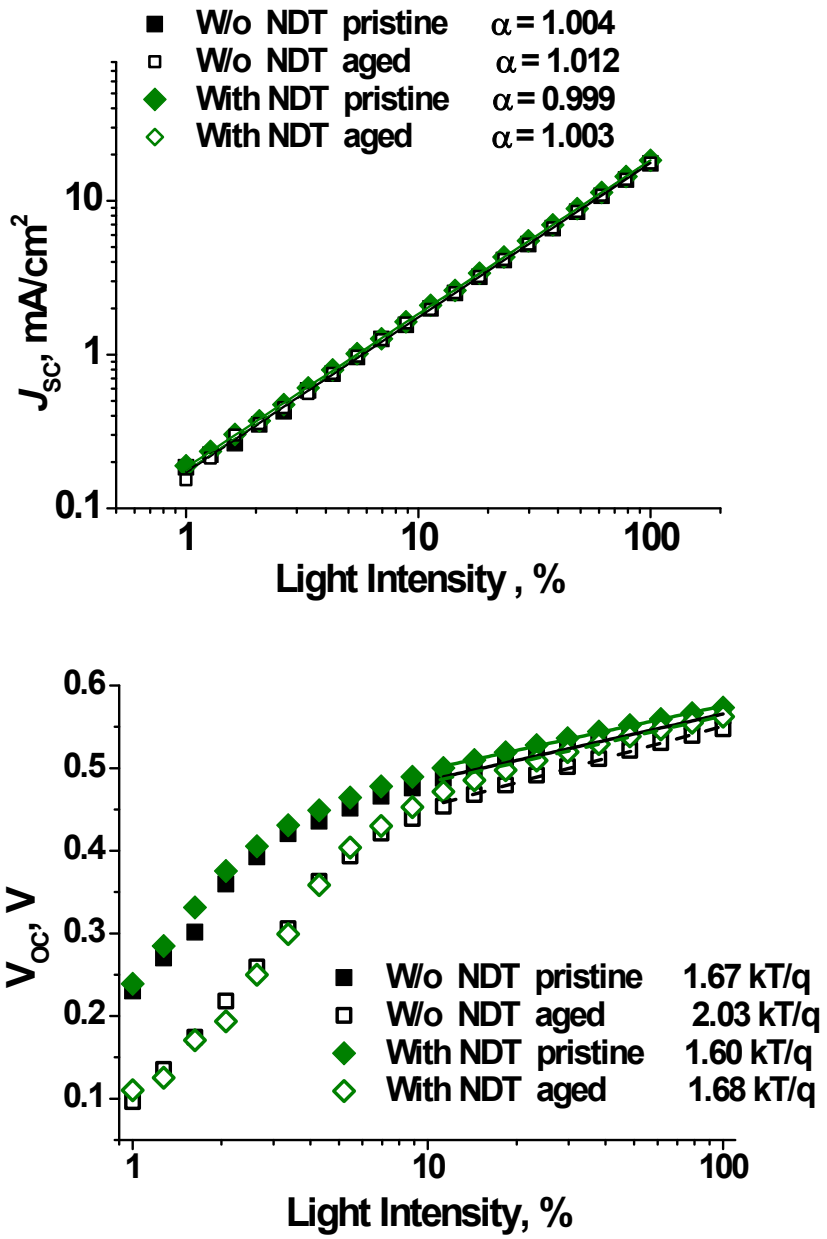

Fig. S1 JSC (a) and VOC (b) dependences on the light intensity for devices processed without or with NDT additive.

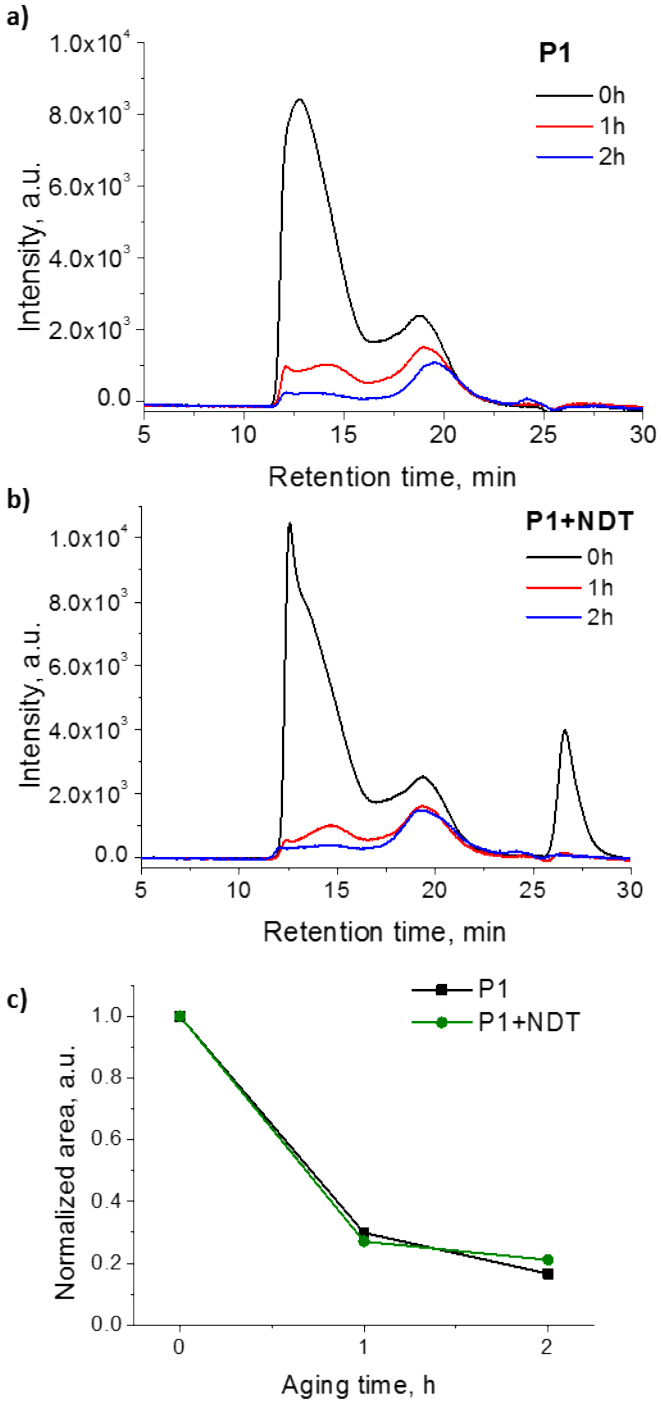

Fig. S2 Evolution of the GPC profiles the conjugated the pristine polymer P1 a) and P1 modified with NDT b) upon exposure to UV light in inert atmosphere. The decays of the peak intensity (area) on the GPC profiles are compared for the samples with and w/o NDT additive in (c)