Data used in the Manuscript "Degradation mechanism of P3HT:PCBM based bulk heterojunction solar cells". by T. Mounika, M. Singh, I. Singh, P. Arun and K. Kumar

Figure 2

I V Data for Device A

S No	Voltage (V)	Current (A)	
		Dark	Illumination
1	-4.14E-01	-1.84E-06	-2.03E-04
2	-3.94E-01	-1.79E-06	-2.03E-04
3	-3.74E-01	-1.72E-06	-1.98E-04
4	-3.54E-01	-1.82E-06	-1.96E-04
5	-3.33E-01	-1.71E-06	-1.91E-04
6	-3.13E-01	-1.65E-06	-1.90E-04
7	-2.93E-01	-1.58E-06	-1.85E-04
8	-2.73E-01	-1.66E-06	-1.83E-04
9	-2.53E-01	-1.63E-06	-1.78E-04
10	-2.32E-01	-1.52E-06	-1.76E-04
11	-2.12E-01	-1.47E-06	-1.71E-04
12	-1.92E-01	-1.57E-06	-1.69E-04
13	-1.72E-01	-1.48E-06	-1.64E-04
14	-1.52E-01	-1.43E-06	-1.62E-04
15	-1.31E-01	-1.36E-06	-1.57E-04
16	-1.11E-01	-1.53E-06	-1.54E-04
17	-9.09E-02	-1.41E-06	-1.49E-04
18	-7.07E-02	-1.37E-06	-1.46E-04
19	-5.05E-02	-1.34E-06	-1.41E-04
20	-3.03E-02	-1.46E-06	-1.37E-04
21	-1.01E-02	-1.40E-06	-1.33E-04
22	1.01E-02	-1.33E-06	-1.29E-04
23	3.03E-02	-1.30E-06	-1.25E-04
24	5.05E-02	-1.41E-06	-1.20E-04
25	7.07E-02	-1.39E-06	-1.15E-04
26	9.09E-02	-1.27E-06	-1.10E-04
27	1.11E-01	-1.18E-06	-1.06E-04
28	1.31E-01	-1.27E-06	-1.00E-04
29	1.52E-01	-1.29E-06	-9.60E-05
30	1.72E-01	-1.10E-06	-8.98E-05
31	1.92E-01	-9.50E-07	-8.52E-05
32	2.12E-01	-9.50E-07	-7.86E-05
33	2.32E-01	-8.90E-07	-7.32E-05
34	2.53E-01	-6.10E-07	-6.59E-05
35	2.73E-01	-3.80E-07	-5.93E-05
36	2.93E-01	-2.10E-07	-5.10E-05

S No	Voltage (V)	Current (A)	
		Dark	Illumination
37	3.13E-01	-6.00E-08	-4.29E-05
38	3.33E-01	3.20E-07	-3.35E-05
39	3.54E-01	7.10E-07	-2.43E-05
40	3.74E-01	9.60E-07	-1.45E-05
41	3.94E-01	1.26E-06	-5.10E-06
42	4.14E-01	1.88E-06	3.42E-06
43	4.34E-01	2.29E-06	1.16E-05
44	4.55E-01	2.67E-06	1.88E-05
45	4.75E-01	3.07E-06	2.49E-05
46	4.95E-01	3.59E-06	3.03E-05
47	5.15E-01	4.16E-06	3.55E-05
48	5.35E-01	4.51E-06	3.99E-05
49	5.56E-01	4.77E-06	4.42E-05
50	5.76E-01	5.27E-06	4.76E-05
51	5.96E-01	5.92E-06	5.16E-05
52	6.16E-01	6.57E-06	5.48E-05
53	6.36E-01	7.07E-06	5.83E-05
54	6.57E-01	7.47E-06	6.08E-05
55	6.77E-01	8.51E-06	6.48E-05
56	6.97E-01	8.90E-06	6.76E-05
57	7.17E-01	8.63E-06	7.07E-05
58	7.37E-01	9.12E-06	7.30E-05
59	7.58E-01	9.82E-06	7.69E-05
60	7.78E-01	1.02E-05	7.94E-05
61	7.98E-01	1.07E-05	8.29E-05
62	8.18E-01	1.12E-05	8.53E-05
63	8.38E-01	1.19E-05	8.90E-05
64	8.59E-01	1.23E-05	9.14E-05
65	8.79E-01	1.29E-05	9.48E-05
66	8.99E-01	1.35E-05	9.68E-05
67	9.19E-01	1.42E-05	1.01E-04
68	9.39E-01	1.49E-05	1.03E-04
69	9.60E-01	1.54E-05	1.07E-04
70	9.80E-01	1.57E-05	1.09E-04
71	1.00E+00	1.64E-05	1.13E-04

I V Data for Device B

S No	Voltage (V)	Current (A)	
		Dark	Illumination
1	-4.14E-01	-1.59E-06	-2.28E-04
2	-3.94E-01	-1.73E-06	-2.22E-04
3	-3.74E-01	-1.57E-06	-2.21E-04
4	-3.54E-01	-1.57E-06	-2.15E-04
5	-3.33E-01	-1.52E-06	-2.12E-04
6	-3.13E-01	-1.68E-06	-2.08E-04
7	-2.93E-01	-1.54E-06	-2.05E-04
8	-2.73E-01	-1.54E-06	-2.00E-04
9	-2.53E-01	-1.47E-06	-1.97E-04
10	-2.32E-01	-1.64E-06	-1.91E-04
11	-2.12E-01	-1.51E-06	-1.89E-04
12	-1.92E-01	-1.51E-06	-1.83E-04
13	-1.72E-01	-1.45E-06	-1.81E-04
14	-1.52E-01	-1.58E-06	-1.75E-04
15	-1.31E-01	-1.48E-06	-1.73E-04
16	-1.11E-01	-1.46E-06	-1.66E-04
17	-9.09E-02	-1.40E-06	-1.63E-04
18	-7.07E-02	-1.55E-06	-1.57E-04
19	-5.05E-02	-1.43E-06	-1.55E-04
20	-3.03E-02	-1.42E-06	-1.49E-04
21	-1.01E-02	-1.33E-06	-1.45E-04
22	1.01E-02	-1.43E-06	-1.38E-04
23	3.03E-02	-1.40E-06	-1.35E-04
24	5.05E-02	-1.31E-06	-1.29E-04
25	7.07E-02	-1.23E-06	-1.24E-04
26	9.09E-02	-1.31E-06	-1.18E-04
27	1.11E-01	-1.23E-06	-1.14E-04
28	1.31E-01	-1.17E-06	-1.07E-04
29	1.52E-01	-1.08E-06	-1.01E-04
30	1.72E-01	-1.14E-06	-9.35E-05
31	1.92E-01	-1.01E-06	-8.78E-05
32	2.12E-01	-8.70E-07	-8.02E-05
33	2.32E-01	-6.80E-07	-7.34E-05
34	2.53E-01	-7.10E-07	-6.46E-05
35	2.73E-01	-4.30E-07	-5.71E-05
36	2.93E-01	-1.30E-07	-4.81E-05

S No	Voltage (V)	Current (A)	
		Dark	Illumination
37	3.13E-01	1.20E-07	-3.99E-05
38	3.33E-01	3.60E-07	-3.04E-05
39	3.54E-01	7.40E-07	-2.31E-05
40	3.74E-01	1.24E-06	-1.52E-05
41	3.94E-01	1.69E-06	-8.36E-06
42	4.14E-01	2.13E-06	-1.30E-06
43	4.34E-01	2.68E-06	4.96E-06
44	4.55E-01	3.37E-06	1.08E-05
45	4.75E-01	4.00E-06	1.60E-05
46	4.95E-01	4.61E-06	2.07E-05
47	5.15E-01	5.30E-06	2.55E-05
48	5.35E-01	6.20E-06	2.99E-05
49	5.56E-01	6.98E-06	3.35E-05
50	5.76E-01	7.74E-06	3.78E-05
51	5.96E-01	8.59E-06	4.20E-05
52	6.16E-01	9.59E-06	4.62E-05
53	6.36E-01	1.06E-05	5.03E-05
54	6.57E-01	1.14E-05	5.36E-05
55	6.77E-01	1.24E-05	5.82E-05
56	6.97E-01	1.35E-05	6.21E-05
57	7.17E-01	1.45E-05	6.59E-05
58	7.37E-01	1.55E-05	6.98E-05
59	7.58E-01	1.66E-05	7.39E-05
60	7.78E-01	1.79E-05	7.81E-05
61	7.98E-01	1.90E-05	8.23E-05
62	8.18E-01	2.01E-05	8.60E-05
63	8.38E-01	2.13E-05	8.92E-05
64	8.59E-01	2.27E-05	9.44E-05
65	8.79E-01	2.39E-05	9.82E-05
66	8.99E-01	2.51E-05	1.03E-04
67	9.19E-01	2.64E-05	1.06E-04
68	9.39E-01	2.79E-05	1.11E-04
69	9.60E-01	2.91E-05	1.14E-04
70	9.80E-01	3.05E-05	1.20E-04
71	1.00E+00	3.19E-05	1.23E-04

Figure 3

Time (min)	Efficiency (%)							
	Device A				Device B			
	Cell 1	Cell 2	Cell 3	Cell 4	Cell 1	Cell 2	Cell 3	Cell 4
0	3.16	3.44	3.99	4.82	3.16	2.87	3.99	4.34
50	2.01	0.22	2.44	2.02	2.88	2.51	1.87	2.29
145	1.64	1.88	1.56	2.42	1.69	1.52	1.48	1.23
180	1.46	1.49	2.16	2.00	1.11	0.99	0.95	0.92
210	1.51	1.40	2.08	1.96	0.82	1.02	0.57	0.65
250	0.00	1.39	1.84	1.66	0.39	0.66	0.28	0.00

Figure 5

Time (min)	Ideality Factor			
	Device A		Device B	
	in Dark	in Light	in Dark	in Light
0	1.79	5.06	2.40	13.2
50	2.42	6.17	1.52	8.40
145	1.11	2.75	2.66	13.0
180	1.08	6.38	1.54	11.8
210	2.53	4	1.08	20.1
250	-	-	0.91	22.1

Figure 6

Ideality Factor	Efficiency (%)
13.2	3.16
8.40	2.88
13.0	1.69
11.8	1.11
20.1	0.82
22.1	0.39