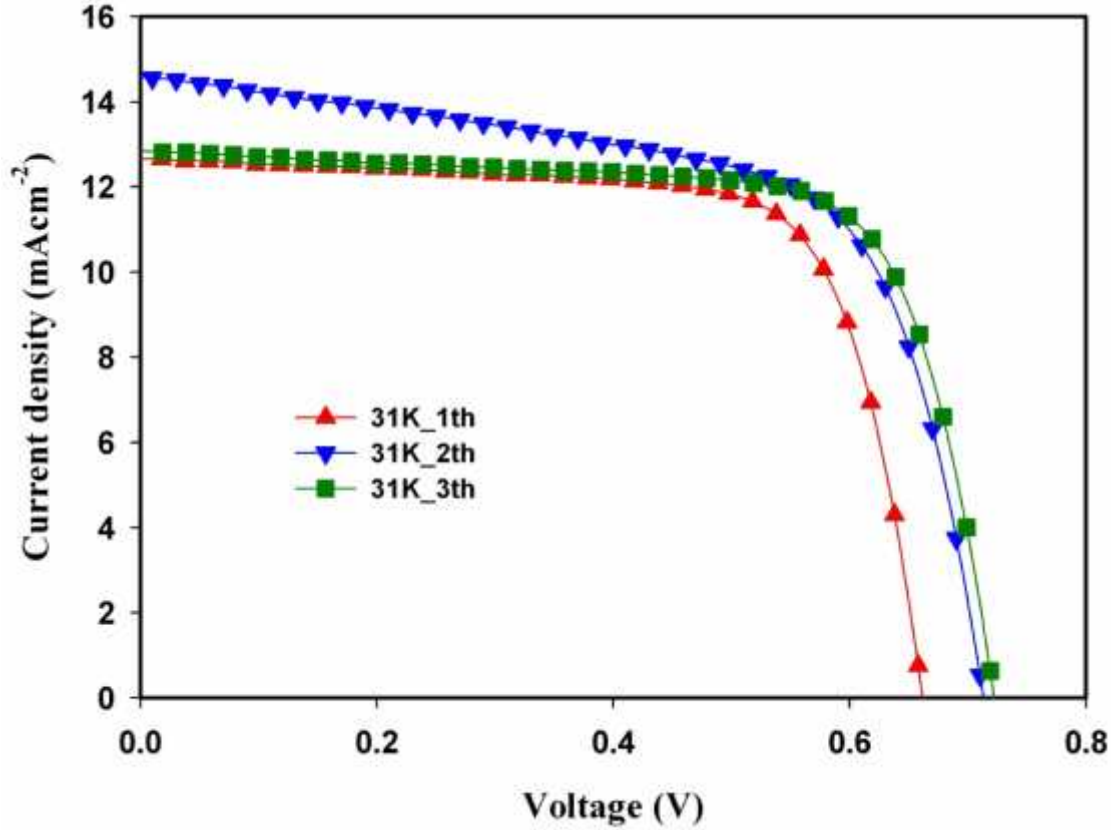


## Variation of P3HT All ssDSCs parameters with time

One Step loading samples:

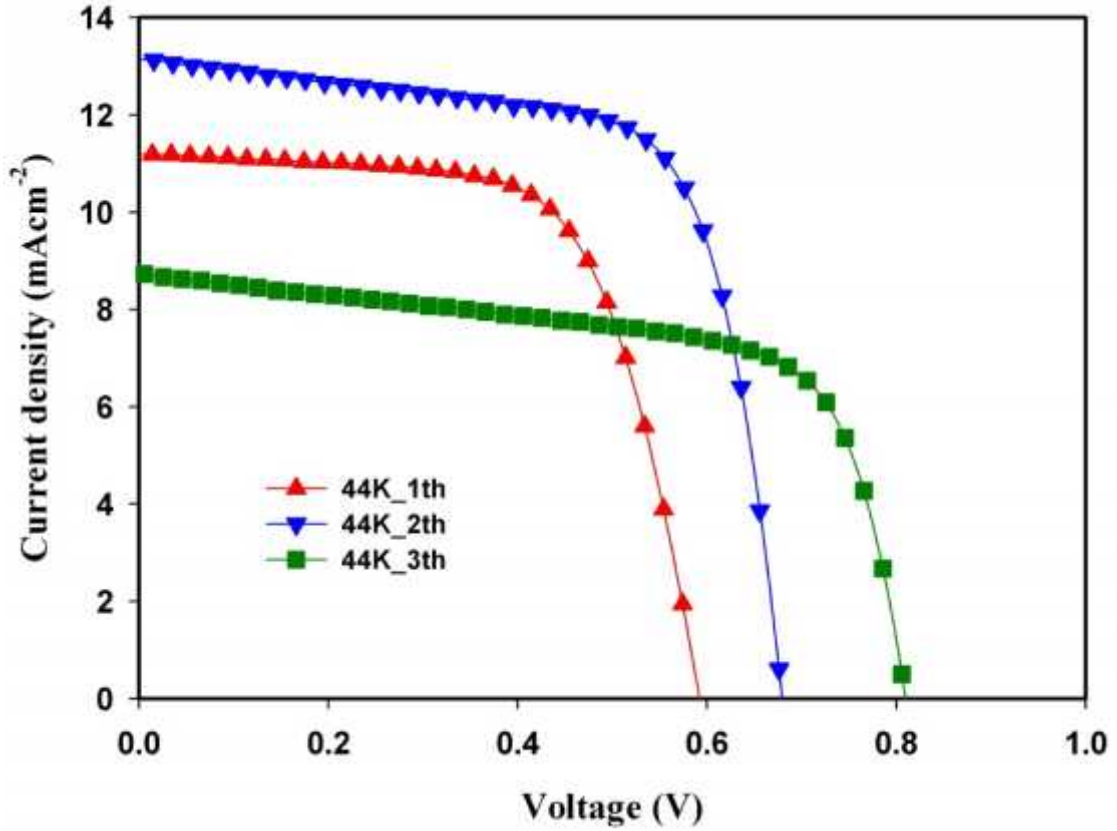
31K



**Table 1:** Dye sensitized solar cells parameters from J-V measurement of the provskite DSC with B3HT as HTL with 31000 g/mol molecular weights under AM1.5G irradiation.

Intensity (Wm <sup>-2</sup> )	Eff (%)	V <sub>oc</sub> (V)	J <sub>sc</sub> (mAcm <sup>-2</sup> )	FF	Ropt ( )	Area (cm <sup>2</sup> )	Sample
1000	6.12	0.658	12.7	0.732	473	0.10	31K_1th
1000	6.70	0.710	14.5	0.647	486	0.10	31K_2th
1000	6.77	0.719	12.9	0.730	529	0.10	31K_3th

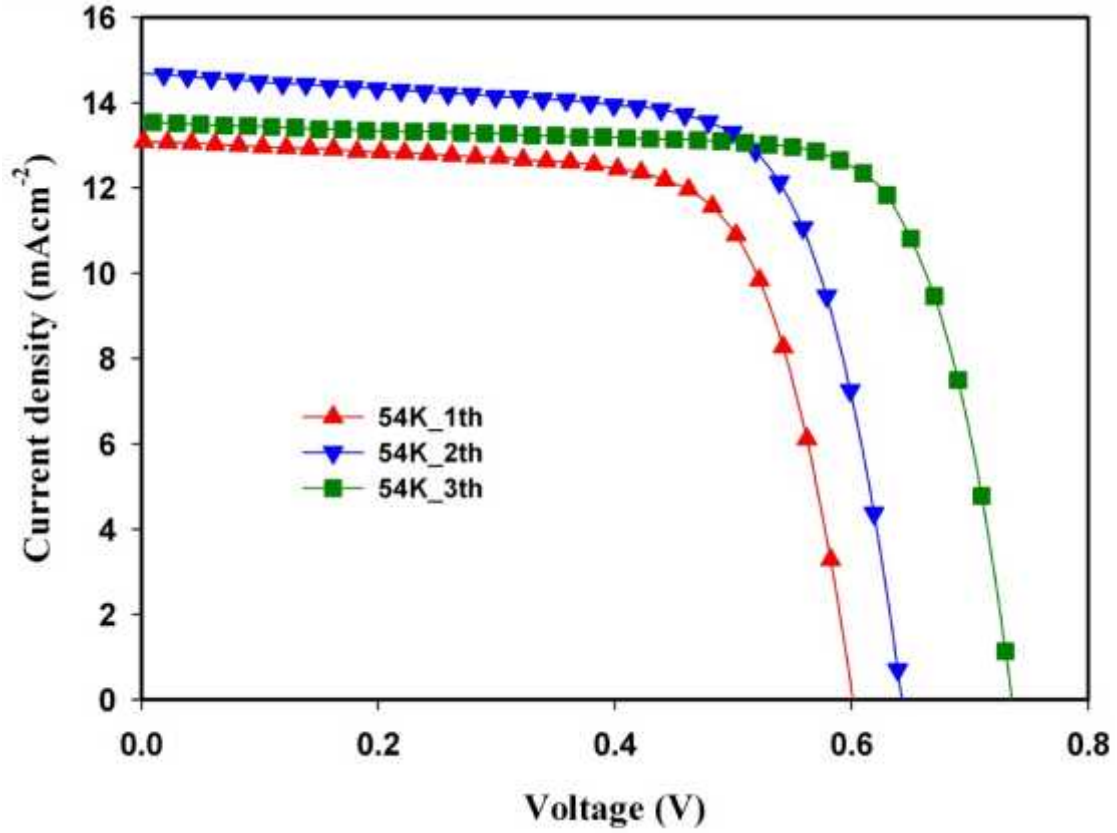
44K



**Table 2:** Dye sensitized solar cells parameters from J-V measurement of the provskite DSC with B3HT as HTL with 44000 g/mol molecular weights under AM1.5G irradiation.

Intensity (Wm <sup>-2</sup> )	Eff (%)	V <sub>oc</sub> (V)	J <sub>sc</sub> (mAcm <sup>-2</sup> )	FF	R <sub>opt</sub> ( )	Area (cm <sup>2</sup> )	Sample
1000	4.37	0.594	11.2	0.657	431	0.10	44K_1th
1000	6.18	0.676	13.1	0.696	500	0.10	44K_2th
1000	4.67	0.806	8.8	0.662	947	0.10	44K_3th

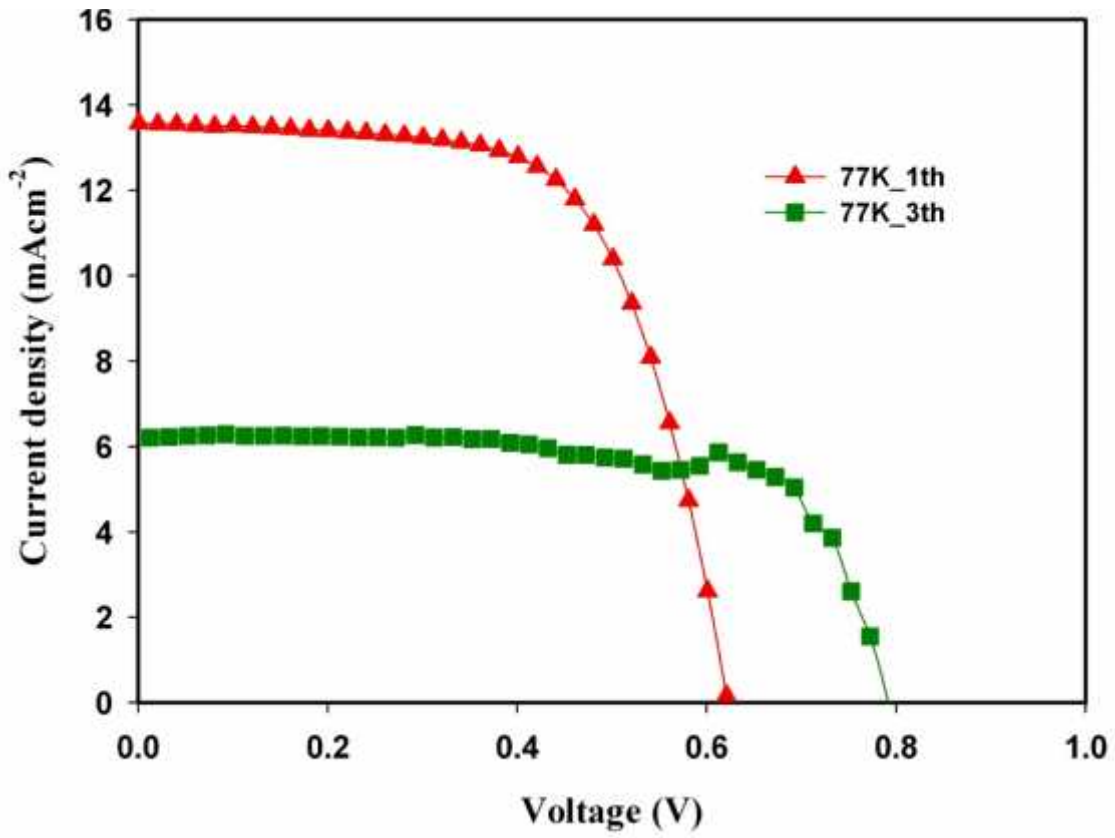
54K



**Table 3:** Dye sensitized solar cells parameters from J-V measurement of the provskite DSC with B3HT as HTL with 54000 g/mol molecular weights under AM1.5G irradiation.

Intensity ( $\text{Wm}^{-2}$ )	Eff (%)	$V_{oc}$ (V)	$J_{sc}$ ( $\text{mAcm}^{-2}$ )	FF	$R_{opt}$ ( $\Omega$ )	Area ( $\text{cm}^2$ )	Sample
1000	5.58	0.602	13.1	0.706	417	0.10	54K_1th
1000	6.68	0.639	14.7	0.710	403	0.10	54K_2th
1000	7.52	0.730	13.5	0.762	494	0.10	54K_3th

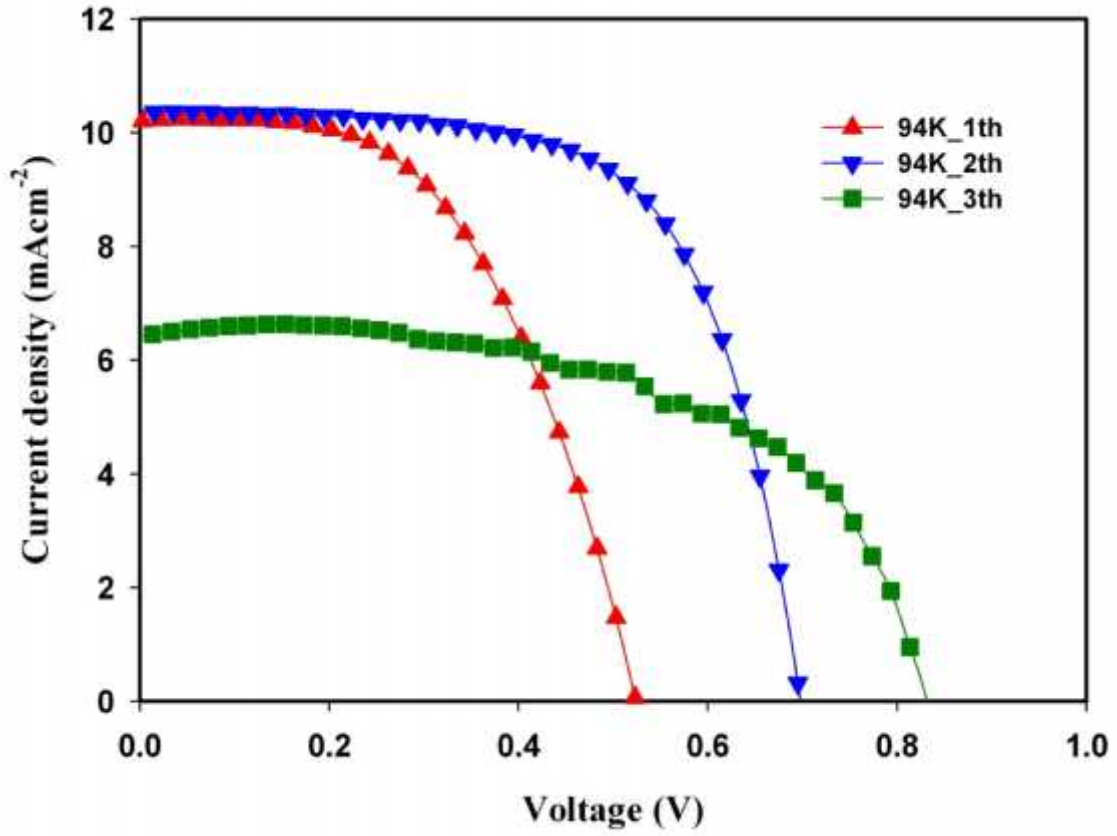
77K



**Table 4:** Dye sensitized solar cells parameters from J-V measurement of the provskite DSC with B3HT as HTL with 77000 g/mol molecular weights under AM1.5G irradiation.

Intensity (Wm <sup>-2</sup> )	Eff (%)	V <sub>oc</sub> (V)	J <sub>sc</sub> (mAcm <sup>-2</sup> )	FF	Ropt ( )	Area (cm <sup>2</sup> )	Sample
1000	5.44	0.621	13.6	0.644	391	0.10	77K_1th
1000	3.59	0.793	6.1	0.742	1045	0.10	77K_3th

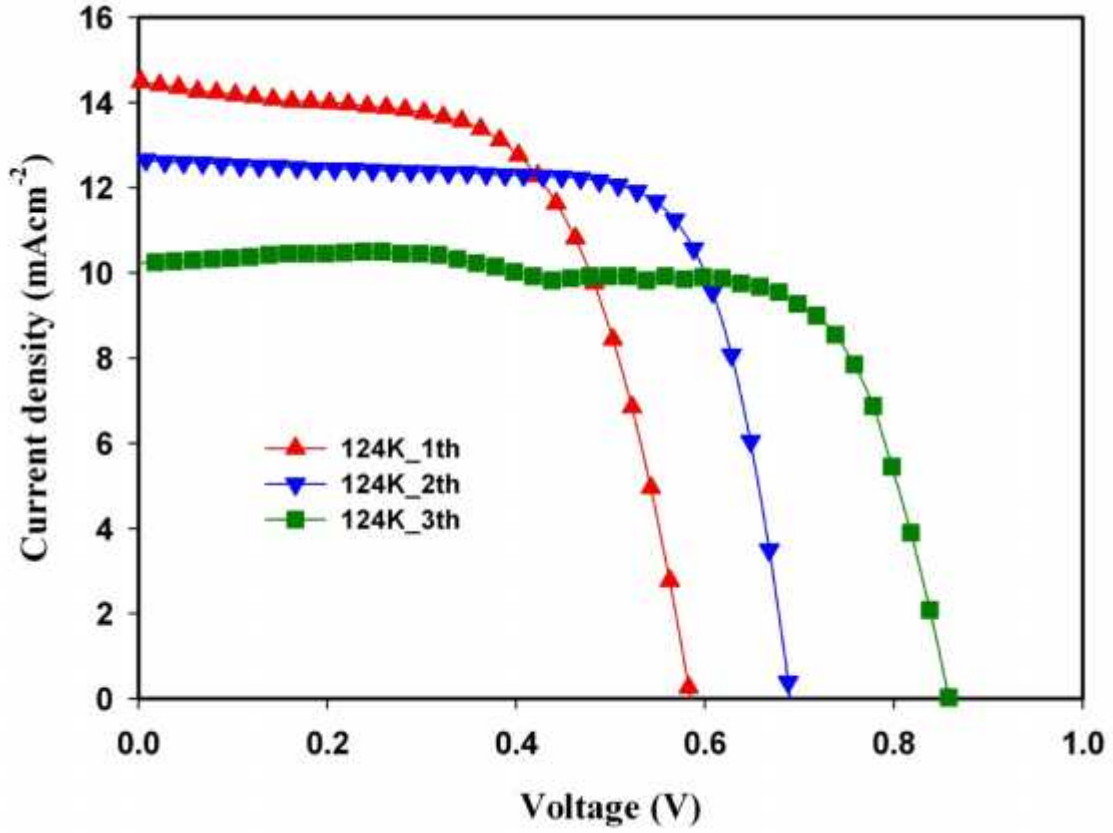
94K



**Table 5:** Dye sensitized solar cells parameters from J-V measurement of the provskite DSC with B3HT as HTL with 94000 g/mol molecular weights under AM1.5G irradiation.

Intensity ( $\text{Wm}^{-2}$ )	Eff (%)	$V_{oc}$ (V)	$J_{sc}$ ( $\text{mAcm}^{-2}$ )	FF	$R_{opt}$ ( $\Omega$ )	Area ( $\text{cm}^2$ )	Sample
1000	2.82	0.523	10.2	0.531	417	0.10	94K_1th
1000	4.71	0.695	10.3	0.655	607	0.10	94K_2th
1000	3.10	0.833	6.2	0.598	1216	0.10	94K_3th

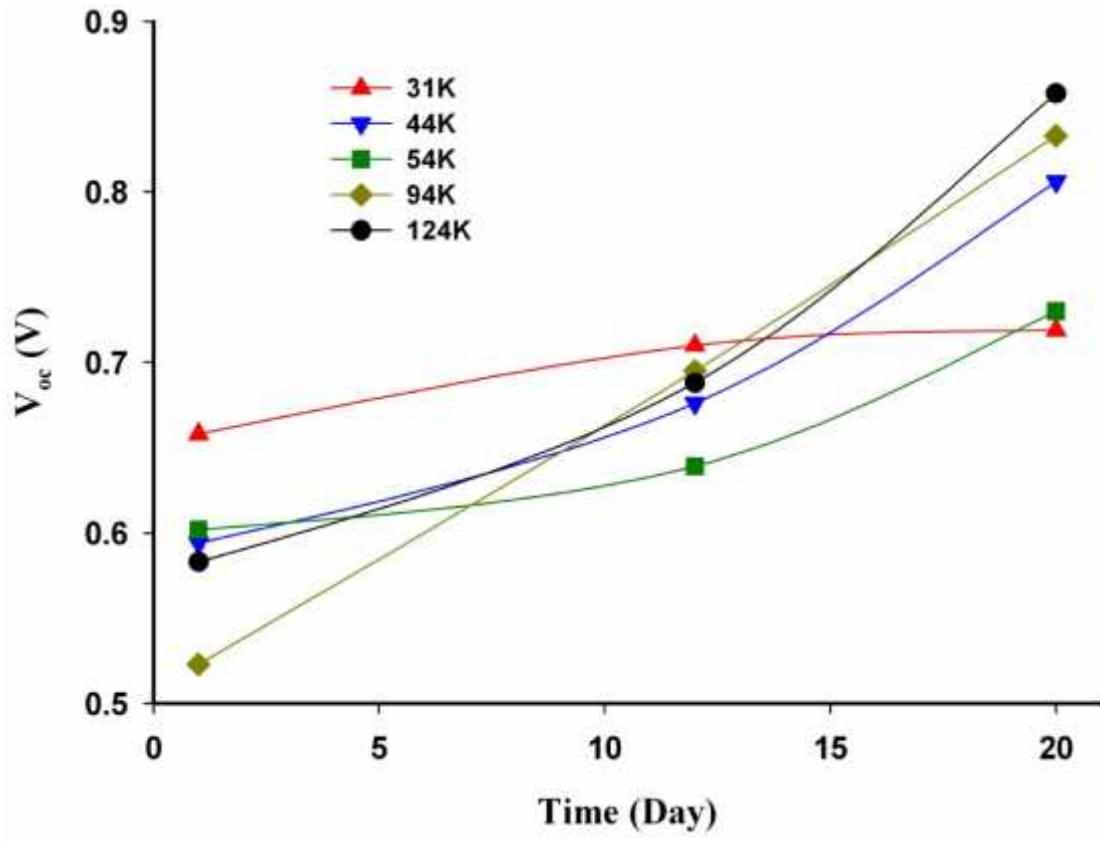
124K



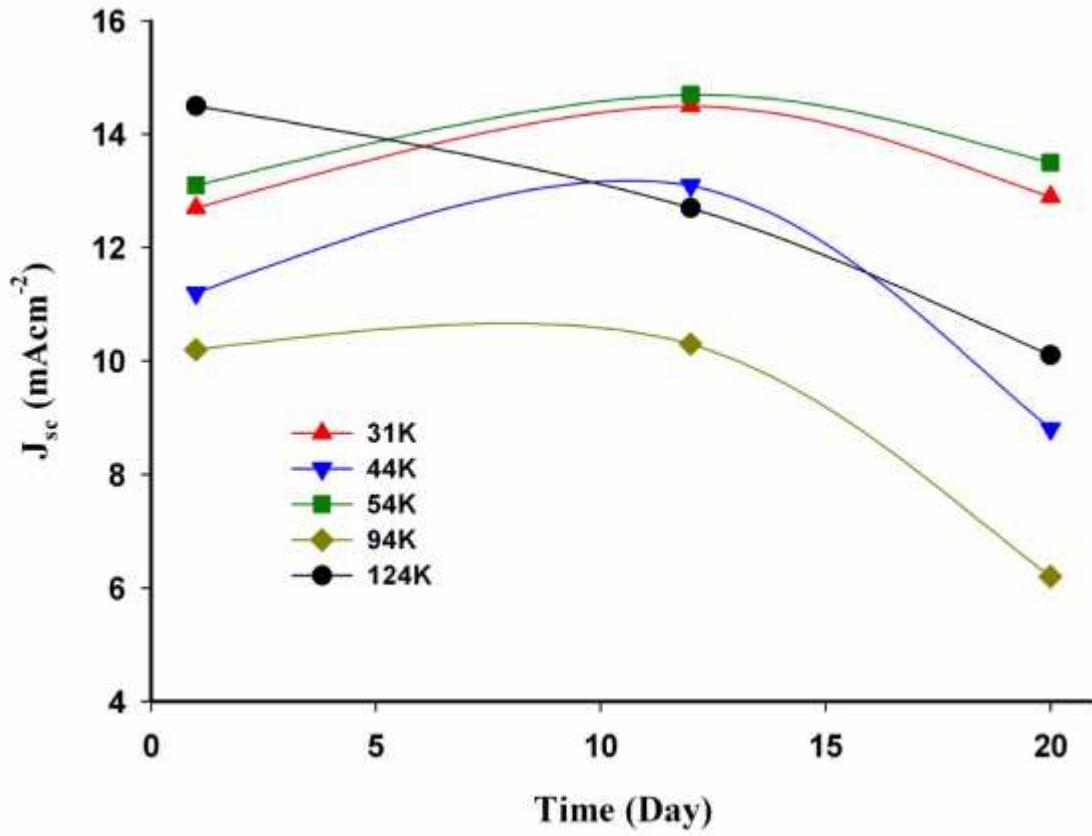
**Table 6:** Dye sensitized solar cells parameters from J-V measurement of the provskite DSC with B3HT as HTL with 124000 g/mol molecular weights under AM1.5G irradiation.

Intensity (Wm <sup>-2</sup> )	Eff (%)	V <sub>oc</sub> (V)	J <sub>sc</sub> (mAcm <sup>-2</sup> )	FF	R <sub>opt</sub> ( )	Area (cm <sup>2</sup> )	Sample
1000	5.19	0.583	14.5	0.613	344	0.10	124K_1th
1000	6.40	0.688	12.7	0.733	470	0.10	124K_2th
1000	6.47	0.858	10.1	0.750	752	0.10	124K_3th

Variation of Voc vs time

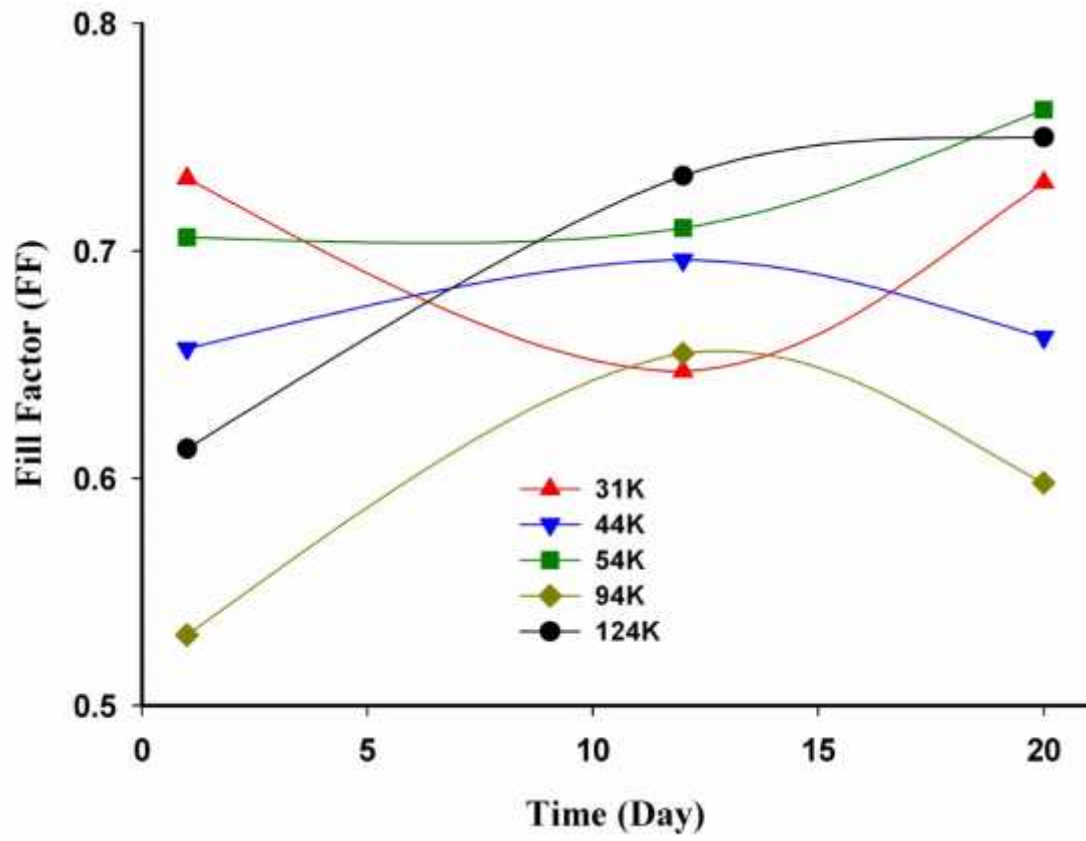


Variation of Jsc vs time





Variation of the fill factor vs time



Variation of the overall efficiency vs time

