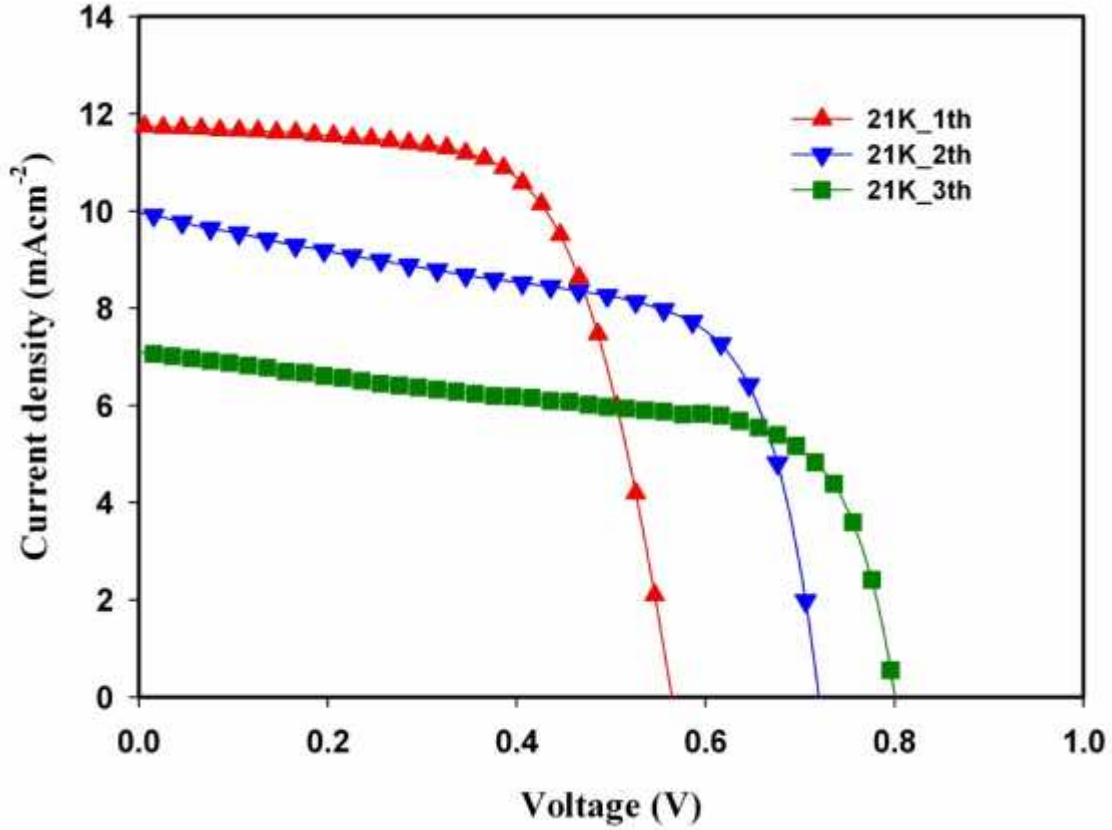


## Variation of P3HT All ssDSCs parameters with time

Two Step loading samples:

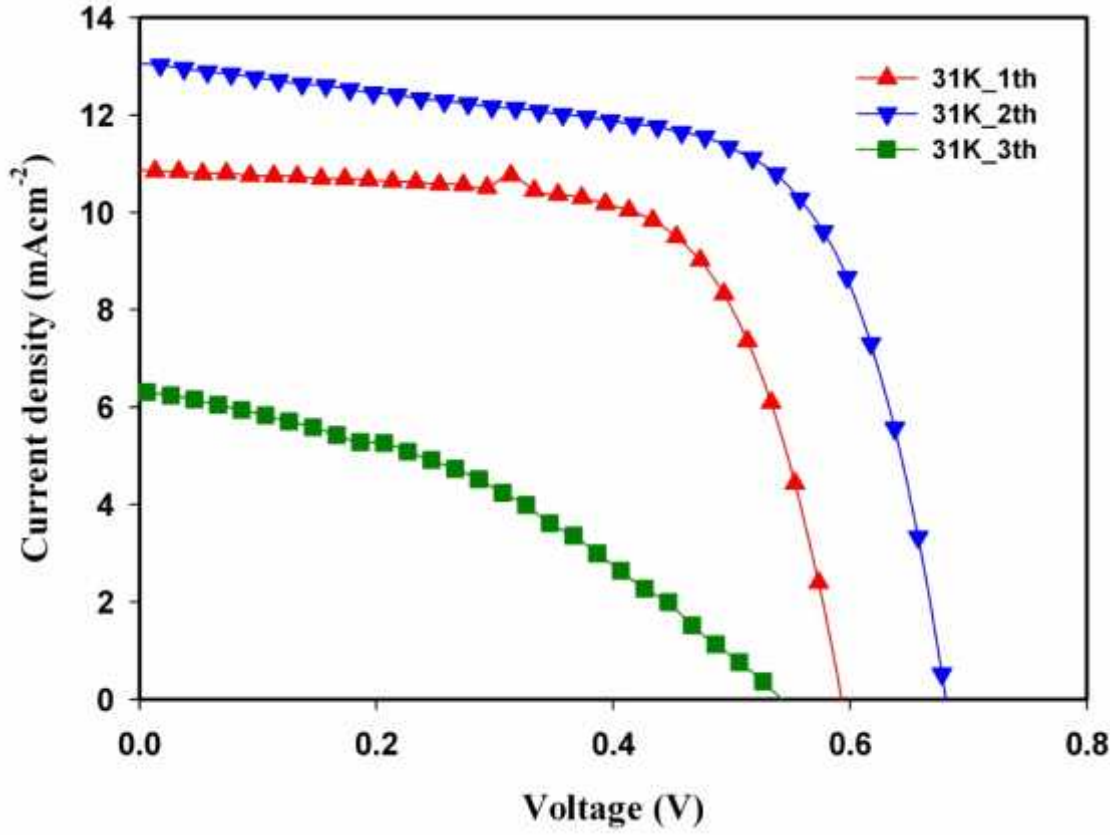
21K



**Table 1:** Dye sensitized solar cells parameters from J-V measurement of the provskite DSC with B3HT as HTL (two step) with 21000 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	4.32	0.566	11.8	0.649	420	0.10	21K_1th
1000	4.53	0.716	10.12	0.626	757	0.10	21K_2th
1000	3.65	0.796	7.2	0.639	1254	0.10	21K_3th

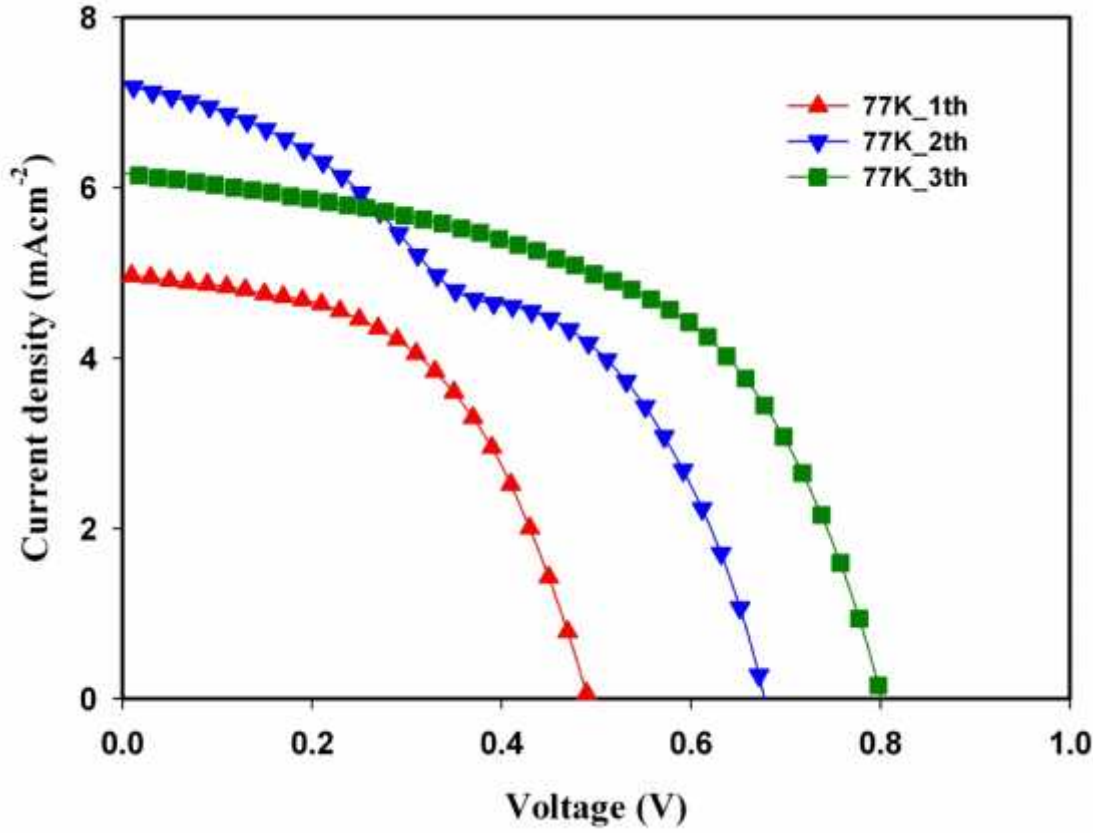
### 31K



**Table 2:** Dye sensitized solar cells parameters from J-V measurement of the provskite DSC with B3HT as HTL (two step) 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	R <sub>opt</sub> ( )	Area (cm <sup>2</sup> )	Sample
1000	4.31	0.593	10.9	0.668	477	0.10	31K_1th
1000	5.80	0.677	13.1	0.654	498	0.10	31K_2th
1000	1.30	0.546	6.4	0.373	818	0.10	31K_3th

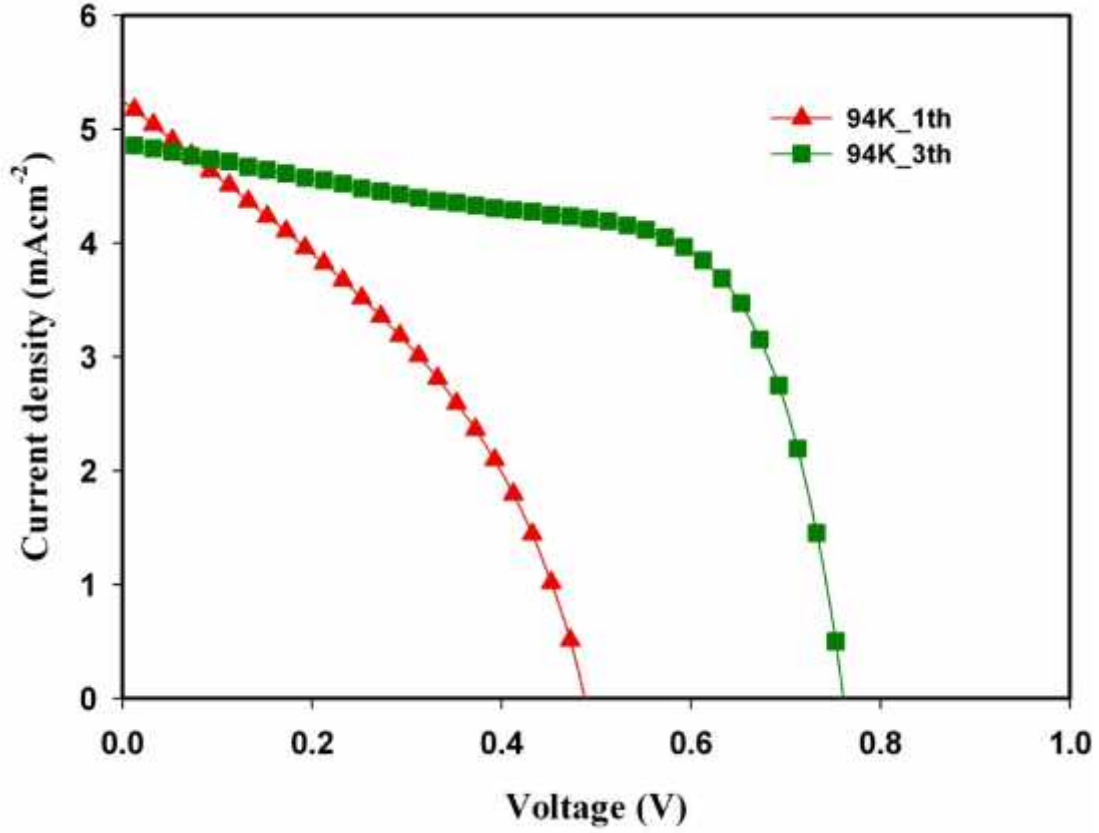
### 77K



**Table 3:** Dye sensitized solar cells parameters from J-V measurement of the provskite DSC with B3HT as HTL (two step) with 77000 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	1.27	0.490	5.02	0.515	859	0.10	77K_1th
1000	2.05	0.672	7.32	0.418	1180	0.10	77K_2th
1000	2.64	0.798	6.2	0.534	1353	0.10	77K_3th

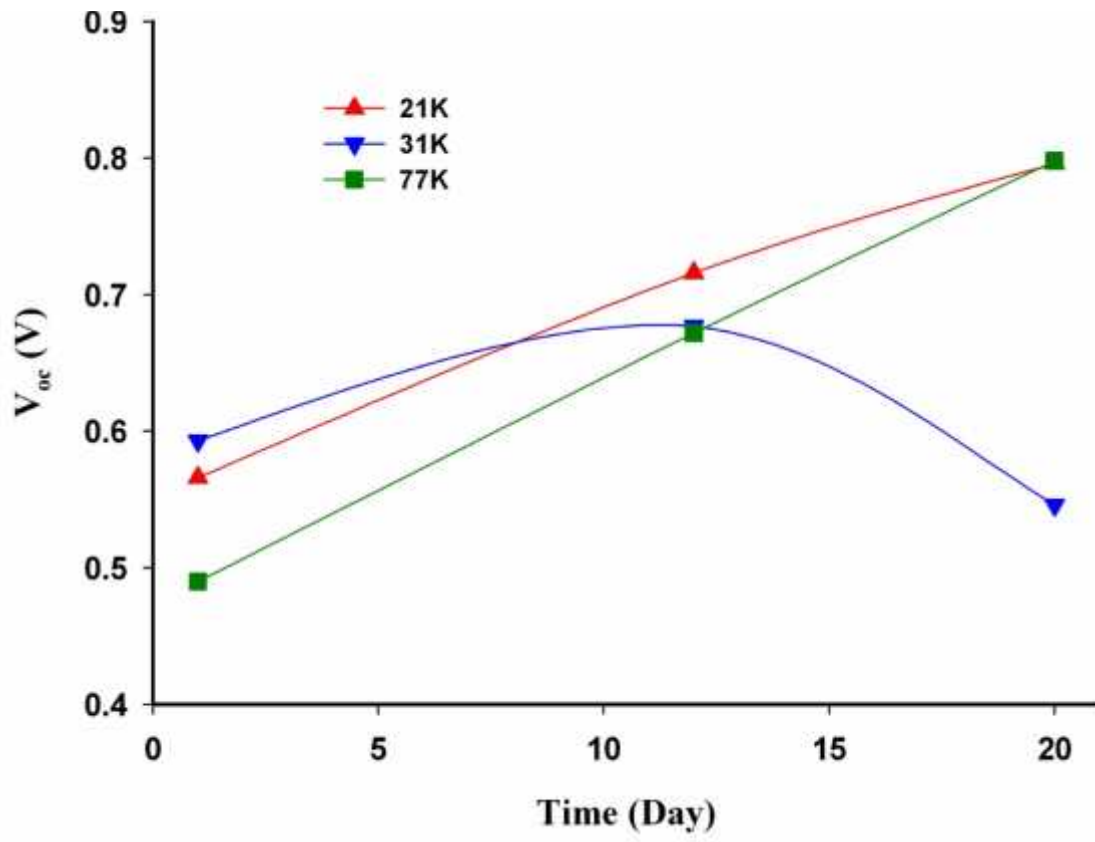
## 94K



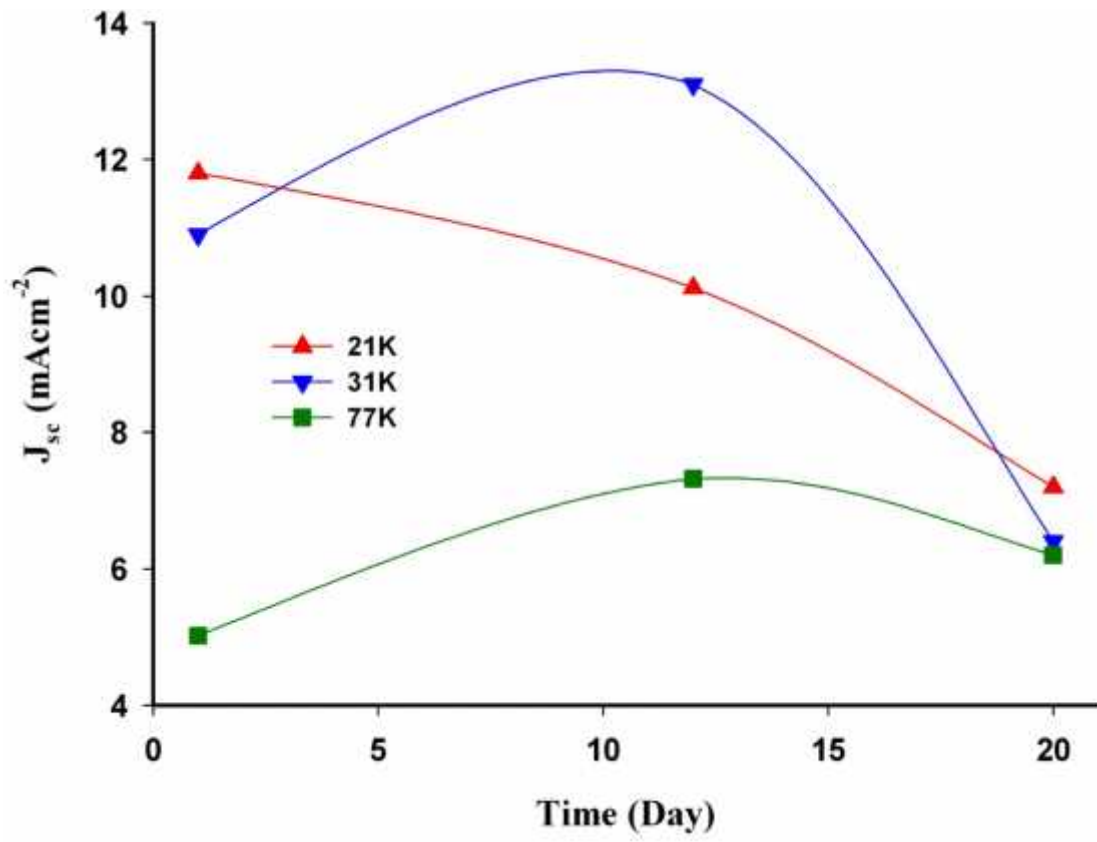
**Table 4:** Dye sensitized solar cells parameters from J-V measurement of the provskite DSC with B3HT as HTL (two step) with 94000 g/mol molecular weights under AM1.5G irradiation.

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	0.940	0.493	5.30	0.360	1040	0.10	94K_1th
1000	2.36	0.753	4.9	0.641	1593	0.10	94K_3th

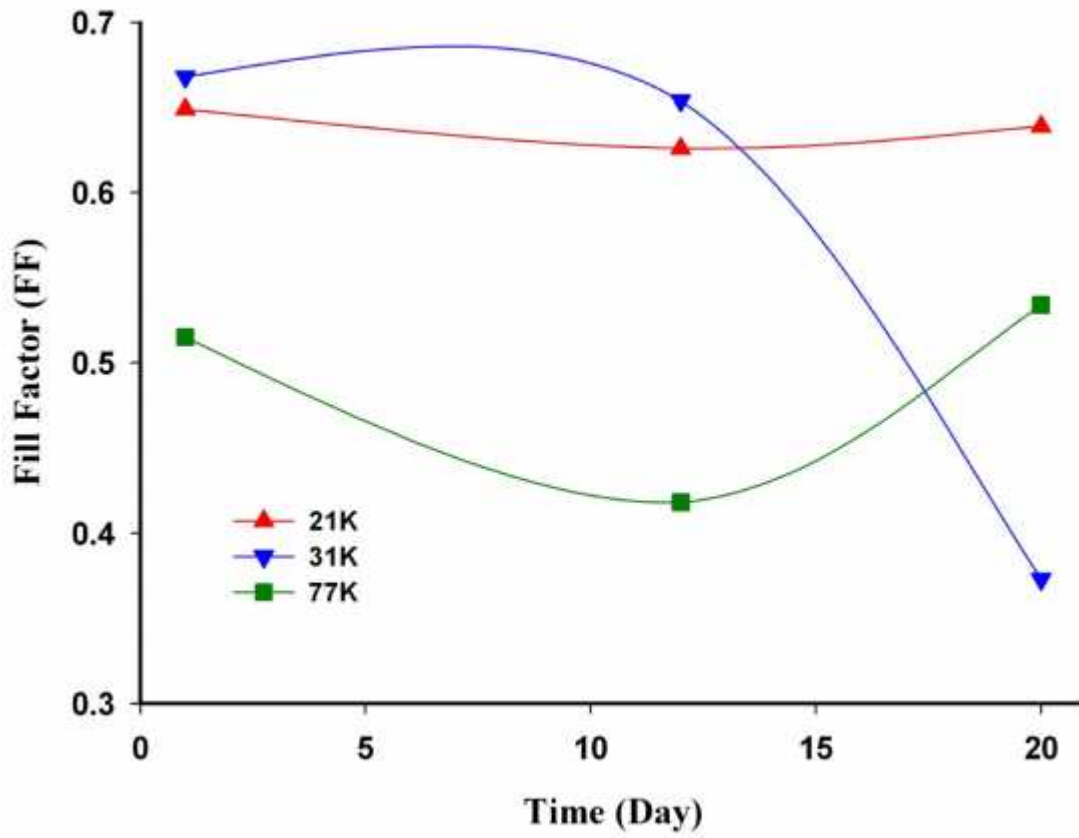
Variation of Voc vs time



Variation of  $J_{sc}$  vs time



Variation of the fill factor vs time



Variation of the overall efficiency vs time

