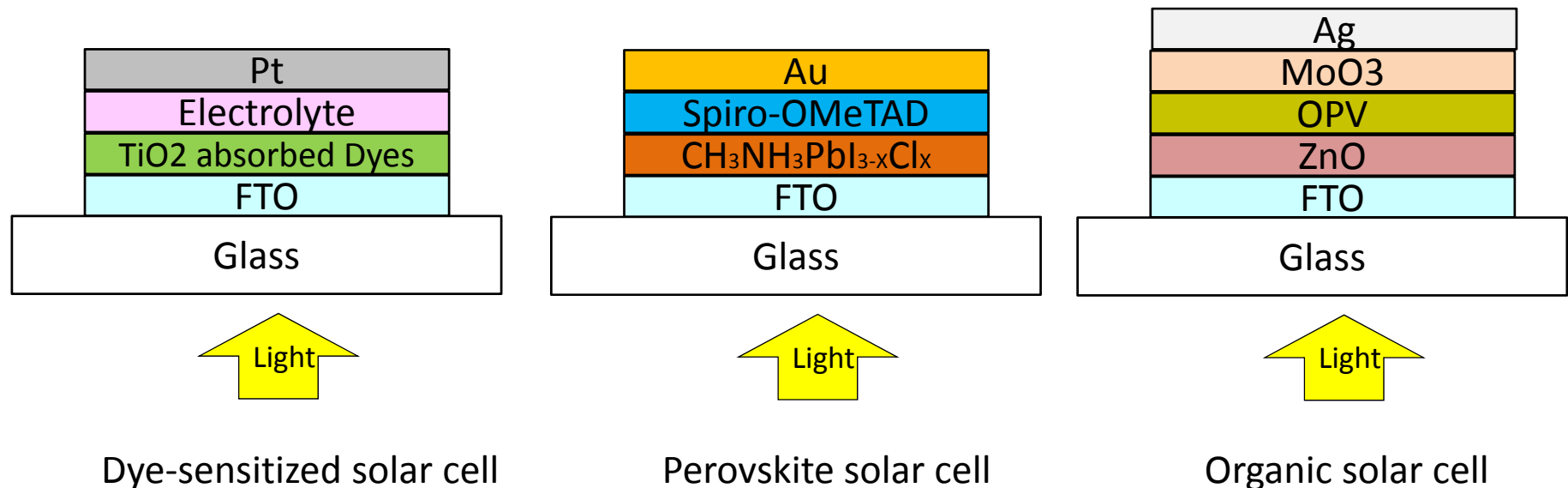


Patterned FTO substrate

Introduction:

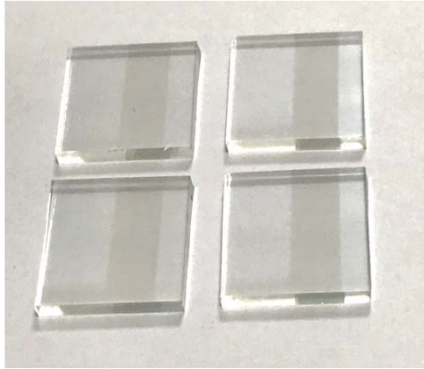
Fluorine-doped tin oxide (FTO) is a transparent conductive film, FTO can be usually used in a wide range of opto-electronic applications. FTO film has better thermal stability compared with ITO film. Meanwhile, the optical transmission of FTO film is high in the visible region. So, It is most suitable for the fabrication of thin-film photovoltaics (such as perovskite solar cell, dye-sensitized solar cell, organic solar cell), energy-saving windows, touch-screen displays, etc. Different FTO patterns and glass dimensions designed by customers are available now.

Thin-film photovoltaics application:



Patterned FTO substrate

Appearance:



Specification:

Item	Specification	Unit
Glass Thickness	2.2	mm
Glass Type	Soda lime glass	
FTO Thickness	200	nm
FTO Resistance	15	Ω/\square
FTO Roughness	< 12.5	nm
FTO work function	4.4 - 4.7	eV
FTO Transmission	83.5%	

FTO experimental data:

Organic solar cell: FTO/ZnO/OPV/MoO₃/Ag

No.	V _{oc} (V)	J _{sc} (mA/cm ²)	FF (%)	PCE (%)
# 1	0.8	18.22	65.59	9.56
# 2	0.8	18.73	64.35	9.64
# 3	0.8	18.56	64.7	9.62