

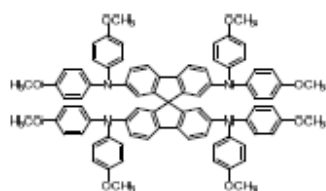
# Sprio-OMeTAD



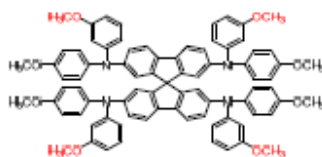
**I-MATERIAL INC**  
2290 Chemin St-Francois  
Dorval, Quebec  
H9P 1K2, Canada

Organic Nano Electronic (ONE=I) Materials for these who understand quality

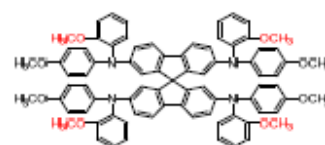
Isomers of Spiro-OMeTAD



*pp*-spiro-OMeTAD  
**HT0728**



*pm*-spiro-OMeTAD  
**HT0444**



*po*-spiro-OMeTAD  
**HT0227**

Reference: JACS, 2014, 136, 7837

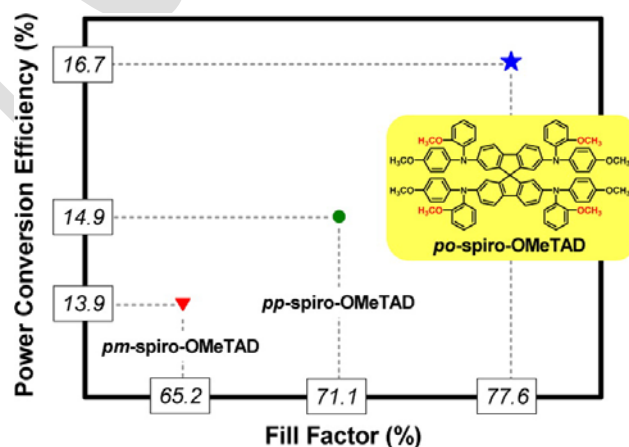
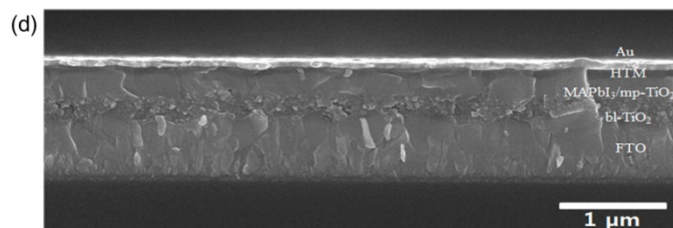
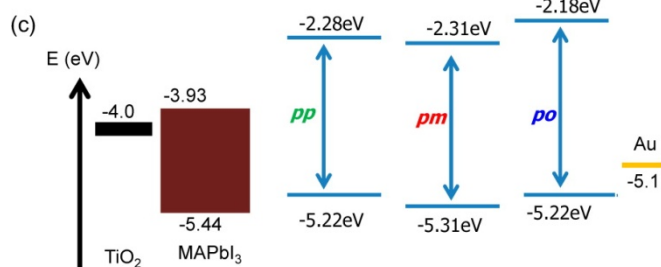
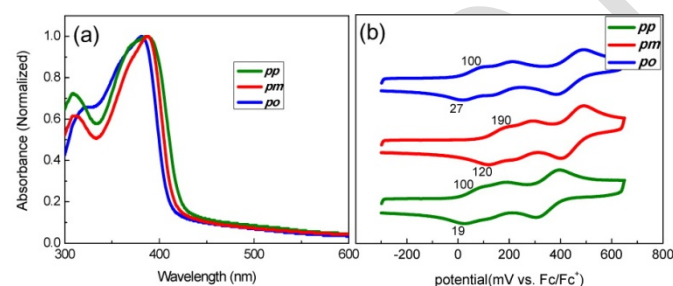


Table 1. Average Photovoltaic Parameters for Reverse- and Forward-Scanned MAPbI<sub>3</sub> Perovskite Solar Cells Using Commercial, *pm*-, *po*-, and *pp*-Spiro-OMeTAD as the HTM

| HTM        | $J_{sc}$ (mA/cm <sup>2</sup> ) | $V_{oc}$ (V) | FF   | PCE (%) | $R_s$ ( $\Omega$ ) |
|------------|--------------------------------|--------------|------|---------|--------------------|
| commercial | 20.4                           | 1.00         | 73.7 | 15.2    | 37.35              |
| <i>pm</i>  | 21.1                           | 1.01         | 65.2 | 13.9    | 64.42              |
| <i>po</i>  | 21.2                           | 1.02         | 77.6 | 16.7    | 32.96              |
| <i>pp</i>  | 20.7                           | 1.00         | 71.1 | 14.9    | 45.37              |