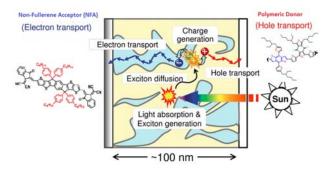
## -MATERIAL Organic Nano Electronic

## (Polymeric Donors for Non-Fullerene Acceptors)

## 1-Material Inc

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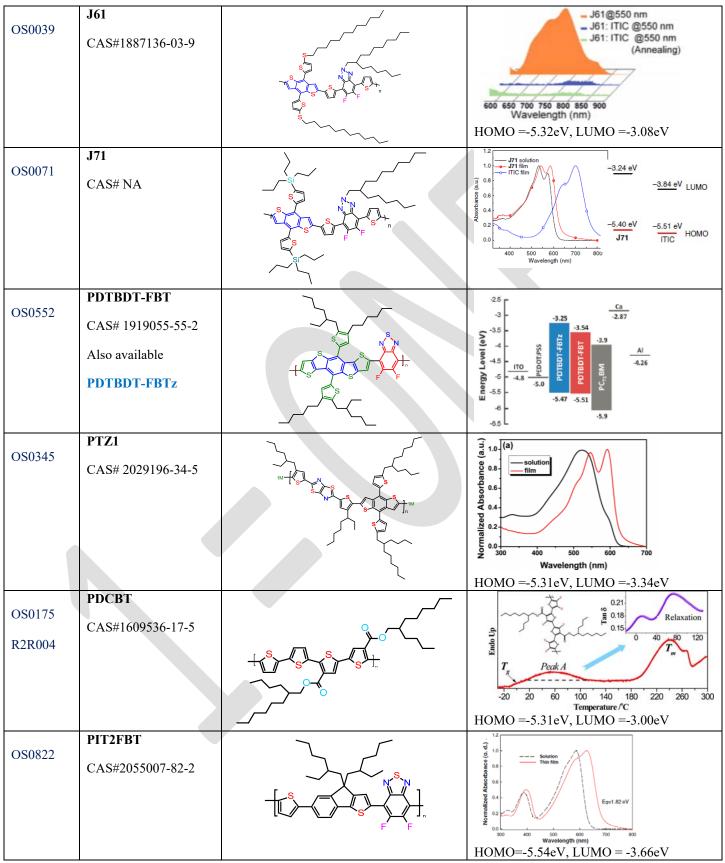
Organic Nano Electronic(ONE=1)materials for these who understand quality



Non-Fullerene Acceptors (NFAs) with potentials to overcome high cost and poor stability of fullerene-based organic photovoltaics(OPV) are intensively explored recently. To fully realize such potentials, polymeric donors are to be critically selected for (1) right energy matching-up, (2) efficient charge transfer, (2) good morphology (3) easy synthesis and purification, (4) and proper solubility for green solvents suitable for large area processing. Listed below are a few polymeric donors compatible with NFAs, which we selected from open publications for your suggestions and validations.

Listing No.	Common Name CAS No.	Structure	Remarks
OS0919	PDBT-T1 CAS#1701403-91-9		3.4 eV
OS0804	PBDB-T CAS#145929-80-4		DLUMO = 0.86 PBDB-T  -3.78  ITIC  -5.33 Anode DHOMO = 0.18
OS0037	J51 CAS# 1393529-03-7		1.0 (C)
OS0017	J52 CAS#1887136-01-7	S S S F F S n	J52 @ 550nm J52: ITIC@550 nm J52: ITIC@550 nm (Annealing)  600 650 700 750 800 850 900 Wavelength (nm)  HOMO =-5.21eV, LUMO =-2.99 eV

## (Polymeric Donors for Non-Fullerene Acceptors)



Other polymeric donors for non-fullerene acceptors may also be interested, please contact info@1-material.com for more information.