

PZ1: Polymeric NFA



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

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

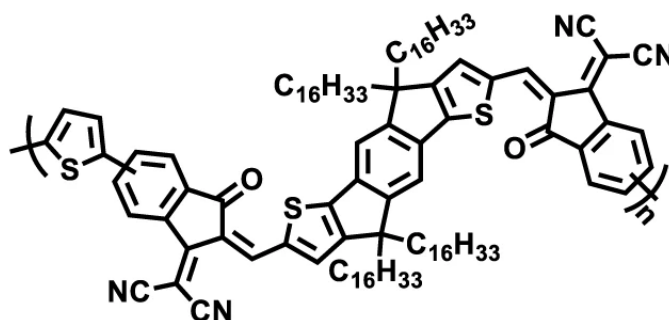
1M Material: PZ1/OS7651

Applications: Polymer acceptor for all-polymer solar cell, poly-NFA

CAS Number: 2177247-65-1

Chemical Name: Poly[(4,4,9,9-tetrahexadecyl-4,9-dihydro-*s*-indaceno[1,2-*b*:5,6-*b'*]dithiophene-2,7-diyl)methylidene[1-(dicyanomethylene)-1,3-dihydro-2-oxo-2*H*-inden-yl-2-ylidene]-2,5-thiophenediyl[1-(dicyanomethylene)-1,3-dihydro-2-oxo-2*H*-inden-yl-2-ylidene]]

Polymer Structure:



Specification:

Appearance: Deep greenish brown solid

Molecular weight: Mw ~50K, PDI ~2.5 (Adjustable to your specific needs)

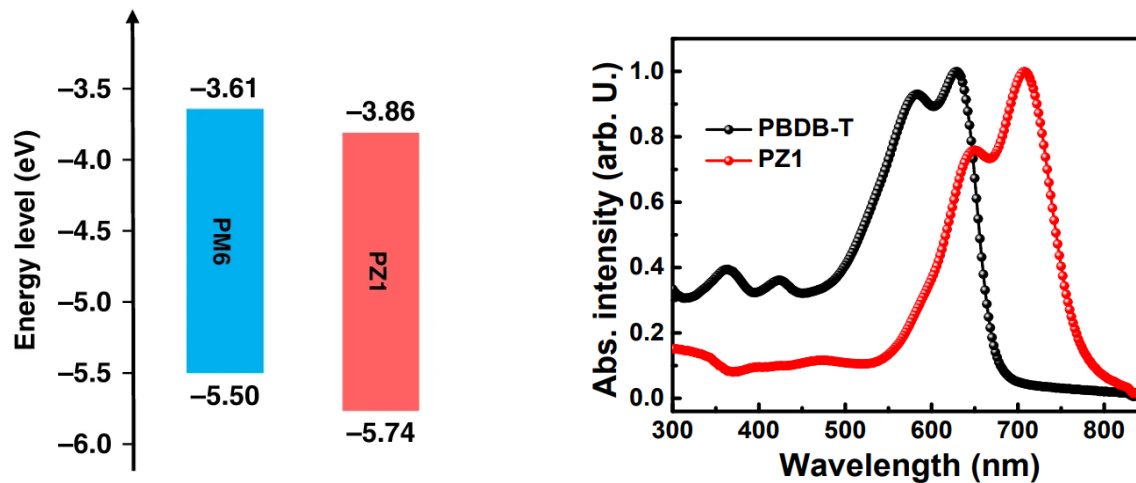
Reference: Nature Communications, **11(1)**, 1218, 2020

Science China: Chemistry, **62(12)**, 1619, 2019

Angewandte Chemie, International Edition, **56(43)**, 13503, 2017

Reference Data Selection:

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PZ1 possesses broad absorption with a low band gap of 1.55 eV and high absorption coefficient ($1.3 \times 10^5 \text{ cm}^{-1}$). The all-PSCs with the wide-band-gap polymer PBDB-T as donor and **PZ1** as acceptor showed a record-high PCE of 9.19 % for the all-PSCs. (<https://doi.org/10.1002/anie.201707678>)