



Tailor-Make (ONE=1)
1-Material for your research

OPV (BHJ, DSSC)
OLED / PLED
OTFT / ORGANIC SENSOR
PRINTING ELECTRONICS

A chemical is not a material until its function is reproducibly performed

www.1-Material.com

π -electron Functional MATERIALS

Delocalized electrons in π -functional materials are similar to the electrons in valence bands of silicon and are of semiconducting characteristics. Due to their organic nature, they offer synthetic chemists a variety of opportunities to manipulate. We fine-tune these structures for effective conjugated length, HOMO/LUMO energy levels, absorption and emission spectra, coating/printing-ability and constant quality according to your needs, confidentially & reliably.

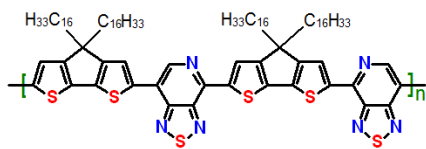
ONLY for laboratory R&D; NOT for commercial applications

NEW

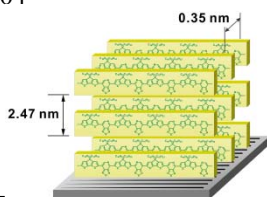
PCDTPT/OS0474

Nano Lett., 2014, 14, 2704

$\mu = 21.3(\text{cm}^2\text{V}^{-1}\text{s}^{-1}) @ 80 \mu\text{m}$
 $\mu = 36.3(\text{cm}^2\text{V}^{-1}\text{s}^{-1}) @ 140 \mu\text{m}$

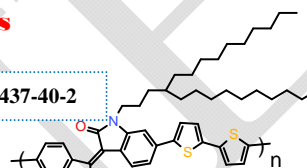


CAS#1334407-47-4



Substrate

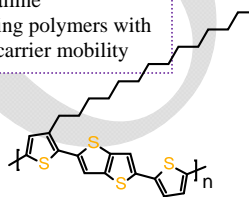
CAS#1421437-40-2



IIDD-C3/OS0402

Adv. Mater., 2012, 24, 6457

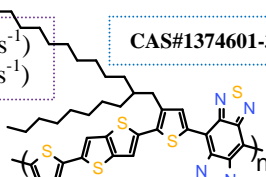
Liquid-crystalline semiconducting polymers with high charge-carrier mobility



CAS#888491-19-8

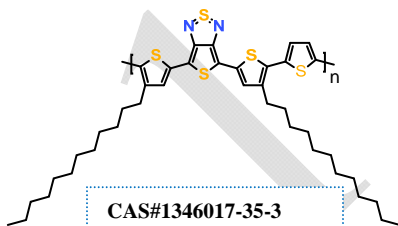
$\mu_h = 1.0(\text{cm}^2\text{V}^{-1}\text{s}^{-1})$
 $\mu_e = 0.7(\text{cm}^2\text{V}^{-1}\text{s}^{-1})$

CAS#1374601-36-1



PBBTTT / OS0361

Adv. Mater., 2012, 24, 2186



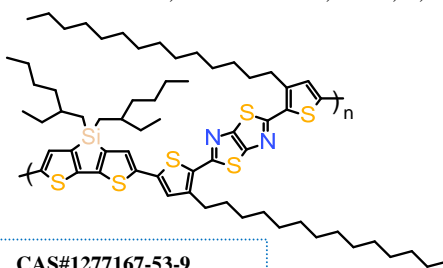
CAS#1346017-35-3

High-detectivity polymer photodetectors with spectral response from 300 nm to 1450 nm

PDDTT/OS0353

Science, 2009, 325(5948), 1665

PBTTT-14/OS0198, Nature Mater, 2006, 5, 329



CAS#1277167-53-9

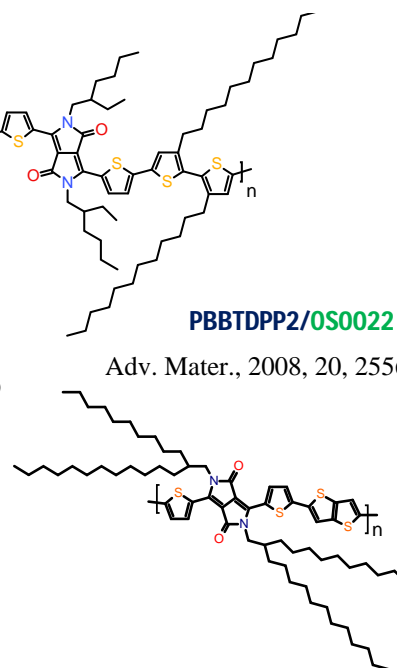
BHJ solar cells with active layers > 200 nm and fill factors > 60%

ZT115(KP115)/OS0115

APL, 2011, 98(4), 043301

PBBTDP2/OS0022

Adv. Mater., 2008, 20, 2556



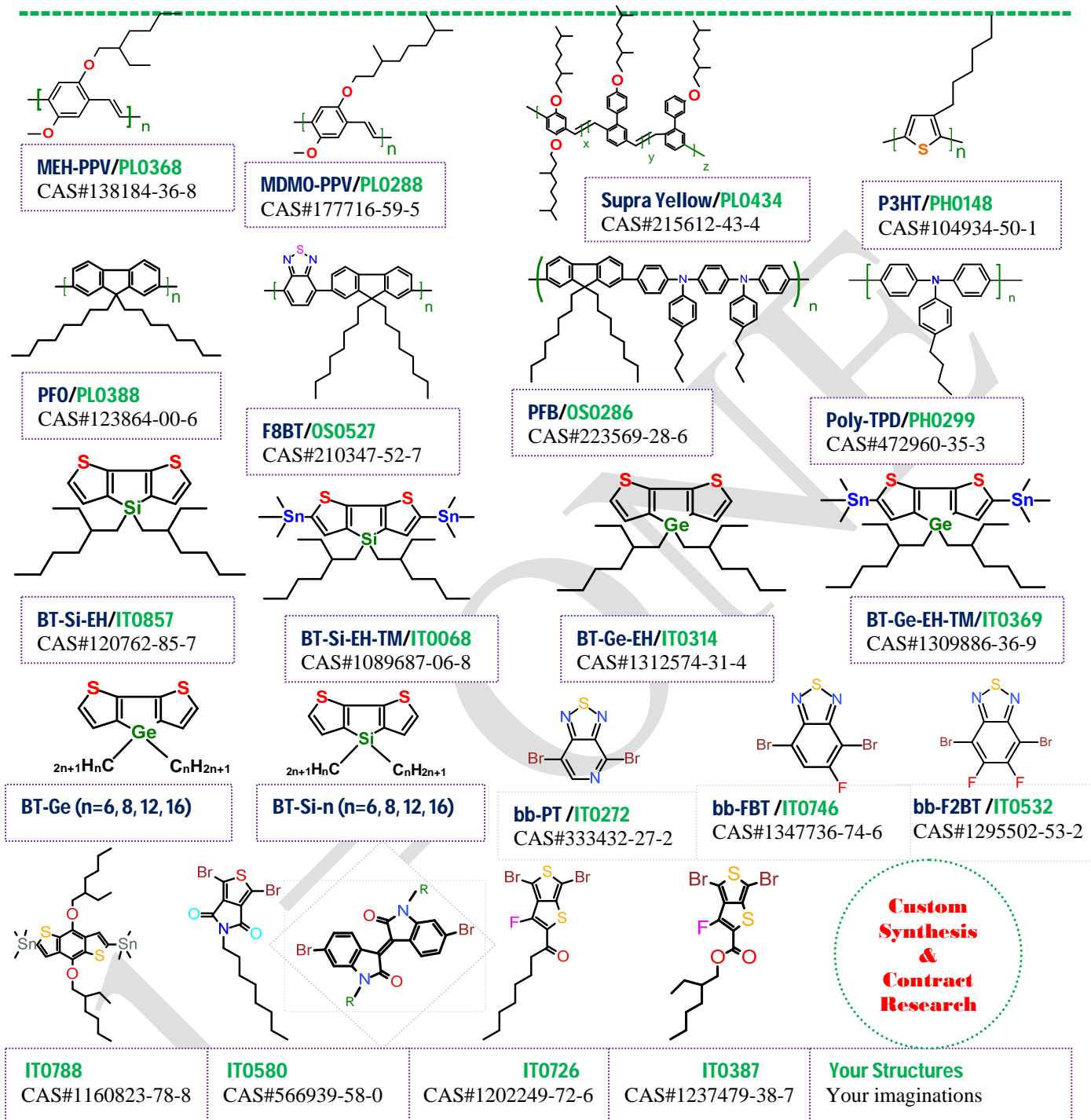
Efficient small bandgap polymer solar cells with high fill factors for 300 nm thick films

DT-PDPP2-TT/OS0300

Adv. Mater. 2013, 23,3182



Organic Nano Electronic (ONE = 1) Materials for those who understand quality



1-Material is committed to providing the materials according to the customer's needs. A few of the materials we promote here may solely be offered to certain customers for their specific needs in their research and development projects on a custom synthesis or on a contract research basis. For the conditions and terms of our offer and service, please consult the disclaimer in our website: www.1-material.com.

Design with your imagination & build upon our experience