



PCE > 20%

1-Material Inc

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Dorval, Quebec
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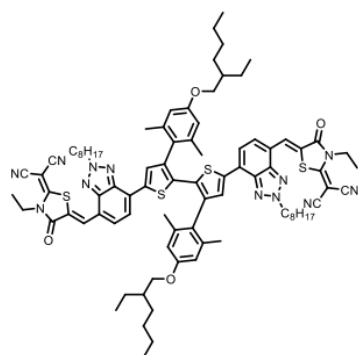
Organic Nano Electronic(ONE=1) Materials for these who understand

Technical Data Sheet

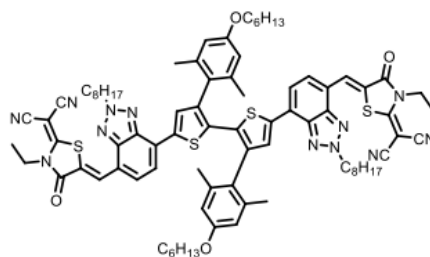
NFA: GS-ISO, GS-OC6, GS-OEH; Custom made for laboratory use

Remark: Tandem OPV, PCE>20%

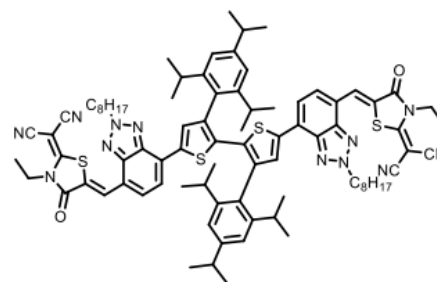
Chemical Structure:



GS-OEH



GS-OC6



GS-ISO

Organic Nano Electronic(ONE=1) Materials, reproducibility matters	
Appearance	Dark solid
Purity	99+%
Availability	On demand
Reference	https://doi.org/10.1039/D0QM00633E

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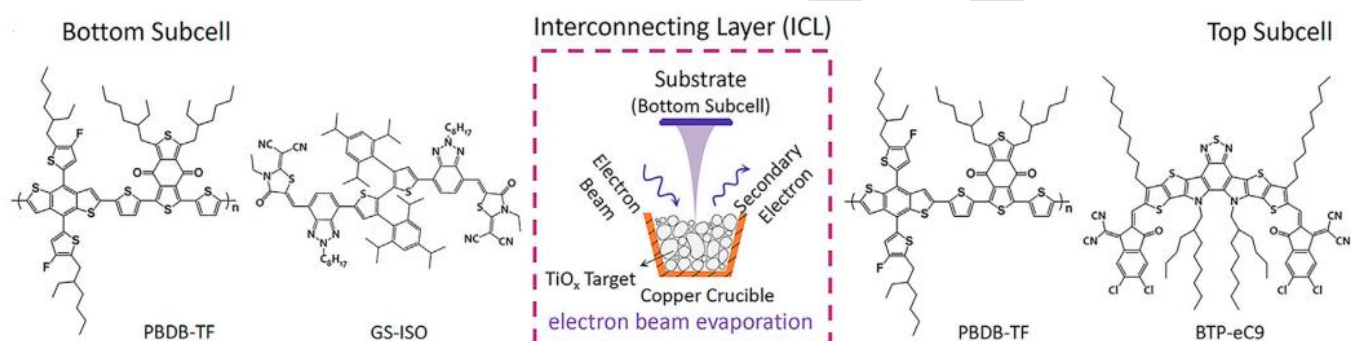
References Data Selection

Table Photovoltaic performance of the tandem OSCs under AM 1.5G, 100 mW cm⁻²

ICL	V _{oc} (V)	J _{sc} (mA/cm ²)	FF (%)	PCE (%) ^a
TiO _x QDs/PEDOT:PSS	1.49 (1.49 ± 0.01)	11.34 (10.71 ± 0.54)	47.94 (48.01 ± 0.88)	8.10 (7.63 ± 0.35)
e-TiO _{1.62} /PEDOT:PSS	1.89 (1.88 ± 0.01)	13.24 (13.37 ± 0.19)	72.09 (70.80 ± 0.56)	18.04 (17.82 ± 0.18)
e-TiO _{1.76} /PEDOT:PSS	2.01 (2.00 ± 0.01)	13.14 (13.24 ± 0.27)	76.75 (75.47 ± 1.06)	20.27 (20.00 ± 0.35)
e-TiO _{1.89} /PEDOT:PSS	1.96 (1.95 ± 0.01)	11.28 (11.66 ± 0.36)	60.75 (58.49 ± 1.82)	13.43 (13.30 ± 0.11)
e-TiO _{1.76} /PEDOT:PSS ^b	2.019	12.97	76.3	20.0

^aThe photovoltaic parameters of the best OSC. The average parameters and standard deviations of 10 independent cells are shown in parentheses, respectively.

^bThe results certified by NIM.



Other Selected Materials

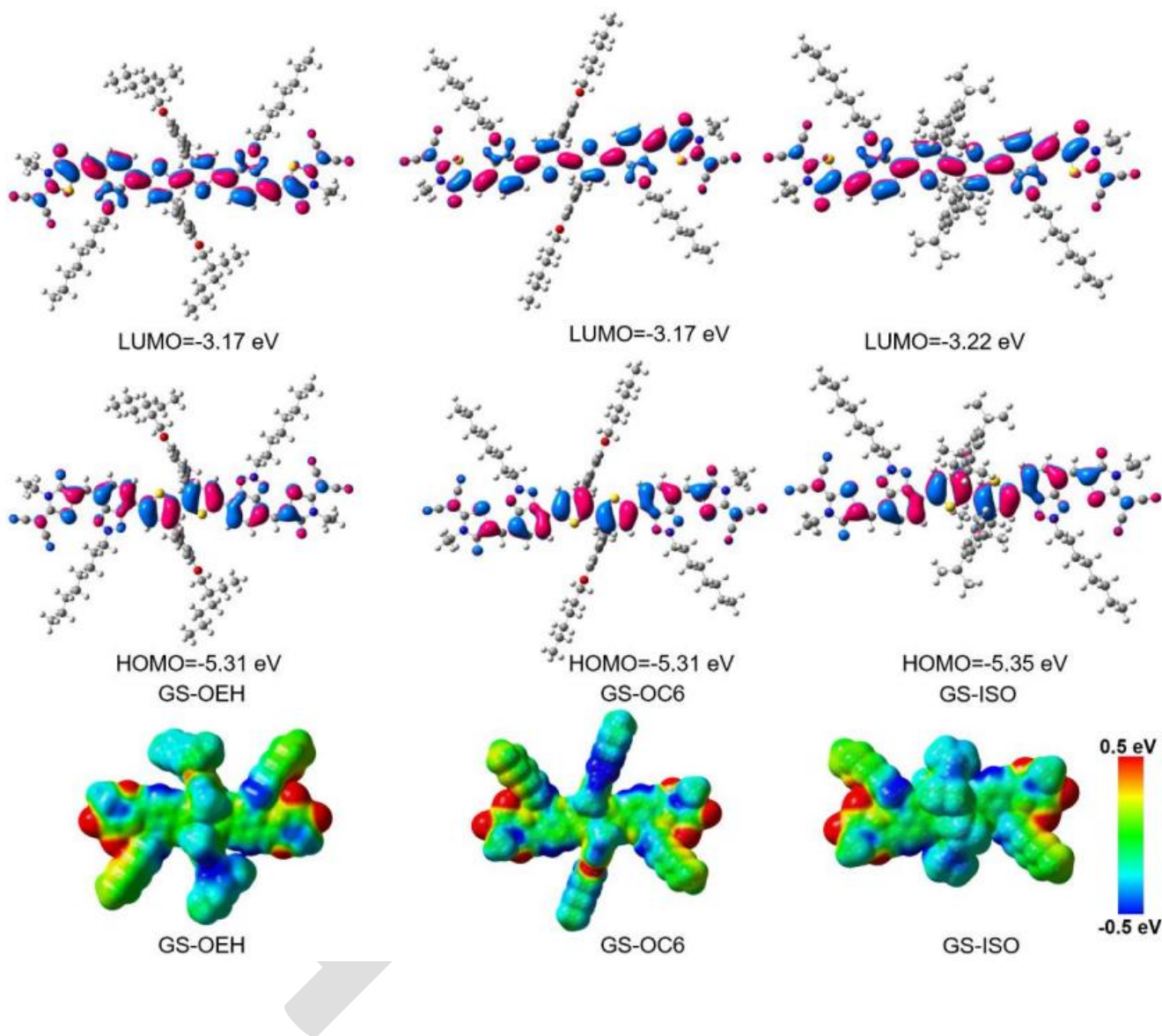
Common name	1M code	CAS No.
eC9	BTP-eC9	2598965-39-8
PM6, PBDB-T-2F, PBDB-TF	OS0135, PCE135	1802013-83-7
PFN, PFN-P1	OS0743, PFN-P1	673474-74-3
PDINN	CIM0011, BDMAPAP-PDI	1020180-01-1
PDINO, PDI-NO	OS0861	1558023-86-1

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DOI: 10.1002/adma.202108090

A High-Performance Nonfused Wide-Bandgap Acceptor for Versatile Photovoltaic Applications



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