

LIST OF ABBREVIATION

^{13}C -NMR - carbon nuclear magnetic resonance spectroscopy

^1H -NMR - proton nuclear magnetic resonance spectroscopy

A - electron acceptor

AFM - Atomic Force Microscopy

CB - conduction band

CDCl_3 - Deuterated Chloroform

CELIV - charge extraction by linearly increasing voltage

CT - charge transfer

D - electron donor

DI SCLC - dark injection space charge limited current

DUT - device under test

E_B - exciton binding

ECC - Effective Conjugation Coordinate

EDTA - Ethylenediaminetetraacetic acid

EPR - Electron Paramagnetic Resonance

EQE - External Quantum Efficiency

FF - Fill Factor

HOMO - Highest Occupied Molecular Orbital

iCT - Intrachain Charge Transfer

IRAV: Activated Infrared Vibrations

ISC - Intersystem crossing

I_{sc} - Short circuit current

ITO - Indium Tin Oxide

LBG - Low bandgap

LBG - low band-gap

LED - Light emitting diode

LEPR - Light-induced EPR

LUMO - Lowest Unoccupied Molecular Orbital

MIM - Metal Insulator Metal

o-DCB - *ortho*-DiChlorobenzene

OPV - Organic Photovoltaic
P3HT - poly(3-hexylthiophene)
P3HT - Poly(3-hexylthiophene)
PA - Polyacetylene
PAT - poly(3-alkylthiophene)
pcAFM - photoconductive AFM
PCE - Power Conversion Efficiency
PEDOT:PSS - poly(3,4-ethylenedioxythiophene): poly(styrenesulfonate)
PET - polyethylene
PF - poly(fluorene)
PFO - PolyFluorene
PPP - poly(*p*phenylene)
PPV - poly(*p*-phenylene vinylene)
PPV - poly(*p*-phenylenevinylene)
PPy - poly(pyrrole)
PSC - Polymer solar cell
PT - poly(thiophene)
SCL - Space Charge Limited
SMU - source-measure unit
TCO - Transparent Oxide Conductive
TMS - Tetramethylsilane
tr-EL - transient electroluminescence
TR-EPR - Time Resolved EPR
VB - valence band
Voc - Open circuit voltage