LIST OF SYMBOLS

Symbol	Details	Chapter (s) where used
ε	Dielectric Constants of a Material	1
$(P)_n$	Polymer	1
E_g	Energy Band Gap	1
Φ	Work Function of a Material	1
I_{DS}	Drain to Source Current	1-7
V_{DS}	Drain to Source Voltage	1-7
V_{GS}	Gate to Source Voltage	1-7
L	Channel Length	1, 3-7
W	Channel Width	1, 3-7
Cox	Capacitance Per Unit Area of the Insulating Layer	1, 3-7
V_{TH}	Threshold Voltage	1, 3-7
μ_{sat}	Field-Effect Carrier Mobility in Saturation Region	1-7
g_m	Transconductance	1-7
SS	Sub-Threshold Slope	1-7
V_{bi}	Build In Potential	1
E_F	Fermi Energy level	1
Λ	Wavelength	1
h	Plank Constant	1
υ	Frequency	1
$I_{ON/OFF}$	ON/OFF current ratio	1-7

LIST OF ABBREVIATIONS

Symbol	Details	Chapter (s) where used
OFET	Organic Field Effect Transistor	1-7
OLED	Organic Light Emitting Diode	1,6
HOMO	Highest Occupied Molecular Orbital	1,6
LUMO	Highest Unoccupied Molecular Orbital	1,6
IE	Ionization Energy	1
EA	Electron Affinity	1
OSCs	Organic Semiconductors	1-7
RR-P3HT	Regioregular poly-3-hexylthiophene	1-7
AFM	Atomic Force Microscopy	1-7
–OH group	Hydroxyl Group	1,2,6
CNTs	Carbon Nanotubes	4
OTS	Octyltrichlorosilane	1,2,4
p^{+}-Si	Heavily p-Doped Silicon	1-7
TCNQ	7,7,8,8 tetracyanoquinodimethane	1,2,6