

## LIST OF SYMBOLS AND ABBREVIATIONS

2A4PNN	-	2-amino-4-picolinium nitrophenolate nitrophenol
$\sigma_{ac}$	-	ac conductivity
AN	-	Anthracene
ARP	-	Applied Research and Photonics
$p$	-	Applied load
arb. unit	-	Arbitrary unit
$A_{crys}$	-	Area of the crystal touching the electrode
$A_{air}$	-	Area of the electrode
a. u.	-	Atomic unit
$d$	-	Average diagonal length
N	-	Avogadro's number
B3LYP	-	Becke-3-Lee-Yang-Parr
BNA	-	N-benzyl-2-methyl-4-nitroaniline
BD	-	Bond orbital
BFDH	-	Bravais, Friedel, Donnay and Harker
$C_{air}$	-	Capacitance of air
$C_{crys}$	-	Capacitance of the crystal
$^{13}C$	-	Carbon
CHNS	-	Carbon Hydrogen Nitrogen Sulphur
$\eta$	-	Chemical hardness
$\mu_{c,p}$	-	Chemical potential
CIF	-	Crystallographic Information data
CCDC	-	Cambridge Crystallographic Data Centre
$\lambda_{max}$	-	Cut-off wavelength
DAST	-	4-dimethyl amino-N-methyl-4 stilbazoliumtosylate
DSC	-	Differential Scanning Calorimetry

DFT	-	Density Functional Theory
DFG	-	Difference Frequency Generation
EOM	-	Electro-Optic Modulation
$C_{11}$	-	Elastic Stiffness Constants
FTIR	-	Fourier Transform Infrared Spectroscopy
FT-Raman	-	Fourier Transform-Raman Spectroscopy
FMO	-	Frontier Molecular Orbital
HRXRD	-	High Resolution X-Ray Diffraction
HOMO	-	Highest Occupied Molecular Orbital
LUMO	-	Lowest Unoccupied Molecular Orbital
MSZW	-	Metastable Zone Width
NDE	-	Non-Destructive Evaluation
NMR	-	Nuclear Magnetic Resonance Spectroscopy
4NP	-	4-nitrophenol
NLO	-	Nonlinear Optics
OR	-	Optical Rectification
OSCs	-	Organic Semiconductor Single Crystals
OLEDs	-	Organic Light Emitting Diodes
OFETs	-	Organic Field Effect Transistors
OTFTs	-	Organic Thin Film Transistors
PVT	-	Physical Vapour Transport
PAHs	-	Polycyclic Aromatic Hydrocarbons
PL	-	Photoluminescence Studies
SHG	-	Second Harmonic Generation
THz	-	Terahertz
THG	-	Third Harmonic Generation
TG/DTA	-	Thermogravimetry/Differential Thermal Analysis
Ti:Sa	-	Titanium:Sapphire
$H_v$	-	Vickers Hardness

n	-	Work Hardening Coefficient
XRD	-	X-Ray Diffraction