

List of Abbreviations

<i>Abbreviation</i>	<i>Full form</i>
1-D	One dimensional
AFM	Atomic force microscopy
BE	Bottom electrode
BFO	Bismuth ferrite
CBRAM	Conducting bridge random access memory
CVD	Chemical vapor deposition
CB	Conduction band
CBD	Chemical bath deposition
CBM	Conduction band minimum
CF	Conducting filament
C-V	Capacitance-Voltage
CPE	Constant phase element
DI	Deionized
DLE	Defect level emission
EDX	Energy dispersive X-ray spectroscopy
FET	Field effect transistor
FTO	Fluorine doped tin oxide
FWHM	Full width at half maximum
HRS	High resistance state
HMTA	Hexamethylenetetramine
I-V	Current-Voltage
ICDD	International Center for Diffraction Data
LED	Light emitting diode
LRS	Low resistance state
MOS	Metal oxide semiconductor
NBE	Near band edge emission
PL	Photoluminescence
PLD	Pulsed laser deposition
RF	Radio frequency
RRAM	Resistive random access memory
Si	Crystalline silicon
SCLC	Space charge limited conduction
SEM	Scanning electron microscopy
TE	Top electrode
UV	Ultra violet
VB	Valence band
VBM	Valence Band minimum
VCM	Valence change memory
VLS	Vapor liquid solid
XRD	X-ray diffraction
ZnO	Zinc Oxide

