

## List of Abbreviations

*Abbreviation Full form*

GHG	Green House Gas
GT	Giga Ton
IEA	International Energy Agency
WHO	World Health Organization
TESS	Thermal Energy Storage System
SHTESS	Sensible heat thermal energy storage system
LHTESS	Latent heat thermal energy storage system
PCM	Phase change material
TCTESS	Thermochemical Thermal Energy Storage System
CDESS	Concentration Difference Energy Storage System
HTF	Heat Transfer Fluid
SSPC	Solid-Solid Phase Chang
SVPC	Solid-Vapor Phase Change
LVPC	Liquid-Vapor Phase Change
SLPC	Solid-Liquid Phase Change
CyA	Caprylic Acid
CA	Capric Acid
LA	Lauric Acid
MA	Myristic Acid
PA	Palmitic Acid
SA	Stearic Acid
PEG	Poly Ethylene Glycol
LTPCMs	Low Temperature Phase Change Materials
HTPCMs	High Temperature Phase Change Materials
TC	Thermal Conductivity
ExG	Exfoliated Graphite
GICs	Graphite Intercalation Compounds
NGFs	Natural Graphite Flakes
SWCNTs	Single Wall Carbon Nano Tubes
MWCNTs	Multi Wall Carbon Nano Tubes
CNFs	Carbon Nano Fibers
GNPs	Graphite Nano Particles
NWs	Nano Wires
Cu	Copper
Al	Aluminum
SS	Stainless Steel
CSP	Concentrated Solar Power
pXRD	Powder X-Ray Diffraction
XRd	X-Ray Diffraction
SEM	Scanning Electron Microscope
FTIR	Fourier Transform Infrared
DoF	Depth of Field
RVS	Raman Vibrational Spectroscopy
CCD	Charged Coupled Device
DLaTGS	Deuterated L-alanine doped Triglycine sulphate
DSC	Differential Scanning Calorimeter
T-history	Temperature-History
TPS	Transient Plane Source
Wt%	Weight Fraction

DE	1-Dodecanol
AM	Acetamide
BA	Benzoic Acid
PhA	Phthalimide
DI	Deionized
FWHM	Full Width Half Minima
PVC	Poly Vinyl Chloride
LDPE	Low Density Polyethylene
HDPE	High Density Polyethylene
EPP	Extended Polypropylene
HD	Heat Duty
MA	Myristic Acid
FWHM	Full Width Half Minima
MS	Mild Steel

