Abbreviations

CCSVT	Chemical Closed- Space Vapor Transport
CBM	Conduction Band Minimum
CVT	Chemical Vapor Transport
CSVT	Close- space Vapor Transport
DAP	Donor- Acceptor Pair recombination
EDX	Energy Dispersive X-ray analysis
ERDA	Elastic Recoil Detection Analysis
ESR	Electron Spin Resonance
FB	Free-to-Bound transitions
FE	Free Exciton
FFT	Fast Fourier Transformation
FWHM	Full Width at one Half of the Maximum
GI- XRD	Grazing incidence X ray Diffraction
JCPDS	Joint Comittee on the Powder Diffraction Spectra
LO	Longitudinal Optical photon
PL	Photoluminescence
PVD	Physical Vapor Deposition
TEM	Transmission Electron Microscopy
SNMS	Secondary Neutral Mass Spectroscopy
SLG	Soda Lime Glass
SRIM	Stopping and Range of Ions in Matter
RTP	Rapid Thermal Process
UV- PL	Ultra- Violet Photoluminescence
VBM	Valence Band Maximum
XRD	X ray Diffraction
XRF	X- ray Fluorenscence Analysis
ZSW	Zentrum für Solarenergie und Wasserstoff Forschung Stuttgart Germany.

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