List of Symbols

A^*	Ablated area
F_{th}	Ablation threshold
Q	Absorbed laser energy
$A(E)/ A_i$	Absorption
α_0	Absorption Coefficient
N_{AT}	Acceptor trap density
E_A	Activation energy
θ	Angle
Å	Angstrom
I_{dc}	Applied DC current
τ_p	Applied pulse length
V	Applied voltage
at %	Atomic percent
E_{doped}	Band gap of doped semiconductor
$E_{undoped}$	Band gap of undoped semiconductor
Φ_{bb}	Black body spectrum
T_s	Black body Temperature
k	Boltzmann constant
E_{BM}	Burnstein-Moss shift
E_C	Conduction-band
E_{CB}	Conduction-band minimum
D	Crystalline size
J_{sc}	Current density
I_{DUT}	Current of device under test
I_{std}	Current of standard device
n_s	Density of electrons
p_s	Density of holes
n_{nid}	Diode quality factor
I_{eff}	Effective thermal penetration depth
η	Efficiency
e	Electron charge
n	electrons

ϕ_{em}	Emissivity
ε	Emissivity of the surface
E_g	Energy band gap
ϕ_e	External Quantum Efficiency
E_f	Fermi energy
FF	Fill factor
t	Film thickness
f	Film/Pulse repetition rate
G	Gauss
C_1	Heat Capacity of the lattice
p	Hole
RH	Humidity
ϕ_{inc}	Incoming Photon flux
P_{in}	Input power
ϕ_{in}	Internal Quantum Efficiency
K	Kelvin
B	Magnetic Field
I_{max}	Maximum current
P_{mpp}	Maximum power density
V_{max}	Maximum voltage
T_m	Melting Temperature
m	Meter
mA	Milliampere
L_f	Minimum dimension of heated volume
min	Minute
μ	Mobility
Ω	ohm
V_{oc}	Open circuit voltage
α	Optical Absorption
I_{opt}	Optical penetration depth
R	Optical Reflection/ Radius of the spot
n_i	Order of reflection
h	Planck's constant

υ_f	Poisson ration
Q_f	Positive charge density
$J_{rec, Sq}$	Radiative recombination short circuit current
R(x)	Recombination at x
J_{rec}	Recombination current
S_n	Recombination speed of electrons
S_p	Recombination speed of holes
ρ	Resistivity/ density of mass
j_0	Reverse saturation current
$J_{0, Sq}$	Saturation current density
R_s	Series resistance
p_s/ n_s	Sheet carrier density
R_{sh}	Sheet resistance
Ω/□	Sheet resistance
$J_{sc, Sq}$	Shockley Quiesser short circuit current
I_{sc}	Short circuit current
R_{shunt}	Shunt resistance
E	Solar energy
υ	Speed of scribing
β	Steepness
σ	Stefan Boltzmann constant/Conductivity
S	Substrate
S T	Substrate Temperature
I_{th}	Thermal Diffusion length
χ	Thermal Diffusivity
d	Thickness
T	Transmission
E_V	Valence-band
E_{VB}	Valence-band minimum
W	Watt
λ	Wavelength
E	Young modulus