

# Nomenclature

## Latin letters

$A$	absorptivity	$[-]$
$a$	acceleration,	$[m \cdot s^{-2}]$
$D$	diffusion coefficient	$[m^2 \cdot s^{-1}]$
$E$	energy	$[J]$
$f$	Fermi-Dirac distribution	$[-]$
$F$	force	$[N]$
$FF$	fill factor	$[-]$
$G$	generation rate	$[m^{-3} s^{-1}]$
$g$	density of states function	$[m^{-3} \cdot J^{-1}]$
$I$	irradiance	$[W \cdot m^{-2}]$
$I$	current	$[A]$
$J$	current density	$[A \cdot m^{-2}]$
$k$	wave number	$[m^{-1}]$
$l_n, l_p$	width of space charge region	$[m]$
$L$	diffusion length	$[m]$
$Le$	radiance,	$[W \cdot m^{-2} \cdot sr^{-1}]$
$Le^*$	basic radiance,	$[W \cdot m^{-2} \cdot sr^{-1}]$
$m$	mass	$[kg]$
$m^*$	effective mass	$[kg]$
$N$	particle density	$[m^{-3}]$
$n$	electron concentration	$[m^{-3}]$
$n$	refractive index (real part)	$[-]$
$P$	power	$[W]$
$p$	hole concentration	$[m^{-3}]$
$R$	recombination rate	$[m^{-3} \cdot s^{-1}]$
$R$	reflectivity	$[-]$
$S$	Surface area	$[m^2]$
$T$	temperature	$[K]$
$T$	transmissivity	$[-]$
$V$	electric potential	$[V]$
$v$	velocity	$[m \cdot s^{-1}]$
$W$	width	$[m]$

## Greek letters

$\alpha$	absorption coefficient	$[m^{-1}]$
$\epsilon$	electric permittivity	$[F \cdot m^{-1}]$
$\zeta$	magnetic field	$[A \cdot m^{-1}]$
$\eta$	efficiency	$[-]$
$\theta$	polar angle, generic angle	$[-]$

$\kappa$	refractive index (imaginary part)	[-]
$\lambda$	wavelength	[m]
$\mu$	mobility	[m <sup>2</sup> ·V <sup>-1</sup> ·s <sup>-1</sup> ]
$\nu$	frequency	[s <sup>-1</sup> ]
$\xi$	electric field	[V·m <sup>-1</sup> ]
$\rho$	charge density	[A·s·m <sup>-3</sup> ]
$\sigma$	capture cross section	[m <sup>2</sup> ]
$\tau$	lifetime, relaxation time	[s]
$\varphi$	azimuth angle	[-]
$\varphi$	spectral photon flux	[m <sup>-2</sup> ·s <sup>-1</sup> ·nm <sup>-1</sup> ]
$\Phi_{ph}$	photon flux	[m <sup>-2</sup> ·s <sup>-1</sup> ]
$\chi$	dielectric susceptibility	[-]
$\chi$	electron affinity	[eV]
$\Psi_{ph}$	photon flow	[s <sup>-1</sup> ]
$\Omega$	solid angle	[-]
$\omega$	angular frequency	[s <sup>-1</sup> ]

### Subscripts

0	in vacuo
A	acceptor
C	conduction band
D	donor
d	drift
F	Fermi
G	bandgap
i	intrinsic, incident
L	light
mpp	maximum power point
n	n-type, electron
p	p-type, hole
OC	open circuit
ph	photon
r	reflected
SC	short circuit
T	transmitted
th	thermal
V	valence band