

## User-defined Parameters

Parameter	Default Value	Definition
$l$	1e-6 m	Length of GNR
$w$	1e-7 m	Width of GNR
$N_L$	1	Number of layers of GNR
$dope$	0 m <sup>-3</sup>	Dopant concentration in GNR
$E_F$	0 eV	GNR Fermi-level
$l_D$	1e-6 m	Carrier mean free path (MFP)
$edge_p$	1	GNR edge specularity
$eps$	2.0	Surrounding dielectric constant
$R_{con}$	0 (If default value is used, quantum contact resistance is calculated and used in the model)	User defined contact resistance