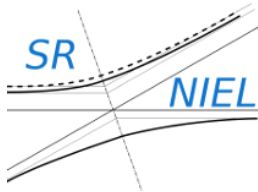
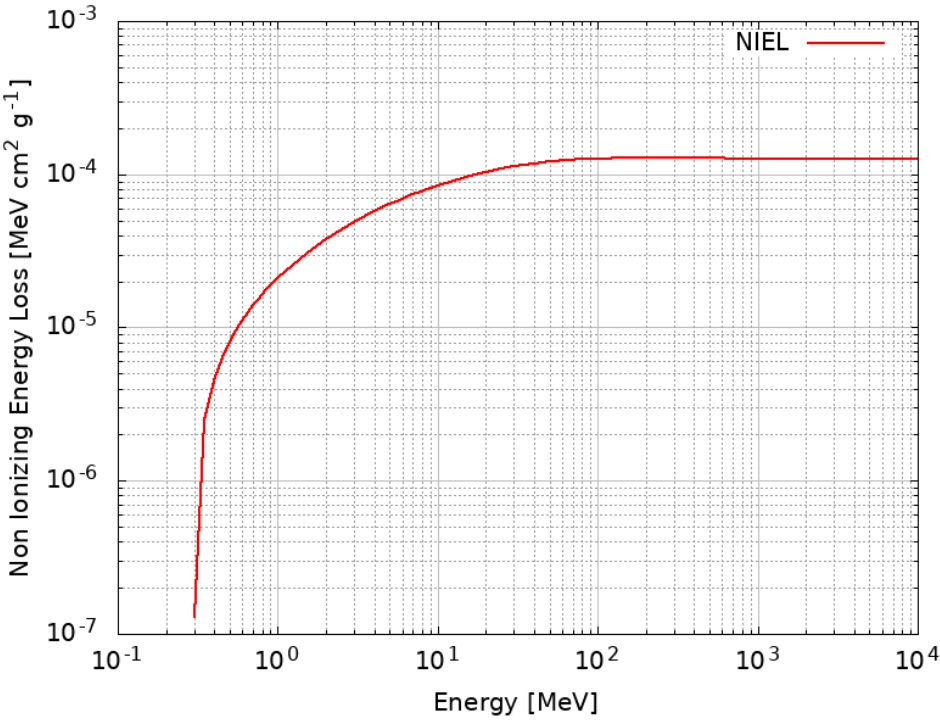


SR (screened relativistic) NIEL (non ionizing energy loss) Calculator  
Electrons: SR-NIEL – 7 ver. 11.0 - 15.September.2025



Input Parameters
Electrons in Si
Displacement Threshold Energies [eV]: 30.00;
Minimum Energy [MeV]: 1.0e-01
Maximum Energy [MeV]: 1.0e+04
Form Factor Model : Exponential
Particle Fluence [cm <sup>-2</sup> ]: 1.00e+00



Energy (MeV)	NIEL (MeV cm <sup>2</sup> g <sup>-1</sup> )	NIEL Dose* (MeV g <sup>-1</sup> )	NIEL Dose* (Gy)
1.0000e-01	0.0000e+00	0.0000e+00	0.0000e+00
1.5000e-01	0.0000e+00	0.0000e+00	0.0000e+00
2.0000e-01	0.0000e+00	0.0000e+00	0.0000e+00
2.5000e-01	0.0000e+00	0.0000e+00	0.0000e+00
3.0000e-01	1.3023e-07	1.3023e-07	2.0870e-17
3.5000e-01	2.4593e-06	2.4593e-06	3.9411e-16
4.0000e-01	4.4991e-06	4.4991e-06	7.2100e-16
4.5000e-01	6.3430e-06	6.3430e-06	1.0165e-15
5.0000e-01	8.0440e-06	8.0440e-06	1.2891e-15
5.5000e-01	9.6341e-06	9.6341e-06	1.5439e-15
6.0000e-01	1.1134e-05	1.1134e-05	1.7844e-15
6.5000e-01	1.2560e-05	1.2560e-05	2.0127e-15
7.0000e-01	1.3920e-05	1.3920e-05	2.2307e-15
7.5000e-01	1.5223e-05	1.5223e-05	2.4396e-15
8.0000e-01	1.6475e-05	1.6475e-05	2.6403e-15
8.5000e-01	1.7682e-05	1.7682e-05	2.8336e-15
9.0000e-01	1.8846e-05	1.8846e-05	3.0202e-15
9.5000e-01	1.9971e-05	1.9971e-05	3.2005e-15
1.0000e+00	2.1060e-05	2.1060e-05	3.3751e-15
1.5000e+00	3.0400e-05	3.0400e-05	4.8719e-15
2.0000e+00	3.7743e-05	3.7743e-05	6.0486e-15
2.5000e+00	4.3774e-05	4.3774e-05	7.0151e-15
3.0000e+00	4.8874e-05	4.8874e-05	7.8324e-15
3.5000e+00	5.3280e-05	5.3280e-05	8.5384e-15
4.0000e+00	5.7149e-05	5.7149e-05	9.1585e-15
4.5000e+00	6.0592e-05	6.0592e-05	9.7102e-15
5.0000e+00	6.3687e-05	6.3687e-05	1.0206e-14
5.5000e+00	6.6494e-05	6.6494e-05	1.0656e-14
6.0000e+00	6.9060e-05	6.9060e-05	1.1067e-14
6.5000e+00	7.1418e-05	7.1418e-05	1.1445e-14
7.0000e+00	7.3599e-05	7.3599e-05	1.1795e-14
7.5000e+00	7.5624e-05	7.5624e-05	1.2119e-14
8.0000e+00	7.7513e-05	7.7513e-05	1.2422e-14
8.5000e+00	7.9280e-05	7.9280e-05	1.2705e-14
9.0000e+00	8.0940e-05	8.0940e-05	1.2971e-14
9.5000e+00	8.2504e-05	8.2504e-05	1.3222e-14
1.0000e+01	8.3980e-05	8.3980e-05	1.3458e-14
1.5000e+01	9.5310e-05	9.5310e-05	1.5274e-14
2.0000e+01	1.0282e-04	1.0282e-04	1.6477e-14
2.5000e+01	1.0819e-04	1.0819e-04	1.7338e-14
3.0000e+01	1.1220e-04	1.1220e-04	1.7981e-14
3.5000e+01	1.1528e-04	1.1528e-04	1.8475e-14
4.0000e+01	1.1769e-04	1.1769e-04	1.8860e-14
4.5000e+01	1.1959e-04	1.1959e-04	1.9165e-14
5.0000e+01	1.2111e-04	1.2111e-04	1.9408e-14
5.5000e+01	1.2232e-04	1.2232e-04	1.9603e-14
6.0000e+01	1.2331e-04	1.2331e-04	1.9761e-14
6.5000e+01	1.2411e-04	1.2411e-04	1.9889e-14

7.0000e+01	1.2476e-04	1.2476e-04	1.9993e-14
7.5000e+01	1.2529e-04	1.2529e-04	2.0079e-14
8.0000e+01	1.2573e-04	1.2573e-04	2.0150e-14
8.5000e+01	1.2610e-04	1.2610e-04	2.0208e-14
9.0000e+01	1.2640e-04	1.2640e-04	2.0256e-14
9.5000e+01	1.2665e-04	1.2665e-04	2.0296e-14
1.0000e+02	1.2686e-04	1.2686e-04	2.0329e-14
1.5000e+02	1.2775e-04	1.2775e-04	2.0472e-14
2.0000e+02	1.2788e-04	1.2788e-04	2.0493e-14
2.5000e+02	1.2785e-04	1.2785e-04	2.0489e-14
3.0000e+02	1.2779e-04	1.2779e-04	2.0479e-14
3.5000e+02	1.2772e-04	1.2772e-04	2.0468e-14
4.0000e+02	1.2766e-04	1.2766e-04	2.0458e-14
4.5000e+02	1.2760e-04	1.2760e-04	2.0449e-14
5.0000e+02	1.2756e-04	1.2756e-04	2.0442e-14
5.5000e+02	1.2751e-04	1.2751e-04	2.0435e-14
6.0000e+02	1.2748e-04	1.2748e-04	2.0429e-14
6.5000e+02	1.2744e-04	1.2744e-04	2.0423e-14
7.0000e+02	1.2741e-04	1.2741e-04	2.0419e-14
7.5000e+02	1.2739e-04	1.2739e-04	2.0414e-14
8.0000e+02	1.2736e-04	1.2736e-04	2.0411e-14
8.5000e+02	1.2734e-04	1.2734e-04	2.0407e-14
9.0000e+02	1.2732e-04	1.2732e-04	2.0404e-14
9.5000e+02	1.2731e-04	1.2731e-04	2.0401e-14
1.0000e+03	1.2729e-04	1.2729e-04	2.0399e-14
1.5000e+03	1.2718e-04	1.2718e-04	2.0382e-14
2.0000e+03	1.2713e-04	1.2713e-04	2.0373e-14
2.5000e+03	1.2709e-04	1.2709e-04	2.0367e-14
3.0000e+03	1.2707e-04	1.2707e-04	2.0364e-14
3.5000e+03	1.2705e-04	1.2705e-04	2.0361e-14
4.0000e+03	1.2704e-04	1.2704e-04	2.0359e-14
4.5000e+03	1.2703e-04	1.2703e-04	2.0357e-14
5.0000e+03	1.2702e-04	1.2702e-04	2.0356e-14
5.5000e+03	1.2701e-04	1.2701e-04	2.0355e-14
6.0000e+03	1.2701e-04	1.2701e-04	2.0354e-14
6.5000e+03	1.2700e-04	1.2700e-04	2.0353e-14
7.0000e+03	1.2700e-04	1.2700e-04	2.0352e-14
7.5000e+03	1.2699e-04	1.2699e-04	2.0352e-14
8.0000e+03	1.2699e-04	1.2699e-04	2.0351e-14
8.5000e+03	1.2699e-04	1.2699e-04	2.0351e-14
9.0000e+03	1.2699e-04	1.2699e-04	2.0350e-14
9.5000e+03	1.2698e-04	1.2698e-04	2.0350e-14
1.0000e+04	1.2698e-04	1.2698e-04	2.0350e-14

\* The medium has to be thick enough to fully absorb the kinetic energy of recoil nuclei.