Muons in germanium (Ge)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
32 (Ge)	72.630(1)	5.323	350.0	0.07188	3.3306	0.3376	3.6096	5.1411	0.14

T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm^2/g]	Photonucl	Total	CSDA range [g/cm^2]
10.0 MeV	4.704×10^1	5.033				5.033	1.124×10^0
14.0 MeV	5.616×10^1	3.968				3.968	2.028×10^0
20.0 MeV	6.802×10^1	3.129				3.129	3.749×10^0
30.0 MeV	8.509×10^1	2.451				2.451	7.408×10^0
40.0 MeV	1.003×10^2	2.105				2.105	1.184×10^1
80.0 MeV	1.527×10^2	1.600				1.600	3.430×10^1
100. MeV	1.764×10^2	1.510				1.510	4.720×10^1
140. MeV	2.218×10^2	1.423				1.423	7.461×10^1
200. MeV	2.868×10^2	1.378				1.378	1.176×10^2
257. MeV	3.471×10^2	1.370			0.000	1.370	*Minimum ionization*
300. MeV	3.917×10^2	1.372	0.000		0.000	1.373	1.905×10^2
400. MeV	4.945×10^2	1.389	0.000		0.000	1.389	2.629×10^2
800. MeV	8.995×10^2	1.471	0.001		0.000	1.472	5.424×10^2
1.00 GeV	1.101×10^3	1.504	0.001		0.000	1.506	6.767×10^2
1.40 GeV	1.502×10^3	1.558	0.001	0.000	0.001	1.560	9.375×10^2
2.00 GeV	2.103×10^3	1.615	0.002	0.001	0.001	1.619	1.315×10^3
3.00 GeV	3.104×10^3	1.681	0.003	0.002	0.001	1.688	1.919×10^3
4.00 GeV	4.104×10^3	1.726	0.005	0.004	0.002	1.737	2.502×10^3
8.00 GeV	8.105×10^3	1.828	0.012	0.012	0.003	1.856	4.722×10^3
10.0 GeV	1.011×10^4	1.859	0.016	0.017	0.004	1.896	5.788×10^3
14.0 GeV	1.411×10^4	1.903	0.024	0.027	0.006	1.960	7.861×10^3
20.0 GeV	2.011×10^4	1.947	0.037	0.044	0.008	2.037	1.086×10^4
30.0 GeV	3.011×10^4	1.994	0.061	0.076	0.012	2.144	1.564×10^4
40.0 GeV	4.011×10^4	2.026	0.086	0.111	0.016	2.239	2.021×10^4
80.0 GeV	8.011×10^4	2.096	0.195	0.266	0.030	2.588	3.679×10^4
100. GeV	1.001×10^5	2.117	0.253	0.350	0.038	2.758	4.428×10^4
140. GeV	1.401×10^5	2.148	0.371	0.523	0.052	3.095	5.796×10^4
200. GeV	2.001×10^5	2.181	0.556	0.796	0.075	3.609	7.590×10^4
297. GeV	2.975×10^5	2.217	0.865	1.242	0.111	4.435	*Muon critical energy*
300. GeV	3.001×10^5	2.218	0.873	1.254	0.112	4.458	1.008×10^5
400. GeV	4.001×10^5	2.244	1.201	1.729	0.149	5.323	1.213×10^5
800. GeV	8.001×10^5	2.307	2.557	3.678	0.301	8.844	1.790×10^5
1.00 TeV	1.000×10^6	2.327	3.254	4.676	0.378	10.637	1.996×10^5
1.40 TeV	1.400×10^6	2.358	4.653	6.668	0.536	14.216	2.320×10^5
2.00 TeV	2.000×10^6	2.392	6.794	9.710	0.776	19.672	2.678×10^5
3.00 TeV	3.000×10^6	2.431	10.371	14.765	1.187	28.754	3.096×10^5
4.00 TeV	4.000×10^6	2.458	13.998	19.877	1.604	37.938	3.398×10^5
8.00 TeV	8.000×10^6	2.527	28.635	40.432	3.336	74.930	4.134×10^5
10.0 TeV	1.000×10^7	2.549	36.015	50.767	4.226	93.558	4.372×10^5
14.0 TeV	1.400×10^7	2.583	50.736	71.386	6.054	130.761	4.732×10^5
20.0 TeV	2.000×10^7	2.620	72.958	102.454	8.856	186.889	5.114×10^5
30.0 TeV	3.000×10^7	2.663	109.952	154.146	13.702	280.464	5.548×10^5
40.0 TeV	4.000×10^7	2.694	147.090	205.967	18.665	374.417	5.855×10^5
80.0 TeV	8.000×10^7	2.770	295.896	413.408	39.403	751.478	6.595×10^5
100. TeV	1.000×10^8	2.795	370.440	517.230	50.120	940.586	6.832×10^5