Muons in gold (Au)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
79 (Au)	196.966569 (5)	19.320	790.0	0.09756	3.1101	0.2021	3.6979	5.5747	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	3.910				3.910	1.486×10^0
14.0 MeV	5.616×10^1	3.120				3.120	2.642×10^0
20.0 MeV	6.802×10^1	2.485				2.485	4.819×10^0
30.0 MeV	8.509×10^1	1.964				1.964	9.402×10^0
40.0 MeV	1.003×10^2	1.696				1.696	1.491×10^1
80.0 MeV	1.527×10^2	1.302				1.302	4.262×10^1
100. MeV	1.764×10^2	1.232				1.232	5.845×10^1
140. MeV	2.218×10^2	1.166				1.166	9.196×10^1
200. MeV	2.868×10^2	1.136				1.137	1.442×10^2
236. MeV	3.250×10^2	1.134	0.000			1.134	*Minimum ionization*
300. MeV	3.917×10^2	1.139	0.000		0.000	1.140	2.323×10^2
400. MeV	4.945×10^2	1.158	0.000		0.000	1.159	3.194×10^2
800. MeV	8.995×10^2	1.240	0.001		0.000	1.241	6.523×10^2
1.00 GeV	1.101×10^3	1.272	0.001		0.000	1.274	8.113×10^2
1.40 GeV	1.502×10^3	1.323	0.002		0.001	1.326	1.119×10^3
2.00 GeV	2.103×10^3	1.378	0.004	0.001	0.001	1.384	1.561×10^3
3.00 GeV	3.104×10^3	1.440	0.007	0.003	0.001	1.452	2.266×10^3
4.00 GeV	4.104×10^3	1.483	0.010	0.006	0.002	1.501	2.943×10^3
8.00 GeV	8.105×10^3	1.580	0.025	0.022	0.003	1.630	5.490×10^3
10.0 GeV	1.011×10^4	1.609	0.033	0.031	0.004	1.677	6.699×10^3
14.0 GeV	1.411×10^4	1.651	0.050	0.050	0.005	1.757	9.028×10^3
20.0 GeV	2.011×10^4	1.693	0.077	0.083	0.007	1.862	1.234×10^4
30.0 GeV	3.011×10^4	1.737	0.127	0.146	0.011	2.022	1.749×10^4
40.0 GeV	4.011×10^4	1.767	0.179	0.215	0.014	2.176	2.226×10^4
80.0 GeV	8.011×10^4	1.833	0.405	0.520	0.028	2.787	3.846×10^4
100. GeV	1.001×10^5	1.853	0.525	0.684	0.035	3.098	4.527×10^4
140. GeV	1.401×10^5	1.882	0.771	1.022	0.048	3.724	5.703×10^4
143. GeV	1.429×10^5	1.884	0.788	1.047	0.049	3.769	*Muon critical energy*
200. GeV	2.001×10^5	1.912	1.155	1.558	0.069	4.695	7.136×10^4
300. GeV	3.001×10^5	1.946	1.810	2.453	0.103	6.314	8.967×10^4
400. GeV	4.001×10^5	1.969	2.488	3.381	0.137	7.976	1.037×10^5
800. GeV	8.001×10^5	2.027	5.282	7.182	0.277	14.770	1.400×10^5
1.00 TeV	1.000×10^6	2.045	6.716	9.127	0.348	18.238	1.522×10^5
1.40 TeV	1.400×10^6	2.074	9.590	13.004	0.493	25.162	1.708×10^5
2.00 TeV	2.000×10^6	2.104	13.983	18.920	0.713	35.722	1.907×10^5
3.00 TeV	3.000×10^6	2.139	21.314	28.750	1.089	53.294	2.135×10^5
4.00 TeV	4.000×10^6	2.165	28.739	38.683	1.472	71.060	2.297×10^5
8.00 TeV	8.000×10^6	2.227	58.660	78.606	3.055	142.551	2.687×10^5
10.0 TeV	1.000×10^7	2.247	73.732	98.672	3.868	178.521	2.812×10^5
14.0 TeV	1.400×10^7	2.279	103.793	138.710	5.535	250.319	3.000×10^5
20.0 TeV	2.000×10^7	2.312	149.136	199.020	8.090	358.560	3.199×10^5
30.0 TeV	3.000×10^7	2.351	224.621	299.358	12.501	538.834	3.425×10^5
40.0 TeV	4.000×10^7	2.379	300.363	399.928	17.015	719.687	3.585×10^5
80.0 TeV	8.000×10^7	2.448	603.732	802.482	35.848	1444.513	3.970×10^5
100. TeV	1.000×10^8	2.471	755.650	1003.940	45.570	1807.633	4.093×10^5