Table 078: Muons in Platinum

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
78 (Pt)	195.084 (9)	21.450	790.0	0.11128	3.0417	0.1484	3.6212	5.4732	0.12

T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm^2]
		[MeV cm^2/g]					
10.0 MeV	4.704×10^1	3.896				3.896	1.492×10^0
14.0 MeV	5.616×10^1	3.109				3.109	2.651×10^0
20.0 MeV	6.802×10^1	2.477				2.477	4.836×10^0
30.0 MeV	8.509×10^1	1.958				1.958	9.435×10^0
40.0 MeV	1.003×10^2	1.690				1.690	1.496×10^1
80.0 MeV	1.527×10^2	1.297				1.297	4.278×10^1
100. MeV	1.764×10^2	1.228				1.228	5.866×10^1
140. MeV	2.218×10^2	1.162				1.162	9.229×10^1
200. MeV	2.868×10^2	1.132				1.132	1.448×10^2
237. MeV	3.260×10^2	1.128	0.000			1.129	*Minimum ionization*
300. MeV	3.917×10^2	1.134	0.000		0.000	1.134	2.332×10^2
400. MeV	4.945×10^2	1.153	0.000		0.000	1.153	3.207×10^2
800. MeV	8.995×10^2	1.233	0.001		0.000	1.234	6.555×10^2
1.00 GeV	1.101×10^3	1.265	0.001		0.000	1.267	8.154×10^2
1.40 GeV	1.502×10^3	1.315	0.002		0.001	1.318	1.125×10^3
2.00 GeV	2.103×10^3	1.370	0.004	0.001	0.001	1.376	1.570×10^3
3.00 GeV	3.104×10^3	1.431	0.007	0.003	0.001	1.443	2.278×10^3
4.00 GeV	4.104×10^3	1.474	0.010	0.006	0.002	1.492	2.959×10^3
8.00 GeV	8.105×10^3	1.570	0.024	0.022	0.003	1.620	5.523×10^3
10.0 GeV	1.011×10^4	1.599	0.032	0.031	0.004	1.666	6.740×10^3
14.0 GeV	1.411×10^4	1.641	0.049	0.050	0.005	1.746	9.083×10^3
20.0 GeV	2.011×10^4	1.683	0.076	0.082	0.007	1.849	1.242×10^4
30.0 GeV	3.011×10^4	1.727	0.125	0.144	0.011	2.007	1.761×10^4
40.0 GeV	4.011×10^4	1.756	0.177	0.212	0.014	2.160	2.241×10^4
80.0 GeV	8.011×10^4	1.821	0.399	0.513	0.028	2.763	3.874×10^4
100. GeV	1.001×10^5	1.841	0.517	0.675	0.035	3.070	4.561×10^4
140. GeV	1.401×10^5	1.870	0.759	1.009	0.048	3.688	5.748×10^4
144. GeV	1.438×10^5	1.872	0.782	1.041	0.049	3.746	*Muon critical energy*
200. GeV	2.001×10^5	1.900	1.138	1.538	0.069	4.646	7.196×10^4
300. GeV	3.001×10^5	1.933	1.784	2.422	0.103	6.243	9.047×10^4
400. GeV	4.001×10^5	1.957	2.451	3.337	0.137	7.884	1.047×10^5
800. GeV	8.001×10^5	2.014	5.204	7.090	0.277	14.587	1.414×10^5
1.00 TeV	1.000×10^6	2.033	6.618	9.009	0.348	18.009	1.538×10^5
1.40 TeV	1.400×10^6	2.061	9.449	12.836	0.493	24.841	1.726×10^5
2.00 TeV	2.000×10^6	2.091	13.779	18.675	0.713	35.261	1.928×10^5
3.00 TeV	3.000×10^6	2.126	21.002	28.378	1.090	52.599	2.159×10^5
4.00 TeV	4.000×10^6	2.152	28.319	38.183	1.473	70.128	2.323×10^5
8.00 TeV	8.000×10^6	2.214	57.805	77.589	3.058	140.669	2.717×10^5
10.0 TeV	1.000×10^7	2.234	72.658	97.395	3.872	176.161	2.844×10^5
14.0 TeV	1.400×10^7	2.265	102.282	136.916	5.541	247.006	3.035×10^5
20.0 TeV	2.000×10^7	2.299	146.966	196.448	8.098	353.813	3.237×10^5
30.0 TeV	3.000×10^7	2.338	221.354	295.488	12.513	531.696	3.466×10^5
40.0 TeV	4.000×10^7	2.365	295.996	394.757	17.031	710.151	3.628×10^5
80.0 TeV	8.000×10^7	2.434	594.964	792.106	35.880	1425.386	4.018×10^5
100. TeV	1.000×10^8	2.457	744.680	990.960	45.610	1783.709	4.143×10^5