

Muons in moscovium (Mc)

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
115 (Mc)	[289.19363(6)]	??	1199.0	0.28871	3.0000	0.6960	3.0000	6.7363	0.00

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	3.475				3.475	1.726×10^0
14.0 MeV	5.616×10^1	2.815				2.815	3.016×10^0
20.0 MeV	6.802×10^1	2.270				2.270	5.411×10^0
30.0 MeV	8.509×10^1	1.814				1.814	1.040×10^1
40.0 MeV	1.003×10^2	1.576				1.576	1.635×10^1
80.0 MeV	1.527×10^2	1.227				1.227	4.592×10^1
100. MeV	1.764×10^2	1.167				1.167	6.268×10^1
140. MeV	2.218×10^2	1.112				1.112	9.795×10^1
200. MeV	2.868×10^2	1.092	0.000			1.092	1.526×10^2
206. MeV	2.933×10^2	1.092	0.000			1.092	<i>Minimum ionization</i>
300. MeV	3.917×10^2	1.107	0.000		0.000	1.107	2.437×10^2
400. MeV	4.945×10^2	1.135	0.000		0.000	1.136	3.329×10^2
800. MeV	8.995×10^2	1.238	0.001		0.000	1.240	6.688×10^2
1.00 GeV	1.101×10^3	1.276	0.002		0.000	1.279	8.275×10^2
1.40 GeV	1.502×10^3	1.334	0.003		0.000	1.338	1.133×10^3
2.00 GeV	2.103×10^3	1.395	0.005	0.000	0.001	1.401	1.571×10^3
3.00 GeV	3.104×10^3	1.461	0.009	0.003	0.001	1.475	2.265×10^3
4.00 GeV	4.104×10^3	1.506	0.014	0.006	0.001	1.528	2.930×10^3
8.00 GeV	8.105×10^3	1.605	0.034	0.025	0.003	1.669	5.425×10^3
10.0 GeV	1.011×10^4	1.634	0.045	0.037	0.004	1.721	6.605×10^3
14.0 GeV	1.411×10^4	1.675	0.070	0.061	0.005	1.812	8.868×10^3
20.0 GeV	2.011×10^4	1.716	0.108	0.102	0.007	1.934	1.207×10^4
30.0 GeV	3.011×10^4	1.757	0.178	0.183	0.010	2.130	1.699×10^4
40.0 GeV	4.011×10^4	1.785	0.251	0.273	0.014	2.324	2.149×10^4
80.0 GeV	8.011×10^4	1.847	0.568	0.670	0.027	3.113	3.632×10^4
100. GeV	1.001×10^5	1.865	0.736	0.886	0.033	3.522	4.235×10^4
111. GeV	1.113×10^5	1.874	0.831	1.007	0.037	3.751	<i>Muon critical energy</i>
140. GeV	1.401×10^5	1.893	1.080	1.328	0.047	4.350	5.256×10^4
200. GeV	2.001×10^5	1.923	1.618	2.032	0.066	5.641	6.465×10^4
300. GeV	3.001×10^5	1.956	2.535	3.205	0.099	7.797	7.968×10^4
400. GeV	4.001×10^5	1.979	3.482	4.423	0.132	10.019	9.097×10^4
800. GeV	8.001×10^5	2.036	7.386	9.415	0.267	19.107	1.194×10^5
1.00 TeV	1.000×10^6	2.055	9.389	11.969	0.336	23.751	1.288×10^5
1.40 TeV	1.400×10^6	2.083	13.399	17.060	0.476	33.020	1.430×10^5
2.00 TeV	2.000×10^6	2.114	19.527	24.830	0.688	47.160	1.581×10^5
3.00 TeV	3.000×10^6	2.149	29.746	37.739	1.051	70.687	1.753×10^5
4.00 TeV	4.000×10^6	2.174	40.093	50.787	1.419	94.476	1.875×10^5
8.00 TeV	8.000×10^6	2.236	81.768	103.220	2.945	190.171	2.168×10^5
10.0 TeV	1.000×10^7	2.256	102.752	129.570	3.728	238.309	2.262×10^5
14.0 TeV	1.400×10^7	2.287	144.605	182.161	5.333	334.389	2.403×10^5
20.0 TeV	2.000×10^7	2.320	207.718	261.384	7.792	479.217	2.552×10^5
30.0 TeV	3.000×10^7	2.359	312.886	393.162	12.037	720.447	2.721×10^5
40.0 TeV	4.000×10^7	2.387	418.420	525.243	16.380	962.432	2.841×10^5
80.0 TeV	8.000×10^7	2.456	840.501	1053.924	34.498	1931.382	3.128×10^5
100. TeV	1.000×10^8	2.479	1051.660	1318.500	43.850	2416.491	3.220×10^5