

Table 318: Muons in Element 114

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
114 (Un)	[289.187 (5)]	??	1185.0	0.28779	3.0000	0.6923	3.0000	6.7249	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	3.447				3.447	1.738×10^0		
14.0 MeV	5.616×10^1	2.790				2.790	3.039×10^0		
20.0 MeV	6.802×10^1	2.249				2.249	5.457×10^0		
30.0 MeV	8.509×10^1	1.796				1.796	1.049×10^1		
40.0 MeV	1.003×10^2	1.561				1.561	1.650×10^1		
80.0 MeV	1.527×10^2	1.214				1.215	4.638×10^1		
100. MeV	1.764×10^2	1.154				1.155	6.331×10^1		
140. MeV	2.218×10^2	1.100				1.100	9.895×10^1		
200. MeV	2.868×10^2	1.080	0.000			1.081	1.542×10^2		
207. MeV	2.943×10^2	1.080	0.000			1.080	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.095	0.000		0.000	1.095	2.463×10^2		
400. MeV	4.945×10^2	1.123	0.000		0.000	1.124	3.364×10^2		
800. MeV	8.995×10^2	1.225	0.001		0.000	1.226	6.760×10^2		
1.00 GeV	1.101×10^3	1.262	0.002		0.000	1.264	8.366×10^2		
1.40 GeV	1.502×10^3	1.319	0.003		0.000	1.323	1.145×10^3		
2.00 GeV	2.103×10^3	1.379	0.005	0.000	0.001	1.385	1.588×10^3		
3.00 GeV	3.104×10^3	1.445	0.009	0.003	0.001	1.458	2.290×10^3		
4.00 GeV	4.104×10^3	1.489	0.014	0.006	0.001	1.511	2.964×10^3		
8.00 GeV	8.105×10^3	1.587	0.034	0.025	0.003	1.649	5.487×10^3		
10.0 GeV	1.011×10^4	1.615	0.045	0.036	0.004	1.701	6.681×10^3		
14.0 GeV	1.411×10^4	1.656	0.068	0.060	0.005	1.791	8.972×10^3		
20.0 GeV	2.011×10^4	1.696	0.107	0.101	0.007	1.911	1.221×10^4		
30.0 GeV	3.011×10^4	1.737	0.175	0.181	0.010	2.104	1.720×10^4		
40.0 GeV	4.011×10^4	1.764	0.247	0.269	0.014	2.296	2.174×10^4		
80.0 GeV	8.011×10^4	1.825	0.559	0.661	0.027	3.073	3.676×10^4		
100. GeV	1.001×10^5	1.844	0.724	0.873	0.033	3.476	4.288×10^4		
111. GeV	1.116×10^5	1.853	0.819	0.996	0.037	3.707	<i>Muon critical energy</i>		
140. GeV	1.401×10^5	1.871	1.062	1.310	0.047	4.292	5.322×10^4		
200. GeV	2.001×10^5	1.900	1.591	2.004	0.066	5.563	6.548×10^4		
300. GeV	3.001×10^5	1.933	2.493	3.161	0.099	7.688	8.072×10^4		
400. GeV	4.001×10^5	1.956	3.425	4.361	0.132	9.876	9.217×10^4		
800. GeV	8.001×10^5	2.012	7.266	9.282	0.267	18.830	1.210×10^5		
1.00 TeV	1.000×10^6	2.031	9.236	11.800	0.336	23.406	1.305×10^5		
1.40 TeV	1.400×10^6	2.059	13.181	16.819	0.476	32.537	1.450×10^5		
2.00 TeV	2.000×10^6	2.089	19.210	24.480	0.688	46.469	1.603×10^5		
3.00 TeV	3.000×10^6	2.123	29.264	37.206	1.051	69.647	1.778×10^5		
4.00 TeV	4.000×10^6	2.148	39.443	50.069	1.419	93.082	1.902×10^5		
8.00 TeV	8.000×10^6	2.209	80.445	101.761	2.945	187.363	2.199×10^5		
10.0 TeV	1.000×10^7	2.229	101.090	127.742	3.728	234.792	2.294×10^5		
14.0 TeV	1.400×10^7	2.260	142.267	179.584	5.334	329.448	2.437×10^5		
20.0 TeV	2.000×10^7	2.293	204.360	257.678	7.794	472.128	2.588×10^5		
30.0 TeV	3.000×10^7	2.331	307.830	387.590	12.040	709.794	2.760×10^5		
40.0 TeV	4.000×10^7	2.359	411.661	517.801	16.384	948.207	2.881×10^5		
80.0 TeV	8.000×10^7	2.427	826.936	1038.988	34.501	1902.853	3.173×10^5		
100. TeV	1.000×10^8	2.449	1034.690	1299.810	43.850	2380.802	3.267×10^5		