Table 047: Muons in Silver

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
47 (Ag)	107.8682 (2)	10.500	470.0	0.24585	2.6899	0.0657	3.1074	5.0630	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}	4.721				4.721	1.206×10^{0}
14.0 MeV	5.616×10^{1}	3.732				3.733	2.168×10^{0}
20.0 MeV	6.802×10^{1}	2.950				2.950	3.996×10^{0}
30.0 MeV	8.509×10^{1}	2.314				2.314	7.874×10^{0}
40.0 MeV	1.003×10^{2}	1.988				1.988	1.257×10^{1}
80.0 MeV	1.527×10^{2}	1.513				1.513	3.634×10^{1}
100. MeV	1.764×10^{2}	1.428				1.428	4.998×10^{1}
140. MeV	2.218×10^{2}	1.346				1.346	7.896×10^{1}
200. MeV	2.868×10^{2}	1.305				1.306	1.244×10^{2}
253. MeV	3.431×10^{2}	1.299				1.299	*Minimum ionization*
300. MeV	3.917×10^{2}	1.303	0.000		0.000	1.303	2.012×10^{2}
400. MeV	4.945×10^{2}	1.321	0.000		0.000	1.321	2.775×10^{2}
800. MeV	8.995×10^{2}	1.404	0.001		0.000	1.405	5.707×10^{2}
1.00 GeV	1.101×10^{3}	1.438	0.001		0.000	1.440	7.113×10^{2}
1.40 GeV	1.502×10^{3}	1.492	0.002	0.000	0.001	1.495	9.837×10^{2}
2.00 GeV	2.103×10^{3}	1.550	0.003	0.001	0.001	1.555	1.377×10^{3}
3.00 GeV	3.104×10^{3}	1.616	0.005	0.003	0.001	1.625	2.005×10^{3}
4.00 GeV	4.104×10^{3}	1.662	0.007	0.005	0.002	1.676	2.610×10^{3}
8.00 GeV	8.105×10^{3}	1.765	0.017	0.016	0.003	1.802	4.903×10^{3}
10.0 GeV	1.011×10^{4}	1.796	0.022	0.023	0.004	1.845	6.000×10^{3}
14.0 GeV	1.411×10^{4}	1.840	0.034	0.037	0.005	1.917	8.125×10^{3}
20.0 GeV	2.011×10^{4}	1.884	0.053	0.060	0.008	2.005	1.118×10^{4}
30.0 GeV	3.011×10^{4}	1.930	0.086	0.105	0.011	2.134	1.601×10^{4}
40.0 GeV	4.011×10^{4}	1.961	0.121	0.154	0.015	2.252	2.057×10^{4}
80.0 GeV	8.011×10^{4}	2.029	0.274	0.370	0.029	2.703	3.675×10^{4}
100. GeV	1.001×10^{5}	2.050	0.355	0.486	0.036	2.928	4.386×10^{4}
140. GeV	1.401×10^{5}	2.081	0.521	0.725	0.051	3.379	5.657×10^{4}
200. GeV	2.001×10^{5}	2.113	0.781	1.103	0.072	4.071	7.273×10^{4}
215. GeV	2.149×10^{5}	2.119	0.846	1.196	0.078	4.239	*Muon critical energy*
300. GeV	3.001×10^{5}	2.149	1.226	1.737	0.108	5.221	9.438×10^{4}
400. GeV	4.001×10^{5}	2.175	1.685	2.393	0.144	6.398	1.117×10^{5}
800. GeV	8.001×10^{5}	2.237	3.582	5.084	0.292	11.195	1.583×10^{5}
1.00 TeV	1.000×10^{6}	2.257	4.557	6.460	0.367	13.642	1.745×10^{5}
1.40 TeV	1.400×10^{6}	2.288	6.511	9.207	0.519	18.527	1.996×10^{5}
2.00 TeV	2.000×10^{6}	2.321	9.501	13.399	0.751	25.974	2.268×10^{5}
3.00 TeV	3.000×10^{6}	2.359	14.493	20.366	1.149	38.369	2.583×10^{5}
4.00 TeV	4.000×10^{6}	2.387	19.553	27.407	1.553	50.901	2.809×10^{5}
8.00 TeV	8.000×10^{6}	2.454	39.957	55.715	3.227	101.354	3.355×10^{5}
10.0 TeV	1.000×10^{7}	2.477	50.241	69.945	4.086	126.750	3.531×10^{5}
14.0 TeV	1.400×10^{7}	2.511	70.753	98.337	5.851	177.453	3.796×10^{5}
20.0 TeV	2.000×10^{7}	2.547	101.706	141.108	8.556	253.918	4.078×10^{5}
30.0 TeV	3.000×10^{7}	2.589	153.235	212.274	13.231	381.330	4.397×10^{5}
40.0 TeV	4.000×10^{7}	2.620	204.952	283.611	18.017	509.201	4.623×10^{5}
80.0 TeV	8.000×10^{7}	2.695	412.144	569.156	37.999	1021.995	5.166×10^{5}
100. TeV	1.000×10^{8}	2.720	515.920	712.060	48.320	1279.021	5.341×10^{5}