Table 038: Muons in Strontium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
38 (Sr)	87.62 (1)	2.540	366.0	0.07165	3.4435	0.4585	3.6778	5.9867	0.14

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	4.921				4.921	1.150×10^0
14.0 MeV	5.616×10^1	3.881				3.882	2.074×10^0
20.0 MeV	6.802×10^1	3.062				3.062	3.834×10^0
30.0 MeV	8.509×10^1	2.399				2.399	7.572×10^0
40.0 MeV	1.003×10^2	2.062				2.062	1.210×10^1
80.0 MeV	1.527×10^2	1.569				1.569	3.502×10^1
100. MeV	1.764×10^2	1.482				1.482	4.816×10^1
140. MeV	2.218×10^2	1.398				1.398	7.608×10^1
200. MeV	2.868×10^2	1.358				1.358	1.198×10^2
237. MeV	3.260×10^2	1.353				1.354	*Minimum ionization*
300. MeV	3.917×10^2	1.359	0.000		0.000	1.359	1.936×10^2
400. MeV	4.945×10^2	1.380	0.000		0.000	1.381	2.666×10^2
800. MeV	8.995×10^2	1.471	0.001		0.000	1.472	5.467×10^2
1.00 GeV	1.101×10^3	1.507	0.001		0.000	1.509	6.808×10^2
1.40 GeV	1.502×10^3	1.564	0.001	0.000	0.001	1.566	9.408×10^2
2.00 GeV	2.103×10^3	1.624	0.002	0.001	0.001	1.629	1.316×10^3
3.00 GeV	3.104×10^3	1.692	0.004	0.003	0.001	1.700	1.916×10^3
4.00 GeV	4.104×10^3	1.739	0.006	0.004	0.002	1.751	2.495×10^3
8.00 GeV	8.105×10^3	1.844	0.014	0.014	0.003	1.875	4.694×10^3
10.0 GeV	1.011×10^4	1.875	0.018	0.019	0.004	1.917	5.749×10^3
14.0 GeV	1.411×10^4	1.920	0.028	0.031	0.006	1.985	7.798×10^3
20.0 GeV	2.011×10^4	1.965	0.043	0.050	0.008	2.066	1.076×10^4
30.0 GeV	3.011×10^4	2.012	0.070	0.087	0.012	2.181	1.547×10^4
40.0 GeV	4.011×10^4	2.043	0.099	0.128	0.015	2.286	1.994×10^4
80.0 GeV	8.011×10^4	2.113	0.224	0.305	0.030	2.673	3.609×10^4
100. GeV	1.001×10^5	2.134	0.291	0.401	0.037	2.864	4.332×10^4
140. GeV	1.401×10^5	2.165	0.427	0.599	0.052	3.244	5.644×10^4
200. GeV	2.001×10^5	2.198	0.640	0.912	0.073	3.824	7.346×10^4
265. GeV	2.651×10^5	2.223	0.875	1.250	0.097	4.446	*Muon critical energy*
300. GeV	3.001×10^5	2.234	1.004	1.436	0.110	4.785	9.680×10^4
400. GeV	4.001×10^5	2.259	1.381	1.979	0.147	5.767	1.158×10^5
800. GeV	8.001×10^5	2.321	2.938	4.208	0.297	9.765	1.685×10^5
1.00 TeV	1.000×10^6	2.342	3.738	5.349	0.373	11.802	1.871×10^5
1.40 TeV	1.400×10^6	2.372	5.343	7.626	0.528	15.870	2.163×10^5
2.00 TeV	2.000×10^6	2.405	7.799	11.101	0.764	22.071	2.482×10^5
3.00 TeV	3.000×10^6	2.443	11.902	16.877	1.169	32.392	2.854×10^5
4.00 TeV	4.000×10^6	2.471	16.062	22.716	1.580	42.829	3.122×10^5
8.00 TeV	8.000×10^6	2.538	32.842	46.191	3.284	84.857	3.772×10^5
10.0 TeV	1.000×10^7	2.560	41.301	57.994	4.160	106.016	3.983×10^5
14.0 TeV	1.400×10^7	2.594	58.173	81.542	5.958	148.268	4.300×10^5
20.0 TeV	2.000×10^7	2.630	83.638	117.018	8.714	212.001	4.637×10^5
30.0 TeV	3.000×10^7	2.672	126.032	176.047	13.479	318.231	5.020×10^5
40.0 TeV	4.000×10^7	2.702	168.586	235.222	18.357	424.869	5.291×10^5
80.0 TeV	8.000×10^7	2.777	339.085	472.087	38.739	852.688	5.942×10^5
100. TeV	1.000×10^8	2.802	424.490	590.630	49.270	1067.193	6.151×10^5