Muons in ruthenium (Ru)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
44 (Ru)	101.07 (2)	12.410	441.0	0.19342	2.8707	0.0599	3.0834	4.7694	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	4.772				4.772	1.191×10^0
14.0 MeV	5.616×10^1	3.770				3.770	2.143×10^0
20.0 MeV	6.802×10^1	2.977				2.977	3.954×10^0
30.0 MeV	8.509×10^1	2.334				2.334	7.798×10^0
40.0 MeV	1.003×10^2	2.005				2.005	1.245×10^1
80.0 MeV	1.527×10^2	1.524				1.524	3.604×10^1
100. MeV	1.764×10^2	1.439				1.439	4.958×10^1
140. MeV	2.218×10^2	1.355				1.355	7.835×10^1
200. MeV	2.868×10^2	1.314				1.314	1.235×10^2
253. MeV	3.431×10^2	1.307				1.307	*Minimum ionization*
300. MeV	3.917×10^2	1.310	0.000		0.000	1.310	1.999×10^2
400. MeV	4.945×10^2	1.327	0.000		0.000	1.327	2.757×10^2
800. MeV	8.995×10^2	1.408	0.001		0.000	1.409	5.679×10^2
1.00 GeV	1.101×10^3	1.441	0.001		0.000	1.443	7.081×10^2
1.40 GeV	1.502×10^3	1.494	0.002	0.000	0.001	1.496	9.800×10^2
2.00 GeV	2.103×10^3	1.551	0.003	0.001	0.001	1.555	1.373×10^3
3.00 GeV	3.104×10^3	1.615	0.004	0.003	0.001	1.623	2.001×10^3
4.00 GeV	4.104×10^3	1.659	0.006	0.005	0.002	1.672	2.608×10^3
8.00 GeV	8.105×10^3	1.759	0.016	0.016	0.003	1.794	4.909×10^3
10.0 GeV	1.011×10^4	1.789	0.021	0.022	0.004	1.836	6.011×10^3
14.0 GeV	1.411×10^4	1.831	0.032	0.035	0.005	1.904	8.149×10^3
20.0 GeV	2.011×10^4	1.874	0.049	0.057	0.008	1.989	1.123×10^4
30.0 GeV	3.011×10^4	1.919	0.081	0.099	0.011	2.112	1.611×10^4
40.0 GeV	4.011×10^4	1.949	0.114	0.146	0.015	2.225	2.072×10^4
80.0 GeV	8.011×10^4	2.017	0.258	0.349	0.030	2.654	3.715×10^4
100. GeV	1.001×10^5	2.037	0.334	0.458	0.037	2.867	4.440×10^4
140. GeV	1.401×10^5	2.068	0.490	0.684	0.051	3.294	5.741×10^4
200. GeV	2.001×10^5	2.100	0.735	1.041	0.073	3.949	7.402×10^4
225. GeV	2.254×10^5	2.110	0.839	1.190	0.082	4.222	*Muon critical energy*
300. GeV	3.001×10^5	2.136	1.153	1.639	0.109	5.038	9.640×10^4
400. GeV	4.001×10^5	2.162	1.585	2.258	0.145	6.151	1.143×10^5
800. GeV	8.001×10^5	2.224	3.370	4.799	0.293	10.687	1.631×10^5
1.00 TeV	1.000×10^6	2.244	4.287	6.099	0.369	13.000	1.800×10^5
1.40 TeV	1.400×10^6	2.275	6.127	8.692	0.522	17.618	2.064×10^5
2.00 TeV	2.000×10^6	2.308	8.941	12.651	0.755	24.657	2.350×10^5
3.00 TeV	3.000×10^6	2.346	13.642	19.231	1.155	36.375	2.682×10^5
4.00 TeV	4.000×10^6	2.374	18.406	25.880	1.561	48.222	2.920×10^5
8.00 TeV	8.000×10^6	2.441	37.618	52.615	3.245	95.921	3.497×10^5
10.0 TeV	1.000×10^7	2.463	47.302	66.055	4.110	119.932	3.683×10^5
14.0 TeV	1.400×10^7	2.497	66.618	92.871	5.885	167.873	3.964×10^5
20.0 TeV	2.000×10^7	2.534	95.768	133.268	8.606	240.177	4.261×10^5
30.0 TeV	3.000×10^7	2.576	144.295	200.482	13.309	360.663	4.599×10^5
40.0 TeV	4.000×10^7	2.606	193.001	267.858	18.123	481.589	4.838×10^5
80.0 TeV	8.000×10^7	2.682	388.132	537.566	38.226	966.607	5.412×10^5
100. TeV	1.000×10^8	2.706	485.870	672.550	48.610	1209.737	5.597×10^5