

Table 322: Muons in Element 118

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
118 (Un)	[294.215 (8)]	1.200×10^{-2}	1242.0	-0.07035	3.0000	2.0204	-1.9972	13.8662	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	3.451				3.451	1.746×10^0		
14.0 MeV	5.616×10^1	2.801				2.801	3.043×10^0		
20.0 MeV	6.802×10^1	2.262				2.262	5.449×10^0		
30.0 MeV	8.509×10^1	1.810				1.810	1.045×10^1		
40.0 MeV	1.003×10^2	1.574				1.574	1.641×10^1		
80.0 MeV	1.527×10^2	1.226				1.227	4.601×10^1		
100. MeV	1.764×10^2	1.166				1.166	6.277×10^1		
140. MeV	2.218×10^2	1.112				1.112	9.805×10^1		
200. MeV	2.868×10^2	1.092	0.000			1.093	1.527×10^2		
206. MeV	2.933×10^2	1.092	0.000			1.093	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.108	0.000		0.000	1.108	2.437×10^2		
400. MeV	4.945×10^2	1.137	0.000		0.000	1.137	3.328×10^2		
800. MeV	8.995×10^2	1.247	0.001		0.000	1.249	6.676×10^2		
1.00 GeV	1.101×10^3	1.290	0.002		0.000	1.293	8.249×10^2		
1.40 GeV	1.502×10^3	1.360	0.003		0.000	1.365	1.126×10^3		
2.00 GeV	2.103×10^3	1.438	0.006		0.001	1.445	1.552×10^3		
3.00 GeV	3.104×10^3	1.530	0.010	0.003	0.001	1.544	2.220×10^3		
4.00 GeV	4.104×10^3	1.595	0.014	0.006	0.001	1.618	2.852×10^3		
8.00 GeV	8.105×10^3	1.754	0.035	0.026	0.003	1.818	5.172×10^3		
10.0 GeV	1.011×10^4	1.804	0.047	0.037	0.004	1.893	6.249×10^3		
14.0 GeV	1.411×10^4	2.131	0.072	0.062	0.005	2.271	8.068×10^3		
20.0 GeV	2.011×10^4	2.166	0.112	0.104	0.007	2.390	1.064×10^4		
30.0 GeV	3.011×10^4	2.204	0.184	0.188	0.010	2.587	1.466×10^4		
40.0 GeV	4.011×10^4	2.230	0.260	0.280	0.014	2.785	1.839×10^4		
80.0 GeV	8.011×10^4	2.291	0.587	0.688	0.027	3.594	3.101×10^4		
100. GeV	1.001×10^5	2.310	0.761	0.909	0.033	4.015	3.627×10^4		
131. GeV	1.308×10^5	2.332	1.033	1.256	0.043	4.666	<i>Muon critical energy</i>		
140. GeV	1.401×10^5	2.338	1.117	1.364	0.046	4.867	4.531×10^4		
200. GeV	2.001×10^5	2.367	1.673	2.087	0.066	6.195	5.622×10^4		
300. GeV	3.001×10^5	2.400	2.621	3.293	0.099	8.415	7.003×10^4		
400. GeV	4.001×10^5	2.424	3.600	4.544	0.132	10.703	8.055×10^4		
800. GeV	8.001×10^5	2.481	7.636	9.675	0.267	20.062	1.074×10^5		
1.00 TeV	1.000×10^6	2.500	9.707	12.301	0.335	24.845	1.164×10^5		
1.40 TeV	1.400×10^6	2.529	13.852	17.534	0.475	34.391	1.300×10^5		
2.00 TeV	2.000×10^6	2.559	20.185	25.521	0.687	48.955	1.446×10^5		
3.00 TeV	3.000×10^6	2.594	30.748	38.791	1.049	73.185	1.612×10^5		
4.00 TeV	4.000×10^6	2.619	41.442	52.202	1.417	97.683	1.729×10^5		
8.00 TeV	8.000×10^6	2.682	84.515	106.101	2.941	196.240	2.013×10^5		
10.0 TeV	1.000×10^7	2.702	106.201	133.191	3.722	245.819	2.103×10^5		
14.0 TeV	1.400×10^7	2.733	149.455	187.247	5.325	344.763	2.240×10^5		
20.0 TeV	2.000×10^7	2.767	214.680	268.676	7.780	493.906	2.385×10^5		
30.0 TeV	3.000×10^7	2.806	323.367	404.126	12.018	742.320	2.549×10^5		
40.0 TeV	4.000×10^7	2.834	432.431	539.888	16.353	991.508	2.665×10^5		
80.0 TeV	8.000×10^7	2.903	868.636	1083.323	34.437	1989.301	2.944×10^5		
100. TeV	1.000×10^8	2.926	1086.860	1355.290	43.770	2488.848	3.034×10^5		