

Muons in dubnium (Db)

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
105 (Db)	[268.125 (4)]	??	1061.0	0.27114	3.0000	0.6224	3.0000	6.5105	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	3.544				3.544	1.672×10^0		
14.0 MeV	5.616×10^1	2.854				2.854	2.941×10^0		
20.0 MeV	6.802×10^1	2.291				2.291	5.310×10^0		
30.0 MeV	8.509×10^1	1.824				1.824	1.026×10^1		
40.0 MeV	1.003×10^2	1.582				1.582	1.618×10^1		
80.0 MeV	1.527×10^2	1.227				1.227	4.572×10^1		
100. MeV	1.764×10^2	1.166				1.166	6.248×10^1		
140. MeV	2.218×10^2	1.109				1.109	9.780×10^1		
200. MeV	2.868×10^2	1.089				1.089	1.526×10^2		
209. MeV	2.968×10^2	1.088	0.000			1.089	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.102	0.000		0.000	1.103	2.440×10^2		
400. MeV	4.945×10^2	1.129	0.000		0.000	1.130	3.336×10^2		
800. MeV	8.995×10^2	1.226	0.001		0.000	1.228	6.722×10^2		
1.00 GeV	1.101×10^3	1.262	0.002		0.000	1.264	8.327×10^2		
1.40 GeV	1.502×10^3	1.317	0.003		0.000	1.321	1.142×10^3		
2.00 GeV	2.103×10^3	1.375	0.005	0.000	0.001	1.381	1.586×10^3		
3.00 GeV	3.104×10^3	1.439	0.009	0.003	0.001	1.452	2.290×10^3		
4.00 GeV	4.104×10^3	1.482	0.013	0.007	0.001	1.504	2.966×10^3		
8.00 GeV	8.105×10^3	1.578	0.032	0.025	0.003	1.638	5.505×10^3		
10.0 GeV	1.011×10^4	1.606	0.042	0.036	0.004	1.689	6.707×10^3		
14.0 GeV	1.411×10^4	1.646	0.065	0.059	0.005	1.776	9.015×10^3		
20.0 GeV	2.011×10^4	1.685	0.100	0.098	0.007	1.892	1.229×10^4		
30.0 GeV	3.011×10^4	1.726	0.165	0.175	0.011	2.078	1.733×10^4		
40.0 GeV	4.011×10^4	1.753	0.233	0.260	0.014	2.261	2.194×10^4		
80.0 GeV	8.011×10^4	1.813	0.526	0.636	0.027	3.004	3.724×10^4		
100. GeV	1.001×10^5	1.832	0.682	0.840	0.034	3.388	4.351×10^4		
116. GeV	1.157×10^5	1.844	0.805	1.000	0.039	3.689	<i>Muon critical energy</i>		
140. GeV	1.401×10^5	1.859	1.001	1.258	0.047	4.166	5.414×10^4		
200. GeV	2.001×10^5	1.888	1.499	1.922	0.067	5.378	6.679×10^4		
300. GeV	3.001×10^5	1.920	2.349	3.030	0.100	7.402	8.259×10^4		
400. GeV	4.001×10^5	1.944	3.227	4.179	0.134	9.485	9.450×10^4		
800. GeV	8.001×10^5	2.000	6.847	8.889	0.270	18.008	1.246×10^5		
1.00 TeV	1.000×10^6	2.018	8.705	11.299	0.339	22.363	1.346×10^5		
1.40 TeV	1.400×10^6	2.046	12.424	16.103	0.480	31.055	1.497×10^5		
2.00 TeV	2.000×10^6	2.075	18.108	23.435	0.694	44.315	1.658×10^5		
3.00 TeV	3.000×10^6	2.110	27.589	35.615	1.061	66.377	1.841×10^5		
4.00 TeV	4.000×10^6	2.134	37.189	47.925	1.433	88.683	1.971×10^5		
8.00 TeV	8.000×10^6	2.195	75.859	97.397	2.974	178.427	2.283×10^5		
10.0 TeV	1.000×10^7	2.215	95.332	122.261	3.764	223.574	2.382×10^5		
14.0 TeV	1.400×10^7	2.246	134.171	171.876	5.385	313.680	2.533×10^5		
20.0 TeV	2.000×10^7	2.278	192.742	246.612	7.868	449.503	2.692×10^5		
30.0 TeV	3.000×10^7	2.316	290.344	370.939	12.155	675.756	2.872×10^5		
40.0 TeV	4.000×10^7	2.344	388.289	495.551	16.541	902.727	3.000×10^5		
80.0 TeV	8.000×10^7	2.411	780.033	994.347	34.837	1811.630	3.306×10^5		
100. TeV	1.000×10^8	2.433	976.020	1243.970	44.280	2266.706	3.405×10^5		