

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)	[268.12567(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	6.723×10^2		
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	1.320	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	0.006	0.001	1.503	2.967×10^3		
8.00 GeV	8.105×10^3	1.578	0.031	0.024	0.003	1.637	5.506×10^3		
10.0 GeV	1.011×10^4	1.606	0.041	0.035	0.004	1.687	6.710×10^3		
14.0 GeV	1.411×10^4	1.646	0.063	0.058	0.005	1.773	9.021×10^3		
20.0 GeV	2.011×10^4	1.685	0.098	0.096	0.007	1.888	1.230×10^4		
30.0 GeV	3.011×10^4	1.726	0.161	0.172	0.011	2.070	1.735×10^4		
40.0 GeV	4.011×10^4	1.753	0.227	0.254	0.014	2.250	2.199×10^4		
80.0 GeV	8.011×10^4	1.813	0.514	0.622	0.027	2.978	3.740×10^4		
100. GeV	1.001×10^5	1.832	0.666	0.821	0.034	3.353	4.373×10^4		
118. GeV	1.181×10^5	1.845	0.804	1.002	0.040	3.693	<i>Muon critical energy</i>		
140. GeV	1.401×10^5	1.859	0.977	1.230	0.047	4.114	5.448×10^4		
200. GeV	2.001×10^5	1.888	1.464	1.879	0.067	5.299	6.731×10^4		
300. GeV	3.001×10^5	1.920	2.294	2.962	0.100	7.278	8.336×10^4		
400. GeV	4.001×10^5	1.944	3.152	4.085	0.133	9.316	9.548×10^4		
800. GeV	8.001×10^5	2.000	6.687	8.690	0.269	17.648	1.262×10^5		
1.00 TeV	1.000×10^6	2.018	8.501	11.046	0.338	21.906	1.363×10^5		
1.40 TeV	1.400×10^6	2.046	12.134	15.742	0.479	30.403	1.518×10^5		
2.00 TeV	2.000×10^6	2.075	17.686	22.908	0.693	43.364	1.682×10^5		
3.00 TeV	3.000×10^6	2.110	26.946	34.816	1.058	64.932	1.869×10^5		
4.00 TeV	4.000×10^6	2.134	36.322	46.850	1.430	86.738	2.002×10^5		
8.00 TeV	8.000×10^6	2.195	74.093	95.209	2.967	174.466	2.321×10^5		
10.0 TeV	1.000×10^7	2.215	93.112	119.512	3.756	218.597	2.423×10^5		
14.0 TeV	1.400×10^7	2.246	131.047	168.016	5.374	306.685	2.577×10^5		
20.0 TeV	2.000×10^7	2.278	188.256	241.082	7.852	439.471	2.739×10^5		
30.0 TeV	3.000×10^7	2.316	283.587	362.624	12.130	660.659	2.924×10^5		
40.0 TeV	4.000×10^7	2.344	379.253	484.446	16.506	882.551	3.054×10^5		
80.0 TeV	8.000×10^7	2.411	761.888	972.058	34.759	1771.119	3.368×10^5		
100. TeV	1.000×10^8	2.433	953.320	1216.080	44.180	2216.016	3.469×10^5		