

Muons in darmstadtium (Ds)

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
110 (Ds)	[281.162 (5)]	??	1129.0	0.28068	3.0000	0.6632	3.0000	6.6357	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	3.474				3.474	1.716×10^0		
14.0 MeV	5.616×10^1	2.806				2.806	3.008×10^0		
20.0 MeV	6.802×10^1	2.257				2.257	5.414×10^0		
30.0 MeV	8.509×10^1	1.800				1.800	1.043×10^1		
40.0 MeV	1.003×10^2	1.563				1.563	1.643×10^1		
80.0 MeV	1.527×10^2	1.214				1.214	4.630×10^1		
100. MeV	1.764×10^2	1.154				1.154	6.323×10^1		
140. MeV	2.218×10^2	1.099				1.099	9.890×10^1		
200. MeV	2.868×10^2	1.079	0.000			1.079	1.542×10^2		
207. MeV	2.943×10^2	1.079	0.000			1.079	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.093	0.000		0.000	1.093	2.464×10^2		
400. MeV	4.945×10^2	1.121	0.000		0.000	1.122	3.368×10^2		
800. MeV	8.995×10^2	1.220	0.001		0.000	1.222	6.775×10^2		
1.00 GeV	1.101×10^3	1.256	0.002		0.000	1.259	8.387×10^2		
1.40 GeV	1.502×10^3	1.312	0.003		0.000	1.316	1.149×10^3		
2.00 GeV	2.103×10^3	1.371	0.005	0.000	0.001	1.378	1.594×10^3		
3.00 GeV	3.104×10^3	1.436	0.009	0.003	0.001	1.449	2.301×10^3		
4.00 GeV	4.104×10^3	1.479	0.014	0.007	0.001	1.502	2.978×10^3		
8.00 GeV	8.105×10^3	1.576	0.034	0.025	0.003	1.639	5.518×10^3		
10.0 GeV	1.011×10^4	1.604	0.045	0.037	0.004	1.690	6.719×10^3		
14.0 GeV	1.411×10^4	1.644	0.068	0.061	0.005	1.780	9.024×10^3		
20.0 GeV	2.011×10^4	1.683	0.106	0.102	0.007	1.900	1.229×10^4		
30.0 GeV	3.011×10^4	1.724	0.174	0.183	0.010	2.093	1.730×10^4		
40.0 GeV	4.011×10^4	1.751	0.246	0.271	0.014	2.284	2.187×10^4		
80.0 GeV	8.011×10^4	1.812	0.557	0.664	0.027	3.061	3.695×10^4		
100. GeV	1.001×10^5	1.830	0.721	0.877	0.034	3.464	4.309×10^4		
111. GeV	1.108×10^5	1.838	0.810	0.992	0.037	3.679	<i>Muon critical energy</i>		
140. GeV	1.401×10^5	1.857	1.058	1.315	0.047	4.280	5.347×10^4		
200. GeV	2.001×10^5	1.886	1.586	2.011	0.067	5.551	6.576×10^4		
300. GeV	3.001×10^5	1.919	2.485	3.171	0.100	7.676	8.102×10^4		
400. GeV	4.001×10^5	1.942	3.413	4.374	0.133	9.864	9.249×10^4		
800. GeV	8.001×10^5	1.998	7.241	9.308	0.269	18.817	1.214×10^5		
1.00 TeV	1.000×10^6	2.016	9.204	11.832	0.338	23.393	1.309×10^5		
1.40 TeV	1.400×10^6	2.044	13.136	16.864	0.479	32.524	1.453×10^5		
2.00 TeV	2.000×10^6	2.073	19.144	24.544	0.692	46.456	1.607×10^5		
3.00 TeV	3.000×10^6	2.108	29.165	37.302	1.057	69.634	1.782×10^5		
4.00 TeV	4.000×10^6	2.132	39.311	50.195	1.428	93.069	1.905×10^5		
8.00 TeV	8.000×10^6	2.193	80.180	102.015	2.964	187.355	2.202×10^5		
10.0 TeV	1.000×10^7	2.213	100.759	128.060	3.752	234.786	2.297×10^5		
14.0 TeV	1.400×10^7	2.243	141.804	180.030	5.368	329.447	2.441×10^5		
20.0 TeV	2.000×10^7	2.276	203.700	258.314	7.842	472.135	2.592×10^5		
30.0 TeV	3.000×10^7	2.314	306.840	388.542	12.115	709.814	2.764×10^5		
40.0 TeV	4.000×10^7	2.342	410.341	519.070	16.486	948.241	2.885×10^5		
80.0 TeV	8.000×10^7	2.409	824.301	1041.546	34.719	1902.977	3.177×10^5		
100. TeV	1.000×10^8	2.431	1031.400	1303.020	44.130	2380.984	3.271×10^5		