Muons in liquid xenon (Xe)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
54 (Xe)	131.293 (6)	2.953	482.0	0.26595	3.0000	0.5993	3.0000	6.4396	0.00

T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm^2]
		[MeV cm^2/g]					
10.0 MeV	4.704×10^1	4.447				4.447	1.281×10^0
14.0 MeV	5.616×10^1	3.518				3.519	2.302×10^0
20.0 MeV	6.802×10^1	2.783				2.784	4.240×10^0
30.0 MeV	8.509×10^1	2.187				2.187	8.346×10^0
40.0 MeV	1.003×10^2	1.883				1.883	1.330×10^1
80.0 MeV	1.527×10^2	1.440				1.440	3.834×10^1
100. MeV	1.764×10^2	1.362				1.362	5.265×10^1
140. MeV	2.218×10^2	1.289				1.289	8.298×10^1
200. MeV	2.868×10^2	1.257				1.257	1.303×10^2
226. MeV	3.145×10^2	1.255				1.255	*Minimum ionization*
300. MeV	3.917×10^2	1.265	0.000		0.000	1.265	2.097×10^2
400. MeV	4.945×10^2	1.290	0.000		0.000	1.291	2.880×10^2
800. MeV	8.995×10^2	1.387	0.001		0.000	1.388	5.862×10^2
1.00 GeV	1.101×10^3	1.424	0.001		0.000	1.425	7.283×10^2
1.40 GeV	1.502×10^3	1.481	0.002	0.000	0.001	1.483	1.003×10^3
2.00 GeV	2.103×10^3	1.541	0.003	0.001	0.001	1.546	1.399×10^3
3.00 GeV	3.104×10^3	1.608	0.005	0.003	0.001	1.617	2.030×10^3
4.00 GeV	4.104×10^3	1.653	0.007	0.005	0.002	1.668	2.639×10^3
8.00 GeV	8.105×10^3	1.753	0.018	0.017	0.003	1.792	4.943×10^3
10.0 GeV	1.011×10^4	1.782	0.024	0.024	0.004	1.835	6.046×10^3
14.0 GeV	1.411×10^4	1.824	0.036	0.039	0.005	1.905	8.184×10^3
20.0 GeV	2.011×10^4	1.865	0.056	0.064	0.008	1.993	1.126×10^4
30.0 GeV	3.011×10^4	1.908	0.092	0.112	0.011	2.123	1.612×10^4
40.0 GeV	4.011×10^4	1.936	0.130	0.164	0.015	2.245	2.070×10^4
80.0 GeV	8.011×10^4	2.000	0.293	0.393	0.029	2.715	3.687×10^4
100. GeV	1.001×10^5	2.019	0.380	0.516	0.036	2.952	4.393×10^4
140. GeV	1.401×10^5	2.048	0.557	0.770	0.050	3.427	5.650×10^4
200. GeV	2.000×10^5	2.078	0.835	1.172	0.071	4.157	*Muon critical energy*
200. GeV	2.001×10^5	2.078	0.836	1.173	0.071	4.158	7.238×10^4
300. GeV	3.001×10^5	2.112	1.310	1.846	0.106	5.376	9.348×10^4
400. GeV	4.001×10^5	2.136	1.801	2.543	0.142	6.624	1.102×10^5
800. GeV	8.001×10^5	2.195	3.829	5.401	0.287	11.713	1.551×10^5
1.00 TeV	1.000×10^6	2.214	4.870	6.863	0.361	14.309	1.705×10^5
1.40 TeV	1.400×10^6	2.244	6.958	9.779	0.511	19.492	1.943×10^5
2.00 TeV	2.000×10^6	2.275	10.151	14.229	0.739	27.395	2.202×10^5
3.00 TeV	3.000×10^6	2.311	15.481	21.625	1.130	40.548	2.500×10^5
4.00 TeV	4.000×10^6	2.337	20.883	29.099	1.526	53.847	2.714×10^5
8.00 TeV	8.000×10^6	2.401	42.663	59.144	3.171	107.381	3.229×10^5
10.0 TeV	1.000×10^7	2.422	53.639	74.247	4.016	134.325	3.396×10^5
14.0 TeV	1.400×10^7	2.454	75.530	104.381	5.749	188.115	3.646×10^5
20.0 TeV	2.000×10^7	2.488	108.560	149.776	8.404	269.229	3.911×10^5
30.0 TeV	3.000×10^7	2.528	163.548	225.304	12.992	404.373	4.212×10^5
40.0 TeV	4.000×10^7	2.557	218.733	301.010	17.689	539.990	4.426×10^5
80.0 TeV	8.000×10^7	2.628	439.800	604.039	37.295	1083.764	4.938×10^5
100. TeV	1.000×10^8	2.651	550.520	755.690	47.420	1356.282	5.103×10^5