

Muons in titanium (Ti)

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
22 (Ti)	47.867(1)	4.540	233.0	0.15662	3.0302	0.0957	3.0386	4.4450	0.12
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	5.608				5.608	1.000×10^0		
14.0 MeV	5.616×10^1	4.404				4.404	1.813×10^0		
20.0 MeV	6.802×10^1	3.460				3.460	3.368×10^0		
30.0 MeV	8.509×10^1	2.699				2.699	6.684×10^0		
40.0 MeV	1.003×10^2	2.312				2.312	1.071×10^1		
80.0 MeV	1.527×10^2	1.746				1.746	3.124×10^1		
100. MeV	1.764×10^2	1.644				1.644	4.308×10^1		
140. MeV	2.218×10^2	1.543				1.543	6.832×10^1		
200. MeV	2.868×10^2	1.489				1.490	1.080×10^2		
274. MeV	3.642×10^2	1.477			0.000	1.477	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.478			0.000	1.478	1.756×10^2		
400. MeV	4.945×10^2	1.493	0.000		0.000	1.493	2.430×10^2		
800. MeV	8.995×10^2	1.573	0.000		0.000	1.573	5.038×10^2		
1.00 GeV	1.101×10^3	1.606	0.001		0.000	1.607	6.295×10^2		
1.40 GeV	1.502×10^3	1.659	0.001	0.000	0.001	1.661	8.741×10^2		
2.00 GeV	2.103×10^3	1.717	0.001	0.001	0.001	1.720	1.229×10^3		
3.00 GeV	3.104×10^3	1.783	0.002	0.002	0.001	1.788	1.798×10^3		
4.00 GeV	4.104×10^3	1.828	0.004	0.003	0.002	1.836	2.350×10^3		
8.00 GeV	8.105×10^3	1.930	0.009	0.009	0.004	1.951	4.455×10^3		
10.0 GeV	1.011×10^4	1.960	0.012	0.012	0.004	1.989	5.470×10^3		
14.0 GeV	1.411×10^4	2.004	0.018	0.020	0.006	2.048	7.450×10^3		
20.0 GeV	2.011×10^4	2.048	0.028	0.032	0.008	2.117	1.033×10^4		
30.0 GeV	3.011×10^4	2.095	0.045	0.056	0.012	2.209	1.495×10^4		
40.0 GeV	4.011×10^4	2.126	0.064	0.082	0.016	2.289	1.939×10^4		
80.0 GeV	8.011×10^4	2.196	0.145	0.198	0.031	2.571	3.585×10^4		
100. GeV	1.001×10^5	2.218	0.188	0.260	0.039	2.705	4.344×10^4		
140. GeV	1.401×10^5	2.250	0.276	0.389	0.054	2.969	5.755×10^4		
200. GeV	2.001×10^5	2.284	0.414	0.593	0.077	3.368	7.651×10^4		
300. GeV	3.001×10^5	2.322	0.650	0.935	0.115	4.023	1.036×10^5		
400. GeV	4.001×10^5	2.349	0.894	1.290	0.154	4.688	1.267×10^5		
402. GeV	4.019×10^5	2.350	0.898	1.297	0.154	4.700	<i>Muon critical energy</i>		
800. GeV	8.001×10^5	2.415	1.906	2.752	0.311	7.383	1.941×10^5		
1.00 TeV	1.000×10^6	2.436	2.426	3.501	0.390	8.754	2.189×10^5		
1.40 TeV	1.400×10^6	2.469	3.472	4.996	0.553	11.490	2.587×10^5		
2.00 TeV	2.000×10^6	2.504	5.073	7.280	0.800	15.658	3.033×10^5		
3.00 TeV	3.000×10^6	2.544	7.750	11.078	1.225	22.597	3.562×10^5		
4.00 TeV	4.000×10^6	2.573	10.465	14.919	1.656	29.614	3.947×10^5		
8.00 TeV	8.000×10^6	2.644	21.431	30.372	3.446	57.894	4.896×10^5		
10.0 TeV	1.000×10^7	2.668	26.963	38.144	4.367	72.143	5.205×10^5		
14.0 TeV	1.400×10^7	2.704	38.007	53.647	6.259	100.618	5.672×10^5		
20.0 TeV	2.000×10^7	2.742	54.688	77.010	9.162	143.603	6.169×10^5		
30.0 TeV	3.000×10^7	2.787	82.425	115.884	14.186	215.283	6.734×10^5		
40.0 TeV	4.000×10^7	2.819	110.272	154.861	19.335	287.287	7.134×10^5		
80.0 TeV	8.000×10^7	2.898	221.896	310.888	40.861	576.543	8.098×10^5		
100. TeV	1.000×10^8	2.924	277.830	388.980	51.990	721.725	8.407×10^5		