

Table 167: Muons in Gallium arsenide (GaAs)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.44247	5.310	384.9	0.07152	3.3356	0.1764	3.6420	5.3299	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	5.006				5.006	1.126×10^0	
14.0 MeV	5.616×10^1	3.944				3.944	2.036×10^0	
20.0 MeV	6.802×10^1	3.109				3.109	3.768×10^0	
30.0 MeV	8.509×10^1	2.436				2.436	7.450×10^0	
40.0 MeV	1.003×10^2	2.093				2.093	1.191×10^1	
80.0 MeV	1.527×10^2	1.595				1.595	3.447×10^1	
100. MeV	1.764×10^2	1.506				1.506	4.740×10^1	
140. MeV	2.218×10^2	1.419				1.419	7.489×10^1	
200. MeV	2.868×10^2	1.375				1.375	1.180×10^2	
256. MeV	3.462×10^2	1.368			0.000	1.368	<i>Minimum ionization</i>	
300. MeV	3.917×10^2	1.371	0.000		0.000	1.371	1.910×10^2	
400. MeV	4.945×10^2	1.388	0.000		0.000	1.388	2.635×10^2	
800. MeV	8.995×10^2	1.472	0.001		0.000	1.473	5.430×10^2	
1.00 GeV	1.101×10^3	1.506	0.001		0.000	1.507	6.772×10^2	
1.40 GeV	1.502×10^3	1.560	0.001	0.000	0.001	1.562	9.376×10^2	
2.00 GeV	2.103×10^3	1.619	0.002	0.001	0.001	1.623	1.314×10^3	
3.00 GeV	3.104×10^3	1.685	0.003	0.002	0.001	1.692	1.917×10^3	
4.00 GeV	4.104×10^3	1.731	0.005	0.004	0.002	1.741	2.499×10^3	
8.00 GeV	8.105×10^3	1.834	0.012	0.012	0.003	1.862	4.712×10^3	
10.0 GeV	1.011×10^4	1.865	0.016	0.017	0.004	1.902	5.774×10^3	
14.0 GeV	1.411×10^4	1.910	0.024	0.027	0.006	1.967	7.840×10^3	
20.0 GeV	2.011×10^4	1.955	0.038	0.044	0.008	2.045	1.083×10^4	
30.0 GeV	3.011×10^4	2.002	0.061	0.076	0.012	2.152	1.559×10^4	
40.0 GeV	4.011×10^4	2.034	0.087	0.112	0.016	2.248	2.014×10^4	
80.0 GeV	8.011×10^4	2.105	0.196	0.268	0.030	2.599	3.665×10^4	
100. GeV	1.001×10^5	2.126	0.254	0.352	0.038	2.770	4.411×10^4	
140. GeV	1.401×10^5	2.158	0.373	0.525	0.052	3.109	5.773×10^4	
200. GeV	2.001×10^5	2.191	0.559	0.800	0.075	3.624	7.559×10^4	
297. GeV	2.974×10^5	2.227	0.869	1.247	0.111	4.454	<i>Muon critical energy</i>	
300. GeV	3.001×10^5	2.227	0.877	1.260	0.112	4.477	1.004×10^5	
400. GeV	4.001×10^5	2.254	1.207	1.736	0.149	5.347	1.208×10^5	
800. GeV	8.001×10^5	2.317	2.569	3.695	0.301	8.882	1.783×10^5	
1.00 TeV	1.000×10^6	2.337	3.269	4.697	0.379	10.683	1.988×10^5	
1.40 TeV	1.400×10^6	2.369	4.674	6.698	0.536	14.279	2.310×10^5	
2.00 TeV	2.000×10^6	2.402	6.826	9.754	0.776	19.759	2.666×10^5	
3.00 TeV	3.000×10^6	2.441	10.420	14.832	1.187	28.881	3.083×10^5	
4.00 TeV	4.000×10^6	2.469	14.064	19.967	1.604	38.105	3.383×10^5	
8.00 TeV	8.000×10^6	2.538	28.769	40.614	3.337	75.259	4.116×10^5	
10.0 TeV	1.000×10^7	2.560	36.183	50.996	4.227	93.968	4.353×10^5	
14.0 TeV	1.400×10^7	2.595	50.974	71.708	6.055	131.333	4.712×10^5	
20.0 TeV	2.000×10^7	2.632	73.300	102.915	8.858	187.706	5.092×10^5	
30.0 TeV	3.000×10^7	2.675	110.466	154.840	13.706	281.687	5.524×10^5	
40.0 TeV	4.000×10^7	2.706	147.777	206.895	18.671	376.049	5.830×10^5	
80.0 TeV	8.000×10^7	2.782	297.278	415.267	39.417	754.746	6.566×10^5	
100. TeV	1.000×10^8	2.807	372.171	519.555	50.139	944.673	6.802×10^5	