Muons in yttrium aluminum oxide (1) ($YAlO_3$)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.46374	5.500	239.3	0.15380	3.0000	0.2000	3.0000	4.2973	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	5.655				5.655	9.900×10^{-1}
14.0 MeV	5.616×10^1	4.441				4.441	1.796×10^0
20.0 MeV	6.802×10^1	3.490				3.490	3.337×10^0
30.0 MeV	8.509×10^1	2.725				2.725	6.625×10^0
40.0 MeV	1.003×10^2	2.337				2.337	1.061×10^1
80.0 MeV	1.527×10^2	1.772				1.772	3.088×10^1
100. MeV	1.764×10^2	1.670				1.670	4.254×10^1
140. MeV	2.218×10^2	1.564				1.564	6.741×10^1
200. MeV	2.868×10^2	1.507				1.507	1.066×10^2
277. MeV	3.683×10^2	1.492			0.000	1.492	*Minimum ionization*
300. MeV	3.917×10^2	1.492			0.000	1.493	1.735×10^2
400. MeV	4.945×10^2	1.505	0.000		0.000	1.506	2.402×10^2
800. MeV	8.995×10^2	1.582	0.000		0.000	1.583	4.992×10^2
1.00 GeV	1.101×10^3	1.615	0.001		0.000	1.616	6.242×10^2
1.40 GeV	1.502×10^3	1.667	0.001	0.000	0.001	1.669	8.676×10^2
2.00 GeV	2.103×10^3	1.724	0.002	0.001	0.001	1.727	1.221×10^3
3.00 GeV	3.104×10^3	1.789	0.003	0.002	0.001	1.795	1.788×10^3
4.00 GeV	4.104×10^3	1.833	0.004	0.003	0.002	1.842	2.337×10^3
8.00 GeV	8.105×10^3	1.935	0.010	0.010	0.003	1.958	4.436×10^3
10.0 GeV	1.011×10^4	1.965	0.013	0.013	0.004	1.996	5.447×10^3
14.0 GeV	1.411×10^4	2.009	0.020	0.022	0.006	2.057	7.419×10^3
20.0 GeV	2.011×10^4	2.053	0.031	0.036	0.008	2.128	1.028×10^4
30.0 GeV	3.011×10^4	2.100	0.050	0.062	0.012	2.225	1.488×10^4
40.0 GeV	4.011×10^4	2.131	0.071	0.091	0.016	2.310	1.929×10^4
80.0 GeV	8.011×10^4	2.202	0.161	0.218	0.031	2.613	3.554×10^4
100. GeV	1.001×10^5	2.224	0.208	0.287	0.039	2.758	4.299×10^4
140. GeV	1.401×10^5	2.256	0.306	0.428	0.054	3.045	5.679×10^4
200. GeV	2.001×10^5	2.290	0.459	0.652	0.077	3.479	7.521×10^4
300. GeV	3.001×10^5	2.329	0.720	1.029	0.116	4.194	1.014×10^5
369. GeV	3.696×10^5	2.348	0.908	1.299	0.142	4.698	*Muon critical energy*
400. GeV	4.001×10^5	2.356	0.991	1.419	0.154	4.921	1.234×10^5
800. GeV	8.001×10^5	2.422	2.111	3.025	0.311	7.870	1.871×10^5
1.00 TeV	1.000×10^6	2.444	2.687	3.848	0.391	9.371	2.103×10^5
1.40 TeV	1.400×10^6	2.477	3.843	5.490	0.554	12.365	2.474×10^5
2.00 TeV	2.000×10^6	2.512	5.613	7.997	0.802	16.926	2.887×10^5
3.00 TeV	3.000×10^6	2.553	8.572	12.165	1.228	24.519	3.375×10^5
4.00 TeV	4.000×10^6	2.582	11.573	16.381	1.661	32.197	3.730×10^5
8.00 TeV	8.000×10^6	2.654	23.684	33.335	3.458	63.131	4.601×10^5
10.0 TeV	1.000×10^7	2.678	29.792	41.861	4.382	78.713	4.884×10^5
14.0 TeV	1.400×10^7	2.714	41.977	58.868	6.281	109.841	5.313×10^5
20.0 TeV	2.000×10^7	2.753	60.374	84.494	9.196	156.818	5.767×10^5
30.0 TeV	3.000×10^7	2.798	90.998	127.135	14.242	235.173	6.285×10^5
40.0 TeV	4.000×10^7	2.830	121.743	169.886	19.413	313.874	6.652×10^5
80.0 TeV	8.000×10^7	2.910	244.950	341.021	41.050	629.932	7.533×10^5
100. TeV	1.000×10^8	2.936	306.675	426.675	52.242	788.529	7.817×10^5