Muons in yttrium silicon oxide (Y_2SiO_5)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.46171	4.540	258.1	0.16963	3.0000	0.2000	3.0000	4.6447	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	5.566				5.566	1.007×10^0
14.0 MeV	5.616×10^1	4.372				4.372	1.826×10^0
20.0 MeV	6.802×10^1	3.438				3.438	3.391×10^0
30.0 MeV	8.509×10^1	2.686				2.686	6.727×10^0
40.0 MeV	1.003×10^2	2.304				2.304	1.077×10^1
80.0 MeV	1.527×10^2	1.748				1.748	3.132×10^1
100. MeV	1.764×10^2	1.648				1.649	4.313×10^1
140. MeV	2.218×10^2	1.547				1.548	6.829×10^1
200. MeV	2.868×10^2	1.494				1.495	1.079×10^2
270. MeV	3.602×10^2	1.482			0.000	1.483	*Minimum ionization*
300. MeV	3.917×10^2	1.484			0.000	1.484	1.752×10^2
400. MeV	4.945×10^2	1.498	0.000		0.000	1.499	2.423×10^2
800. MeV	8.995×10^2	1.579	0.000		0.000	1.580	5.021×10^2
1.00 GeV	1.101×10^3	1.613	0.001		0.000	1.614	6.273×10^2
1.40 GeV	1.502×10^3	1.667	0.001	0.000	0.001	1.669	8.708×10^2
2.00 GeV	2.103×10^3	1.725	0.002	0.001	0.001	1.728	1.224×10^3
3.00 GeV	3.104×10^3	1.791	0.003	0.002	0.001	1.797	1.790×10^3
4.00 GeV	4.104×10^3	1.836	0.004	0.003	0.002	1.846	2.339×10^3
8.00 GeV	8.105×10^3	1.939	0.011	0.010	0.003	1.963	4.433×10^3
10.0 GeV	1.011×10^4	1.969	0.014	0.015	0.004	2.003	5.441×10^3
14.0 GeV	1.411×10^4	2.014	0.021	0.024	0.006	2.065	7.407×10^3
20.0 GeV	2.011×10^4	2.058	0.033	0.038	0.008	2.138	1.026×10^4
30.0 GeV	3.011×10^4	2.104	0.054	0.067	0.012	2.238	1.483×10^4
40.0 GeV	4.011×10^4	2.136	0.077	0.098	0.016	2.327	1.921×10^4
80.0 GeV	8.011×10^4	2.206	0.173	0.235	0.031	2.646	3.530×10^4
100. GeV	1.001×10^5	2.228	0.224	0.309	0.039	2.800	4.265×10^4
140. GeV	1.401×10^5	2.260	0.329	0.461	0.054	3.105	5.621×10^4
200. GeV	2.001×10^5	2.294	0.494	0.702	0.076	3.567	7.423×10^4
300. GeV	3.001×10^5	2.332	0.775	1.107	0.115	4.330	9.964×10^4
347. GeV	3.470×10^5	2.346	0.911	1.303	0.133	4.693	*Muon critical energy*
400. GeV	4.001×10^5	2.360	1.067	1.527	0.153	5.107	1.209×10^5
800. GeV	8.001×10^5	2.426	2.271	3.253	0.309	8.259	1.819×10^5
1.00 TeV	1.000×10^6	2.447	2.890	4.137	0.388	9.864	2.040×10^5
1.40 TeV	1.400×10^6	2.480	4.134	5.901	0.550	13.066	2.392×10^5
2.00 TeV	2.000×10^6	2.515	6.037	8.595	0.796	17.944	2.782×10^5
3.00 TeV	3.000×10^6	2.555	9.217	13.073	1.219	26.065	3.242×10^5
4.00 TeV	4.000×10^6	2.585	12.442	17.601	1.648	34.277	3.576×10^5
8.00 TeV	8.000×10^6	2.656	25.458	35.812	3.430	67.357	4.393×10^5
10.0 TeV	1.000×10^7	2.680	32.021	44.969	4.347	84.018	4.658×10^5
14.0 TeV	1.400×10^7	2.716	45.114	63.237	6.231	117.298	5.059×10^5
20.0 TeV	2.000×10^7	2.754	64.880	90.762	9.121	167.518	5.485×10^5
30.0 TeV	3.000×10^7	2.799	97.784	136.561	14.123	251.268	5.969×10^5
40.0 TeV	4.000×10^7	2.831	130.818	182.477	19.248	335.375	6.313×10^5
80.0 TeV	8.000×10^7	2.911	263.188	366.280	40.689	673.069	7.138×10^5
100. TeV	1.000×10^8	2.937	329.502	458.272	51.778	842.491	7.403×10^5