

Muons in lutetium silicon oxide (Lu_2SiO_5)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.42793	7.400	472.0	0.20623	3.0000	0.2732	3.0000	5.4394	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	4.679				4.679		1.209×10^0	
14.0 MeV	5.616×10^1	3.692				3.693		2.181×10^0	
20.0 MeV	6.802×10^1	2.916				2.916		4.029×10^0	
30.0 MeV	8.509×10^1	2.287				2.287		7.953×10^0	
40.0 MeV	1.003×10^2	1.968				1.968		1.270×10^1	
80.0 MeV	1.527×10^2	1.503				1.503		3.666×10^1	
100. MeV	1.764×10^2	1.421				1.422		5.038×10^1	
140. MeV	2.218×10^2	1.344				1.344		7.944×10^1	
200. MeV	2.868×10^2	1.308				1.308		1.248×10^2	
242. MeV	3.316×10^2	1.304				1.304		<i>Minimum ionization</i>	
300. MeV	3.917×10^2	1.309	0.000		0.000	1.309		2.014×10^2	
400. MeV	4.945×10^2	1.329	0.000		0.000	1.329		2.773×10^2	
800. MeV	8.995×10^2	1.415	0.001		0.000	1.416		5.684×10^2	
1.00 GeV	1.101×10^3	1.449	0.001		0.000	1.450		7.080×10^2	
1.40 GeV	1.502×10^3	1.502	0.002	0.000	0.001	1.505		9.785×10^2	
2.00 GeV	2.103×10^3	1.560	0.003	0.001	0.001	1.565		1.369×10^3	
3.00 GeV	3.104×10^3	1.624	0.005	0.003	0.001	1.633		1.994×10^3	
4.00 GeV	4.104×10^3	1.668	0.007	0.005	0.002	1.682		2.596×10^3	
8.00 GeV	8.105×10^3	1.766	0.018	0.017	0.003	1.805		4.883×10^3	
10.0 GeV	1.011×10^4	1.796	0.024	0.024	0.004	1.848		5.978×10^3	
14.0 GeV	1.411×10^4	1.838	0.037	0.039	0.006	1.919		8.100×10^3	
20.0 GeV	2.011×10^4	1.879	0.058	0.063	0.008	2.009		1.115×10^4	
30.0 GeV	3.011×10^4	1.923	0.094	0.111	0.011	2.141		1.597×10^4	
40.0 GeV	4.011×10^4	1.952	0.133	0.163	0.015	2.265		2.051×10^4	
80.0 GeV	8.011×10^4	2.018	0.302	0.394	0.029	2.744		3.653×10^4	
100. GeV	1.001×10^5	2.038	0.391	0.518	0.036	2.984		4.352×10^4	
140. GeV	1.401×10^5	2.068	0.574	0.774	0.051	3.468		5.594×10^4	
199. GeV	1.990×10^5	2.099	0.855	1.172	0.072	4.199		<i>Muon critical energy</i>	
200. GeV	2.001×10^5	2.099	0.860	1.180	0.072	4.212		7.163×10^4	
300. GeV	3.001×10^5	2.135	1.349	1.857	0.108	5.451		9.245×10^4	
400. GeV	4.001×10^5	2.160	1.855	2.560	0.144	6.720		1.089×10^5	
800. GeV	8.001×10^5	2.221	3.941	5.442	0.292	11.896		1.531×10^5	
1.00 TeV	1.000×10^6	2.241	5.012	6.916	0.366	14.537		1.683×10^5	
1.40 TeV	1.400×10^6	2.271	7.159	9.857	0.519	19.808		1.918×10^5	
2.00 TeV	2.000×10^6	2.304	10.443	14.344	0.751	27.844		2.172×10^5	
3.00 TeV	3.000×10^6	2.341	15.924	21.801	1.149	41.217		2.466×10^5	
4.00 TeV	4.000×10^6	2.368	21.478	29.338	1.553	54.738		2.676×10^5	
8.00 TeV	8.000×10^6	2.435	43.866	59.634	3.228	109.164		3.183×10^5	
10.0 TeV	1.000×10^7	2.457	55.146	74.862	4.089	136.555		3.346×10^5	
14.0 TeV	1.400×10^7	2.490	77.646	105.247	5.856	191.241		3.593×10^5	
20.0 TeV	2.000×10^7	2.526	111.592	151.018	8.565	273.703		3.854×10^5	
30.0 TeV	3.000×10^7	2.567	168.101	227.174	13.250	411.094		4.150×10^5	
40.0 TeV	4.000×10^7	2.597	224.810	303.511	18.047	548.966		4.360×10^5	
80.0 TeV	8.000×10^7	2.671	451.972	609.067	38.091	1101.802		4.864×10^5	
100. TeV	1.000×10^8	2.695	565.740	761.984	48.449	1378.869		5.026×10^5	