

Muons in lanthanum oxysulfide $\text{La}_2\text{O}_2\text{S}$

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.42706	5.860	421.2	0.21501	2.7298	-0.0906	3.2664	5.4470	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	4.760				4.760		1.186×10^0	
14.0 MeV	5.616×10^1	3.753				3.753		2.142×10^0	
20.0 MeV	6.802×10^1	2.961				2.961		3.962×10^0	
30.0 MeV	8.509×10^1	2.321				2.321		7.828×10^0	
40.0 MeV	1.003×10^2	1.996				1.996		1.250×10^1	
80.0 MeV	1.527×10^2	1.519				1.519		3.617×10^1	
100. MeV	1.764×10^2	1.433				1.433		4.977×10^1	
140. MeV	2.218×10^2	1.349				1.349		7.866×10^1	
200. MeV	2.868×10^2	1.308				1.308		1.240×10^2	
252. MeV	3.421×10^2	1.301				1.301			<i>Minimum ionization</i>
300. MeV	3.917×10^2	1.304	0.000		0.000	1.304		2.007×10^2	
400. MeV	4.945×10^2	1.322	0.000		0.000	1.322		2.769×10^2	
800. MeV	8.995×10^2	1.404	0.001		0.000	1.405		5.701×10^2	
1.00 GeV	1.101×10^3	1.438	0.001		0.000	1.439		7.107×10^2	
1.40 GeV	1.502×10^3	1.491	0.002	0.000	0.001	1.494		9.833×10^2	
2.00 GeV	2.103×10^3	1.549	0.003	0.001	0.001	1.554		1.377×10^3	
3.00 GeV	3.104×10^3	1.615	0.005	0.003	0.001	1.624		2.005×10^3	
4.00 GeV	4.104×10^3	1.660	0.007	0.005	0.002	1.674		2.612×10^3	
8.00 GeV	8.105×10^3	1.763	0.016	0.016	0.003	1.799		4.908×10^3	
10.0 GeV	1.011×10^4	1.794	0.022	0.022	0.004	1.842		6.007×10^3	
14.0 GeV	1.411×10^4	1.838	0.033	0.035	0.006	1.913		8.136×10^3	
20.0 GeV	2.011×10^4	1.882	0.051	0.058	0.008	2.000		1.120×10^4	
30.0 GeV	3.011×10^4	1.929	0.084	0.101	0.011	2.125		1.605×10^4	
40.0 GeV	4.011×10^4	1.960	0.118	0.148	0.015	2.242		2.063×10^4	
80.0 GeV	8.011×10^4	2.028	0.267	0.356	0.030	2.682		3.691×10^4	
100. GeV	1.001×10^5	2.049	0.346	0.468	0.037	2.900		4.408×10^4	
140. GeV	1.401×10^5	2.079	0.508	0.699	0.051	3.338		5.693×10^4	
200. GeV	2.001×10^5	2.110	0.761	1.065	0.073	4.010		7.331×10^4	
221. GeV	2.209×10^5	2.119	0.849	1.190	0.080	4.239			<i>Muon critical energy</i>
300. GeV	3.001×10^5	2.146	1.194	1.676	0.109	5.126		9.533×10^4	
400. GeV	4.001×10^5	2.171	1.641	2.310	0.145	6.268		1.129×10^5	
800. GeV	8.001×10^5	2.232	3.488	4.910	0.293	10.925		1.607×10^5	
1.00 TeV	1.000×10^6	2.252	4.438	6.240	0.368	13.299		1.773×10^5	
1.40 TeV	1.400×10^6	2.282	6.340	8.894	0.522	18.039		2.030×10^5	
2.00 TeV	2.000×10^6	2.315	9.251	12.943	0.755	25.266		2.310×10^5	
3.00 TeV	3.000×10^6	2.352	14.112	19.673	1.155	37.293		2.634×10^5	
4.00 TeV	4.000×10^6	2.379	19.037	26.476	1.560	49.454		2.866×10^5	
8.00 TeV	8.000×10^6	2.445	38.898	53.821	3.244	98.409		3.428×10^5	
10.0 TeV	1.000×10^7	2.467	48.907	67.567	4.109	123.051		3.610×10^5	
14.0 TeV	1.400×10^7	2.500	68.872	94.993	5.885	172.252		3.883×10^5	
20.0 TeV	2.000×10^7	2.536	98.997	136.310	8.608	246.453		4.173×10^5	
30.0 TeV	3.000×10^7	2.577	149.147	205.055	13.314	370.095		4.502×10^5	
40.0 TeV	4.000×10^7	2.607	199.479	273.965	18.132	494.184		4.735×10^5	
80.0 TeV	8.000×10^7	2.681	401.112	549.794	38.262	991.851		5.295×10^5	
100. TeV	1.000×10^8	2.705	502.101	687.836	48.663	1241.307		5.475×10^5	