

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] | | |
| 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 | | |