

Muons in lithium (Li)

| Z | A [g/mol] | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|----------|---------------------|-----------------------------|--------|---------------------------------------|-----------|---------|------------------------------------|-----------|------------|
| 3 (Li) | 6.94(2) | 0.534 | 40.0 | 0.95136 | 2.4993 | 0.1304 | 1.6397 | 3.1221 | 0.14 |
| T | p [MeV/c] | Ionization | Brems | Pair prod [MeV cm ² /g] | Photonucl | Total | CSDA range [g/cm ²] | | |
| 10.0 MeV | 4.704×10^1 | 6.698 | | | | 6.698 | 8.207×10^{-1} | | |
| 14.0 MeV | 5.616×10^1 | 5.209 | | | | 5.209 | 1.505×10^0 | | |
| 20.0 MeV | 6.802×10^1 | 4.055 | | | | 4.055 | 2.826×10^0 | | |
| 30.0 MeV | 8.509×10^1 | 3.134 | | | | 3.135 | 5.671×10^0 | | |
| 40.0 MeV | 1.003×10^2 | 2.669 | | | | 2.669 | 9.151×10^0 | | |
| 80.0 MeV | 1.527×10^2 | 1.988 | | | | 1.988 | 2.708×10^1 | | |
| 100. MeV | 1.764×10^2 | 1.865 | | | | 1.865 | 3.750×10^1 | | |
| 140. MeV | 2.218×10^2 | 1.739 | | | | 1.739 | 5.981×10^1 | | |
| 200. MeV | 2.868×10^2 | 1.667 | | | | 1.667 | 9.519×10^1 | | |
| 300. MeV | 3.917×10^2 | 1.639 | | | 0.000 | 1.639 | 1.559×10^2 | | |
| 318. MeV | 4.105×10^2 | 1.639 | | | 0.000 | 1.639 | <i>Minimum ionization</i> | | |
| 400. MeV | 4.945×10^2 | 1.643 | | | 0.000 | 1.644 | 2.168×10^2 | | |
| 800. MeV | 8.995×10^2 | 1.701 | | | 0.000 | 1.701 | 4.561×10^2 | | |
| 1.00 GeV | 1.101×10^3 | 1.727 | | | 0.000 | 1.727 | 5.727×10^2 | | |
| 1.40 GeV | 1.502×10^3 | 1.768 | 0.000 | | 0.001 | 1.769 | 8.014×10^2 | | |
| 2.00 GeV | 2.103×10^3 | 1.813 | 0.000 | | 0.001 | 1.814 | 1.136×10^3 | | |
| 3.00 GeV | 3.104×10^3 | 1.863 | 0.000 | 0.000 | 0.002 | 1.865 | 1.679×10^3 | | |
| 4.00 GeV | 4.104×10^3 | 1.897 | 0.001 | 0.000 | 0.002 | 1.900 | 2.210×10^3 | | |
| 8.00 GeV | 8.105×10^3 | 1.977 | 0.001 | 0.001 | 0.004 | 1.984 | 4.265×10^3 | | |
| 10.0 GeV | 1.011×10^4 | 2.002 | 0.002 | 0.002 | 0.005 | 2.011 | 5.266×10^3 | | |
| 14.0 GeV | 1.411×10^4 | 2.039 | 0.003 | 0.003 | 0.007 | 2.052 | 7.235×10^3 | | |
| 20.0 GeV | 2.011×10^4 | 2.077 | 0.005 | 0.005 | 0.009 | 2.096 | 1.013×10^4 | | |
| 30.0 GeV | 3.011×10^4 | 2.118 | 0.008 | 0.009 | 0.014 | 2.149 | 1.483×10^4 | | |
| 40.0 GeV | 4.011×10^4 | 2.146 | 0.011 | 0.014 | 0.018 | 2.189 | 1.944×10^4 | | |
| 80.0 GeV | 8.011×10^4 | 2.212 | 0.025 | 0.034 | 0.035 | 2.305 | 3.722×10^4 | | |
| 100. GeV | 1.001×10^5 | 2.232 | 0.032 | 0.045 | 0.043 | 2.353 | 4.580×10^4 | | |
| 140. GeV | 1.401×10^5 | 2.262 | 0.048 | 0.067 | 0.060 | 2.438 | 6.250×10^4 | | |
| 200. GeV | 2.001×10^5 | 2.294 | 0.073 | 0.103 | 0.086 | 2.556 | 8.653×10^4 | | |
| 300. GeV | 3.001×10^5 | 2.330 | 0.115 | 0.165 | 0.128 | 2.739 | 1.243×10^5 | | |
| 400. GeV | 4.001×10^5 | 2.355 | 0.160 | 0.230 | 0.171 | 2.916 | 1.597×10^5 | | |
| 800. GeV | 8.001×10^5 | 2.417 | 0.346 | 0.502 | 0.346 | 3.611 | 2.827×10^5 | | |
| 1.00 TeV | 1.000×10^6 | 2.437 | 0.443 | 0.643 | 0.435 | 3.959 | 3.356×10^5 | | |
| 1.40 TeV | 1.400×10^6 | 2.468 | 0.638 | 0.925 | 0.617 | 4.649 | 4.287×10^5 | | |
| 1.58 TeV | 1.578×10^6 | 2.479 | 0.727 | 1.053 | 0.699 | 4.958 | <i>Muon critical energy</i> | | |
| 2.00 TeV | 2.000×10^6 | 2.501 | 0.940 | 1.360 | 0.894 | 5.695 | 5.451×10^5 | | |
| 3.00 TeV | 3.000×10^6 | 2.539 | 1.446 | 2.085 | 1.371 | 7.441 | 6.983×10^5 | | |
| 4.00 TeV | 4.000×10^6 | 2.566 | 1.962 | 2.823 | 1.857 | 9.207 | 8.190×10^5 | | |
| 8.00 TeV | 8.000×10^6 | 2.633 | 4.057 | 5.799 | 3.881 | 16.370 | 1.141×10^6 | | |
| 10.0 TeV | 1.000×10^7 | 2.655 | 5.119 | 7.301 | 4.924 | 19.999 | 1.251×10^6 | | |
| 14.0 TeV | 1.400×10^7 | 2.689 | 7.239 | 10.291 | 7.075 | 27.293 | 1.421×10^6 | | |
| 20.0 TeV | 2.000×10^7 | 2.725 | 10.450 | 14.806 | 10.382 | 38.363 | 1.606×10^6 | | |
| 30.0 TeV | 3.000×10^7 | 2.767 | 15.797 | 22.311 | 16.131 | 57.006 | 1.819×10^6 | | |
| 40.0 TeV | 4.000×10^7 | 2.797 | 21.178 | 29.845 | 22.035 | 75.855 | 1.970×10^6 | | |
| 80.0 TeV | 8.000×10^7 | 2.871 | 42.758 | 60.014 | 46.852 | 152.495 | 2.335×10^6 | | |
| 100. TeV | 1.000×10^8 | 2.896 | 53.580 | 75.120 | 59.730 | 191.326 | 2.452×10^6 | | |