

Muons in uranium (U)

| Z | A [g/mol] | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|----------|---------------------|-----------------------------|---------|---------------------------------------|-----------|----------|------------------------------------|-----------|------------|
| 92 (U) | [238.02891(3)] | 18.950 | 890.0 | 0.19677 | 2.8171 | 0.2260 | 3.3721 | 5.8694 | 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 | 3.665 | | | | 3.665 | 1.595×10^0 | | |
| 14.0 MeV | 5.616×10^1 | 2.933 | | | | 2.933 | 2.826×10^0 | | |
| 20.0 MeV | 6.802×10^1 | 2.342 | | | | 2.342 | 5.138×10^0 | | |
| 30.0 MeV | 8.509×10^1 | 1.855 | | | | 1.855 | 9.995×10^0 | | |
| 40.0 MeV | 1.003×10^2 | 1.604 | | | | 1.604 | 1.583×10^1 | | |
| 80.0 MeV | 1.527×10^2 | 1.234 | | | | 1.234 | 4.509×10^1 | | |
| 100. MeV | 1.764×10^2 | 1.169 | | | | 1.169 | 6.178×10^1 | | |
| 140. MeV | 2.218×10^2 | 1.109 | | | | 1.109 | 9.707×10^1 | | |
| 200. MeV | 2.868×10^2 | 1.083 | | | | 1.083 | 1.520×10^2 | | |
| 227. MeV | 3.154×10^2 | 1.081 | 0.000 | | | 1.082 | <i>Minimum ionization</i> | | |
| 300. MeV | 3.917×10^2 | 1.089 | 0.000 | | 0.000 | 1.089 | 2.443×10^2 | | |
| 400. MeV | 4.945×10^2 | 1.109 | 0.000 | | 0.000 | 1.109 | 3.353×10^2 | | |
| 800. MeV | 8.995×10^2 | 1.191 | 0.001 | | 0.000 | 1.192 | 6.824×10^2 | | |
| 1.00 GeV | 1.101×10^3 | 1.223 | 0.002 | | 0.000 | 1.225 | 8.478×10^2 | | |
| 1.40 GeV | 1.502×10^3 | 1.273 | 0.003 | | 0.001 | 1.277 | 1.167×10^3 | | |
| 2.00 GeV | 2.103×10^3 | 1.328 | 0.004 | 0.001 | 0.001 | 1.334 | 1.627×10^3 | | |
| 3.00 GeV | 3.104×10^3 | 1.389 | 0.007 | 0.003 | 0.001 | 1.402 | 2.357×10^3 | | |
| 4.00 GeV | 4.104×10^3 | 1.431 | 0.011 | 0.006 | 0.002 | 1.451 | 3.057×10^3 | | |
| 8.00 GeV | 8.105×10^3 | 1.527 | 0.027 | 0.023 | 0.003 | 1.580 | 5.688×10^3 | | |
| 10.0 GeV | 1.011×10^4 | 1.555 | 0.036 | 0.032 | 0.004 | 1.628 | 6.935×10^3 | | |
| 14.0 GeV | 1.411×10^4 | 1.596 | 0.055 | 0.053 | 0.005 | 1.711 | 9.330×10^3 | | |
| 20.0 GeV | 2.011×10^4 | 1.637 | 0.086 | 0.088 | 0.007 | 1.819 | 1.273×10^4 | | |
| 30.0 GeV | 3.011×10^4 | 1.680 | 0.140 | 0.156 | 0.011 | 1.988 | 1.798×10^4 | | |
| 40.0 GeV | 4.011×10^4 | 1.708 | 0.198 | 0.230 | 0.014 | 2.152 | 2.282×10^4 | | |
| 80.0 GeV | 8.011×10^4 | 1.771 | 0.449 | 0.560 | 0.027 | 2.808 | 3.904×10^4 | | |
| 100. GeV | 1.001×10^5 | 1.790 | 0.581 | 0.738 | 0.034 | 3.145 | 4.577×10^4 | | |
| 128. GeV | 1.284×10^5 | 1.810 | 0.772 | 0.995 | 0.043 | 3.623 | <i>Muon critical energy</i> | | |
| 140. GeV | 1.401×10^5 | 1.818 | 0.853 | 1.105 | 0.047 | 3.824 | 5.729×10^4 | | |
| 200. GeV | 2.001×10^5 | 1.846 | 1.278 | 1.686 | 0.067 | 4.879 | 7.116×10^4 | | |
| 300. GeV | 3.001×10^5 | 1.878 | 2.004 | 2.655 | 0.101 | 6.640 | 8.867×10^4 | | |
| 400. GeV | 4.001×10^5 | 1.901 | 2.753 | 3.660 | 0.135 | 8.451 | 1.020×10^5 | | |
| 800. GeV | 8.001×10^5 | 1.956 | 5.844 | 7.781 | 0.272 | 15.855 | 1.360×10^5 | | |
| 1.00 TeV | 1.000×10^6 | 1.974 | 7.430 | 9.888 | 0.342 | 19.637 | 1.473×10^5 | | |
| 1.40 TeV | 1.400×10^6 | 2.002 | 10.607 | 14.090 | 0.484 | 27.185 | 1.646×10^5 | | |
| 2.00 TeV | 2.000×10^6 | 2.031 | 15.463 | 20.503 | 0.700 | 38.699 | 1.830×10^5 | | |
| 3.00 TeV | 3.000×10^6 | 2.065 | 23.564 | 31.156 | 1.070 | 57.858 | 2.040×10^5 | | |
| 4.00 TeV | 4.000×10^6 | 2.089 | 31.769 | 41.921 | 1.446 | 77.228 | 2.189×10^5 | | |
| 8.00 TeV | 8.000×10^6 | 2.149 | 64.824 | 85.189 | 3.001 | 155.165 | 2.547×10^5 | | |
| 10.0 TeV | 1.000×10^7 | 2.169 | 81.471 | 106.935 | 3.799 | 194.376 | 2.662×10^5 | | |
| 14.0 TeV | 1.400×10^7 | 2.199 | 114.675 | 150.327 | 5.436 | 272.640 | 2.835×10^5 | | |
| 20.0 TeV | 2.000×10^7 | 2.232 | 164.754 | 215.690 | 7.944 | 390.622 | 3.018×10^5 | | |
| 30.0 TeV | 3.000×10^7 | 2.269 | 248.123 | 324.427 | 12.273 | 587.094 | 3.225×10^5 | | |
| 40.0 TeV | 4.000×10^7 | 2.296 | 331.768 | 433.413 | 16.702 | 784.182 | 3.372×10^5 | | |
| 80.0 TeV | 8.000×10^7 | 2.363 | 666.782 | 869.666 | 35.176 | 1573.988 | 3.725×10^5 | | |
| 100. TeV | 1.000×10^8 | 2.385 | 834.540 | 1087.990 | 44.710 | 1969.627 | 3.838×10^5 | | |