Table 033: Muons in Arsenic

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
33 (As)	74.92160 (2)	5.730	347.0	0.06633	3.4176	0.1767	3.5702	5.0510	0.08

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	5.040				5.040	1.122×10^0
14.0 MeV	5.616×10^1	3.973				3.973	2.025×10^0
20.0 MeV	6.802×10^1	3.133				3.133	3.744×10^0
30.0 MeV	8.509×10^1	2.453				2.453	7.400×10^0
40.0 MeV	1.003×10^2	2.107				2.107	1.183×10^1
80.0 MeV	1.527×10^2	1.600				1.600	3.428×10^1
100. MeV	1.764×10^2	1.510				1.510	4.717×10^1
140. MeV	2.218×10^2	1.422				1.422	7.458×10^1
200. MeV	2.868×10^2	1.378				1.378	1.176×10^2
257. MeV	3.471×10^2	1.370			0.000	1.370	*Minimum ionization*
300. MeV	3.917×10^2	1.373	0.000		0.000	1.373	1.905×10^2
400. MeV	4.945×10^2	1.389	0.000		0.000	1.390	2.629×10^2
800. MeV	8.995×10^2	1.472	0.001		0.000	1.472	5.422×10^2
1.00 GeV	1.101×10^3	1.505	0.001		0.000	1.506	6.765×10^2
1.40 GeV	1.502×10^3	1.558	0.001	0.000	0.001	1.560	9.372×10^2
2.00 GeV	2.103×10^3	1.615	0.002	0.001	0.001	1.619	1.314×10^3
3.00 GeV	3.104×10^3	1.680	0.003	0.002	0.001	1.687	1.918×10^3
4.00 GeV	4.104×10^3	1.725	0.005	0.004	0.002	1.736	2.502×10^3
8.00 GeV	8.105×10^3	1.826	0.012	0.012	0.003	1.854	4.724×10^3
10.0 GeV	1.011×10^4	1.857	0.016	0.017	0.004	1.894	5.790×10^3
14.0 GeV	1.411×10^4	1.900	0.025	0.028	0.006	1.959	7.865×10^3
20.0 GeV	2.011×10^4	1.944	0.038	0.045	0.008	2.036	1.087×10^4
30.0 GeV	3.011×10^4	1.990	0.063	0.078	0.012	2.144	1.565×10^4
40.0 GeV	4.011×10^4	2.021	0.089	0.114	0.016	2.240	2.021×10^4
80.0 GeV	8.011×10^4	2.091	0.200	0.274	0.030	2.596	3.677×10^4
100. GeV	1.001×10^5	2.112	0.260	0.359	0.038	2.769	4.423×10^4
140. GeV	1.401×10^5	2.143	0.381	0.537	0.052	3.114	5.784×10^4
200. GeV	2.001×10^5	2.176	0.572	0.817	0.074	3.640	7.565×10^4
290. GeV	2.898×10^5	2.209	0.863	1.238	0.108	4.420	*Muon critical energy*
300. GeV	3.001×10^5	2.213	0.897	1.288	0.111	4.510	1.003×10^5
400. GeV	4.001×10^5	2.238	1.234	1.775	0.149	5.397	1.205×10^5
800. GeV	8.001×10^5	2.301	2.627	3.776	0.300	9.005	1.773×10^5
1.00 TeV	1.000×10^6	2.322	3.343	4.801	0.378	10.844	1.975×10^5
1.40 TeV	1.400×10^6	2.353	4.779	6.845	0.535	14.514	2.293×10^5
2.00 TeV	2.000×10^6	2.387	6.978	9.967	0.774	20.107	2.643×10^5
3.00 TeV	3.000×10^6	2.425	10.652	15.156	1.184	29.418	3.052×10^5
4.00 TeV	4.000×10^6	2.453	14.378	20.402	1.600	38.834	3.347×10^5
8.00 TeV	8.000×10^6	2.521	29.408	41.497	3.327	76.755	4.066×10^5
10.0 TeV	1.000×10^7	2.544	36.986	52.104	4.215	95.850	4.298×10^5
14.0 TeV	1.400×10^7	2.578	52.103	73.265	6.038	133.985	4.650×10^5
20.0 TeV	2.000×10^7	2.615	74.922	105.148	8.832	191.518	5.022×10^5
30.0 TeV	3.000×10^7	2.658	112.909	158.197	13.665	287.430	5.446×10^5
40.0 TeV	4.000×10^7	2.689	151.042	211.379	18.614	383.725	5.746×10^5
80.0 TeV	8.000×10^7	2.765	303.838	424.259	39.294	770.156	6.467×10^5
100. TeV	1.000×10^8	2.790	380.380	530.800	49.980	963.951	6.699×10^5