Table 042: Muons in Molybdenum

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
42 (Mo)	95.96 (2)	10.220	424.0	0.10525	3.2549	0.2267	3.2784	4.8793	0.14

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	4.836				4.836	1.175×10^0
14.0 MeV	5.616×10^1	3.820				3.820	2.114×10^0
20.0 MeV	6.802×10^1	3.017				3.017	3.901×10^0
30.0 MeV	8.509×10^1	2.366				2.366	7.693×10^0
40.0 MeV	1.003×10^2	2.034				2.034	1.228×10^1
80.0 MeV	1.527×10^2	1.547				1.547	3.551×10^1
100. MeV	1.764×10^2	1.460				1.460	4.885×10^1
140. MeV	2.218×10^2	1.377				1.377	7.718×10^1
200. MeV	2.868×10^2	1.336				1.336	1.216×10^2
252. MeV	3.421×10^2	1.329				1.330	*Minimum ionization*
300. MeV	3.917×10^2	1.333	0.000		0.000	1.333	1.967×10^2
400. MeV	4.945×10^2	1.350	0.000		0.000	1.351	2.712×10^2
800. MeV	8.995×10^2	1.433	0.001		0.000	1.434	5.584×10^2
1.00 GeV	1.101×10^3	1.466	0.001		0.000	1.467	6.962×10^2
1.40 GeV	1.502×10^3	1.518	0.001	0.000	0.001	1.521	9.638×10^2
2.00 GeV	2.103×10^3	1.575	0.002	0.001	0.001	1.579	1.351×10^3
3.00 GeV	3.104×10^3	1.639	0.004	0.003	0.001	1.647	1.970×10^3
4.00 GeV	4.104×10^3	1.683	0.006	0.005	0.002	1.696	2.568×10^3
8.00 GeV	8.105×10^3	1.782	0.015	0.015	0.003	1.816	4.839×10^3
10.0 GeV	1.011×10^4	1.812	0.020	0.021	0.004	1.857	5.928×10^3
14.0 GeV	1.411×10^4	1.854	0.031	0.034	0.006	1.925	8.042×10^3
20.0 GeV	2.011×10^4	1.897	0.048	0.055	0.008	2.008	1.109×10^4
30.0 GeV	3.011×10^4	1.942	0.078	0.096	0.011	2.128	1.593×10^4
40.0 GeV	4.011×10^4	1.972	0.110	0.141	0.015	2.239	2.051×10^4
80.0 GeV	8.011×10^4	2.040	0.248	0.337	0.030	2.656	3.688×10^4
100. GeV	1.001×10^5	2.061	0.322	0.442	0.037	2.863	4.413×10^4
140. GeV	1.401×10^5	2.092	0.472	0.660	0.051	3.277	5.719×10^4
200. GeV	2.001×10^5	2.124	0.708	1.005	0.073	3.911	7.393×10^4
235. GeV	2.352×10^5	2.138	0.848	1.205	0.086	4.278	*Muon critical energy*
300. GeV	3.001×10^5	2.160	1.111	1.583	0.109	4.964	9.658×10^4
400. GeV	4.001×10^5	2.186	1.528	2.181	0.146	6.041	1.148×10^5
800. GeV	8.001×10^5	2.248	3.249	4.635	0.295	10.428	1.646×10^5
1.00 TeV	1.000×10^6	2.269	4.134	5.891	0.370	12.665	1.820×10^5
1.40 TeV	1.400×10^6	2.300	5.908	8.397	0.524	17.130	2.091×10^5
2.00 TeV	2.000×10^6	2.333	8.622	12.222	0.759	23.937	2.386×10^5
3.00 TeV	3.000×10^6	2.372	13.155	18.578	1.160	35.266	2.728×10^5
4.00 TeV	4.000×10^6	2.399	17.751	25.004	1.568	46.722	2.974×10^5
8.00 TeV	8.000×10^6	2.467	36.284	50.836	3.259	92.848	3.569×10^5
10.0 TeV	1.000×10^7	2.489	45.626	63.823	4.128	116.068	3.761×10^5
14.0 TeV	1.400×10^7	2.523	64.260	89.734	5.912	162.431	4.051×10^5
20.0 TeV	2.000×10^7	2.560	92.382	128.770	8.646	232.359	4.359×10^5
30.0 TeV	3.000×10^7	2.603	139.197	193.719	13.371	348.891	4.708×10^5
40.0 TeV	4.000×10^7	2.633	186.186	258.826	18.209	465.855	4.955×10^5
80.0 TeV	8.000×10^7	2.709	374.443	519.440	38.413	935.006	5.549×10^5
100. TeV	1.000×10^8	2.733	468.740	649.870	48.850	1170.195	5.740×10^5