

Muons in osmium (Os)

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
76 (Os)	190.23(3)	22.570	746.0	0.12751	2.9608	0.0891	3.5414	5.3083	0.10
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	3.946				3.946	1.468×10^0		
14.0 MeV	5.616×10^1	3.144				3.144	2.614×10^0		
20.0 MeV	6.802×10^1	2.502				2.502	4.775×10^0		
30.0 MeV	8.509×10^1	1.975				1.975	9.331×10^0		
40.0 MeV	1.003×10^2	1.704				1.704	1.481×10^1		
80.0 MeV	1.527×10^2	1.306				1.306	4.242×10^1		
100. MeV	1.764×10^2	1.236				1.236	5.820×10^1		
140. MeV	2.218×10^2	1.168				1.168	9.164×10^1		
200. MeV	2.868×10^2	1.136				1.136	1.439×10^2		
243. MeV	3.325×10^2	1.132	0.000			1.132	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.137	0.000		0.000	1.137	2.321×10^2		
400. MeV	4.945×10^2	1.155	0.000		0.000	1.155	3.194×10^2		
800. MeV	8.995×10^2	1.233	0.001		0.000	1.235	6.539×10^2		
1.00 GeV	1.101×10^3	1.265	0.001		0.000	1.267	8.137×10^2		
1.40 GeV	1.502×10^3	1.315	0.002		0.001	1.318	1.123×10^3		
2.00 GeV	2.103×10^3	1.369	0.004	0.001	0.001	1.374	1.568×10^3		
3.00 GeV	3.104×10^3	1.430	0.007	0.003	0.001	1.441	2.278×10^3		
4.00 GeV	4.104×10^3	1.472	0.010	0.006	0.002	1.490	2.960×10^3		
8.00 GeV	8.105×10^3	1.568	0.024	0.021	0.003	1.616	5.528×10^3		
10.0 GeV	1.011×10^4	1.596	0.031	0.030	0.004	1.662	6.747×10^3		
14.0 GeV	1.411×10^4	1.638	0.048	0.049	0.005	1.741	9.097×10^3		
20.0 GeV	2.011×10^4	1.679	0.074	0.080	0.007	1.842	1.245×10^4		
30.0 GeV	3.011×10^4	1.723	0.122	0.141	0.011	1.998	1.765×10^4		
40.0 GeV	4.011×10^4	1.752	0.172	0.208	0.014	2.148	2.248×10^4		
80.0 GeV	8.011×10^4	1.817	0.389	0.503	0.028	2.738	3.893×10^4		
100. GeV	1.001×10^5	1.837	0.505	0.661	0.035	3.039	4.586×10^4		
140. GeV	1.401×10^5	1.866	0.741	0.988	0.048	3.644	5.787×10^4		
146. GeV	1.463×10^5	1.869	0.778	1.041	0.050	3.740	<i>Muon critical energy</i>		
200. GeV	2.001×10^5	1.895	1.110	1.506	0.069	4.582	7.253×10^4		
300. GeV	3.001×10^5	1.929	1.740	2.371	0.103	6.145	9.132×10^4		
400. GeV	4.001×10^5	1.952	2.391	3.267	0.138	7.750	1.058×10^5		
800. GeV	8.001×10^5	2.009	5.078	6.940	0.278	14.307	1.432×10^5		
1.00 TeV	1.000×10^6	2.028	6.457	8.819	0.349	17.655	1.558×10^5		
1.40 TeV	1.400×10^6	2.056	9.220	12.565	0.494	24.338	1.750×10^5		
2.00 TeV	2.000×10^6	2.087	13.445	18.281	0.715	34.529	1.956×10^5		
3.00 TeV	3.000×10^6	2.122	20.494	27.780	1.093	51.490	2.192×10^5		
4.00 TeV	4.000×10^6	2.147	27.635	37.378	1.476	68.638	2.359×10^5		
8.00 TeV	8.000×10^6	2.209	56.412	75.953	3.065	137.641	2.763×10^5		
10.0 TeV	1.000×10^7	2.229	70.908	95.340	3.881	172.360	2.892×10^5		
14.0 TeV	1.400×10^7	2.260	99.821	134.030	5.554	241.667	3.088×10^5		
20.0 TeV	2.000×10^7	2.294	143.434	192.310	8.118	346.158	3.294×10^5		
30.0 TeV	3.000×10^7	2.333	216.038	289.267	12.545	520.184	3.528×10^5		
40.0 TeV	4.000×10^7	2.361	288.889	386.448	17.074	694.774	3.694×10^5		
80.0 TeV	8.000×10^7	2.429	580.691	775.434	35.974	1394.530	4.092×10^5		
100. TeV	1.000×10^8	2.452	726.820	970.100	45.730	1745.104	4.220×10^5		