

$b(E) \times 10^6$  [cm<sup>2</sup>g<sup>-1</sup>] for  
hafnium (Hf),  $Z = 72$ ,  $A = 178.49(2)$

E [GeV]	$b_{\text{brems}}$	$b_{\text{pair}}$	$b_{\text{nucl}}$	$b_{\text{tot}}$
2.	1.7680	0.4895	0.3682	2.6256
5.	2.4484	1.8526	0.3932	4.6942
10.	3.0033	2.9099	0.3855	6.2987
20.	3.5727	3.9023	0.3669	7.8418
50.	4.3182	5.4060	0.3563	10.0805
100.	4.8487	6.4016	0.3490	11.5993
200.	5.3335	7.2862	0.3456	12.9652
500.	5.8785	8.0984	0.3457	14.3226
1000.	6.2073	8.5294	0.3511	15.0878
2000.	6.4635	8.8407	0.3596	15.6637
5000.	6.7016	9.1010	0.3750	16.1777
10000.	6.8197	9.2214	0.3904	16.4316
20000.	6.8980	9.2999	0.4083	16.6063
50000.	6.9628	9.3586	0.4363	16.7577
100000.	6.9917	9.3830	0.4601	16.8348