

$b(E) \times 10^6$  [cm<sup>2</sup>g<sup>-1</sup>] for  
 Freon-12 (CF<sub>2</sub>Cl<sub>2</sub>)  
 $\langle Z/A \rangle = 0.47969$

E [GeV]	$b_{\text{brems}}$	$b_{\text{pair}}$	$b_{\text{nucl}}$	$b_{\text{tot}}$
2.	0.4711	0.2192	0.4406	1.1309
5.	0.6403	0.5368	0.4682	1.6452
10.	0.7781	0.7935	0.4559	2.0276
20.	0.9212	1.0664	0.4366	2.4241
50.	1.1119	1.4542	0.4153	2.9814
100.	1.2512	1.7238	0.4049	3.3798
200.	1.3819	1.9722	0.3998	3.7538
500.	1.5341	2.2145	0.3992	4.1479
1000.	1.6297	2.3522	0.4057	4.3877
2000.	1.7075	2.4521	0.4164	4.5759
5000.	1.7831	2.5379	0.4360	4.7570
10000.	1.8223	2.5784	0.4557	4.8564
20000.	1.8499	2.6039	0.4788	4.9326
50000.	1.8720	2.6245	0.5149	5.0114
100000.	1.8826	2.6329	0.5458	5.0613