

$b(E) \times 10^6$  [cm<sup>2</sup>g<sup>-1</sup>] for  
 guanine (C<sub>5</sub>H<sub>5</sub>N<sub>5</sub>O)  
 $\langle Z/A \rangle = 0.51612$

E [GeV]	$b_{\text{brems}}$	$b_{\text{pair}}$	$b_{\text{nucl}}$	$b_{\text{tot}}$
2.	0.2618	0.1142	0.4691	0.8452
5.	0.3548	0.2822	0.4963	1.1333
10.	0.4318	0.4268	0.4814	1.3400
20.	0.5129	0.5846	0.4593	1.5569
50.	0.6234	0.8065	0.4353	1.8652
100.	0.7060	0.9639	0.4235	2.0934
200.	0.7843	1.1090	0.4175	2.3108
500.	0.8770	1.2587	0.4166	2.5523
1000.	0.9365	1.3505	0.4235	2.7105
2000.	0.9859	1.4152	0.4349	2.8358
5000.	1.0351	1.4722	0.4560	2.9635
10000.	1.0613	1.4993	0.4775	3.0380
20000.	1.0797	1.5163	0.5026	3.0986
50000.	1.0955	1.5297	0.5421	3.1673
100000.	1.1027	1.5352	0.5760	3.2140