

$b(E) \times 10^6$  [cm<sup>2</sup>g<sup>-1</sup>] for  
cellulose [(C<sub>6</sub>H<sub>10</sub>O<sub>5</sub>)<sub>n</sub>]  
 $\langle Z/A \rangle = 0.53040$

E [GeV]	$b_{\text{brems}}$	$b_{\text{pair}}$	$b_{\text{nucl}}$	$b_{\text{tot}}$
2.	0.2689	0.1176	0.4699	0.8564
5.	0.3646	0.2906	0.4972	1.1524
10.	0.4438	0.4394	0.4823	1.3656
20.	0.5273	0.6017	0.4601	1.5891
50.	0.6410	0.8299	0.4358	1.9068
100.	0.7260	0.9916	0.4240	2.1416
200.	0.8065	1.1406	0.4179	2.3651
500.	0.9019	1.2940	0.4170	2.6129
1000.	0.9631	1.3882	0.4238	2.7750
2000.	1.0139	1.4544	0.4352	2.9034
5000.	1.0647	1.5129	0.4564	3.0339
10000.	1.0917	1.5405	0.4779	3.1101
20000.	1.1107	1.5579	0.5031	3.1717
50000.	1.1271	1.5717	0.5426	3.2414
100000.	1.1346	1.5773	0.5766	3.2885