

$b(E) \times 10^6$  [cm<sup>2</sup>g<sup>-1</sup>] for  
phosphorus (P),  $Z = 15$ ,  $A = 30.973762(5)$

E [GeV]	$b_{\text{brems}}$	$b_{\text{pair}}$	$b_{\text{nucl}}$	$b_{\text{tot}}$
2.	0.5301	0.2483	0.4341	1.2126
5.	0.7204	0.6066	0.4620	1.7890
10.	0.8751	0.8941	0.4505	2.2197
20.	1.0353	1.1993	0.4317	2.6664
50.	1.2485	1.6335	0.4110	3.2930
100.	1.4037	1.9348	0.4009	3.7393
200.	1.5500	2.1974	0.3959	4.1433
500.	1.7185	2.4830	0.3954	4.5968
1000.	1.8247	2.6323	0.4018	4.8589
2000.	1.9107	2.7431	0.4122	5.0660
5000.	1.9942	2.8375	0.4315	5.2631
10000.	2.0373	2.8819	0.4508	5.3701
20000.	2.0679	2.9101	0.4734	5.4514
50000.	2.0919	2.9328	0.5088	5.5334
100000.	2.1036	2.9421	0.5390	5.5846