

$b(E) \times 10^6$  [cm<sup>2</sup>g<sup>-1</sup>] for  
neptunium (Np),  $Z = 93$ ,  $A = [237.04817(2)]$

E [GeV]	$b_{\text{brems}}$	$b_{\text{pair}}$	$b_{\text{nucl}}$	$b_{\text{tot}}$
2.	2.1548	0.2886	0.3582	2.8016
5.	2.9952	1.9755	0.3823	5.3530
10.	3.6821	3.2881	0.3749	7.3452
20.	4.3871	4.4900	0.3617	9.2389
50.	5.3085	6.3357	0.3469	11.9911
100.	5.9623	7.5502	0.3400	13.8525
200.	6.5575	8.6231	0.3367	15.5173
500.	7.2229	9.6023	0.3369	17.1621
1000.	7.6217	10.1192	0.3421	18.0830
2000.	7.9306	10.4902	0.3503	18.7711
5000.	8.2157	10.8008	0.3652	19.3817
10000.	8.3561	10.9429	0.3801	19.6791
20000.	8.4488	11.0366	0.3973	19.8827
50000.	8.5316	11.1055	0.4243	20.0614
100000.	8.5590	11.1343	0.4473	20.1406