

$b(E) \times 10^6$  [cm<sup>2</sup>g<sup>-1</sup>] for  
skin (ICRP)  
 $\langle Z/A \rangle = 0.54932$

| E [GeV] | $b_{\text{brems}}$ | $b_{\text{pair}}$ | $b_{\text{nucl}}$ | $b_{\text{tot}}$ |
|---------|--------------------|-------------------|-------------------|------------------|
| 2.      | 0.2763             | 0.1211            | 0.4711            | 0.8685           |
| 5.      | 0.3749             | 0.2994            | 0.4986            | 1.1729           |
| 10.     | 0.4565             | 0.4528            | 0.4836            | 1.3929           |
| 20.     | 0.5425             | 0.6199            | 0.4612            | 1.6236           |
| 50.     | 0.6597             | 0.8550            | 0.4367            | 1.9515           |
| 100.    | 0.7471             | 1.0213            | 0.4247            | 2.1931           |
| 200.    | 0.8303             | 1.1745            | 0.4186            | 2.4234           |
| 500.    | 0.9287             | 1.3321            | 0.4177            | 2.6785           |
| 1000.   | 0.9918             | 1.4287            | 0.4244            | 2.8448           |
| 2000.   | 1.0443             | 1.4967            | 0.4357            | 2.9766           |
| 5000.   | 1.0968             | 1.5567            | 0.4570            | 3.1104           |
| 10000.  | 1.1248             | 1.5850            | 0.4785            | 3.1883           |
| 20000.  | 1.1446             | 1.6029            | 0.5038            | 3.2513           |
| 50000.  | 1.1617             | 1.6170            | 0.5435            | 3.3221           |
| 100000. | 1.1697             | 1.6227            | 0.5775            | 3.3701           |