

$b(E) \times 10^6$  [cm<sup>2</sup>g<sup>-1</sup>] for  
water (vapor) (H<sub>2</sub>O)  
 $\langle Z/A \rangle = 0.55509$

| E [GeV] | $b_{\text{brems}}$ | $b_{\text{pair}}$ | $b_{\text{nucl}}$ | $b_{\text{tot}}$ |
|---------|--------------------|-------------------|-------------------|------------------|
| 2.      | 0.2902             | 0.1278            | 0.4696            | 0.8876           |
| 5.      | 0.3937             | 0.3155            | 0.4973            | 1.2065           |
| 10.     | 0.4793             | 0.4763            | 0.4824            | 1.4380           |
| 20.     | 0.5695             | 0.6511            | 0.4601            | 1.6807           |
| 50.     | 0.6920             | 0.8973            | 0.4357            | 2.0251           |
| 100.    | 0.7830             | 1.0711            | 0.4239            | 2.2780           |
| 200.    | 0.8702             | 1.2312            | 0.4177            | 2.5191           |
| 500.    | 0.9727             | 1.3952            | 0.4168            | 2.7847           |
| 1000.   | 1.0384             | 1.4956            | 0.4235            | 2.9575           |
| 2000.   | 1.0930             | 1.5661            | 0.4348            | 3.0938           |
| 5000.   | 1.1476             | 1.6282            | 0.4559            | 3.2317           |
| 10000.  | 1.1766             | 1.6575            | 0.4773            | 3.3116           |
| 20000.  | 1.1972             | 1.6760            | 0.5026            | 3.3758           |
| 50000.  | 1.2149             | 1.6907            | 0.5420            | 3.4476           |
| 100000. | 1.2235             | 1.6966            | 0.5759            | 3.4961           |