

$b(E) \times 10^6$  [cm<sup>2</sup>g<sup>-1</sup>] for  
cerium (Ce),  $Z = 58$ ,  $A = 140.116(1)$

| E [GeV] | $b_{\text{brems}}$ | $b_{\text{pair}}$ | $b_{\text{nucl}}$ | $b_{\text{tot}}$ |
|---------|--------------------|-------------------|-------------------|------------------|
| 2.      | 1.4992             | 0.5391            | 0.3769            | 2.4152           |
| 5.      | 2.0698             | 1.6772            | 0.4026            | 4.1496           |
| 10.     | 2.5344             | 2.5592            | 0.3946            | 5.4882           |
| 20.     | 3.0111             | 3.4034            | 0.3751            | 6.7897           |
| 50.     | 3.6362             | 4.6705            | 0.3643            | 8.6710           |
| 100.    | 4.0822             | 5.5140            | 0.3566            | 9.9528           |
| 200.    | 4.4911             | 6.2672            | 0.3530            | 11.1112          |
| 500.    | 4.9529             | 6.9625            | 0.3531            | 12.2686          |
| 1000.   | 5.2331             | 7.3334            | 0.3586            | 12.9251          |
| 2000.   | 5.4525             | 7.6021            | 0.3674            | 13.4220          |
| 5000.   | 5.6576             | 7.8275            | 0.3833            | 13.8684          |
| 10000.  | 5.7599             | 7.9320            | 0.3992            | 14.0911          |
| 20000.  | 5.8280             | 8.0001            | 0.4177            | 14.2459          |
| 50000.  | 5.8846             | 8.0513            | 0.4466            | 14.3824          |
| 100000. | 5.9100             | 8.0726            | 0.4712            | 14.4537          |