$b(E) \times 10^6$ [cm$^2$g$^{-1}$] for
hafnium (Hf), $Z = 72$, $A$ =178.49(2)

| E [GeV] | $b_{\rm brems}$ | $b_{\rm pair}$ | $b_{\rm nucl}$ | $b_{\rm tot}$ |
|---|---|---|---|---|
| 2. | 1.7680 | 0.4895 | 0.3682 | 2.6256 |
| 5. | 2.4484 | 1.8526 | 0.3932 | 4.6942 |
| 10. | 3.0033 | 2.9099 | 0.3855 | 6.2987 |
| 20. | 3.5727 | 3.9023 | 0.3669 | 7.8418 |
| 50. | 4.3182 | 5.4060 | 0.3563 | 10.0805 |
| 100. | 4.8487 | 6.4016 | 0.3490 | 11.5993 |
| 200. | 5.3335 | 7.2862 | 0.3456 | 12.9652 |
| 500. | 5.8785 | 8.0984 | 0.3457 | 14.3226 |
| 1000. | 6.2073 | 8.5294 | 0.3511 | 15.0878 |
| 2000. | 6.4635 | 8.8407 | 0.3596 | 15.6637 |
| 5000. | 6.7016 | 9.1010 | 0.3750 | 16.1777 |
| 10000. | 6.8197 | 9.2214 | 0.3904 | 16.4316 |
| 20000. | 6.8980 | 9.2999 | 0.4083 | 16.6063 |
| 50000. | 6.9628 | 9.3586 | 0.4363 | 16.7577 |
| 100000. | 6.9917 | 9.3830 | 0.4601 | 16.8348 |