

TABLE 6.1. Electron Collisional, Radiative, and Total Mass Stopping Powers; Radiation Yield; and Range in Water

Kinetic Energy	β^2	$-\frac{1}{\rho} \left(\frac{dE}{dx} \right)_{\text{col}}$ (MeV cm ² g ⁻¹)	$-\frac{1}{\rho} \left(\frac{dE}{dx} \right)_{\text{rad}}$ (MeV cm ² g ⁻¹)	$-\frac{1}{\rho} \left(\frac{dE}{dx} \right)_{\text{tot}}$ (MeV cm ² g ⁻¹)	Radiation Yield	Range (g cm ⁻²)
10 eV	0.00004	4.0	—	4.0	—	4 × 10 ⁻⁸
30	0.00012	44.	—	44.	—	2 × 10 ⁻⁷
50	0.00020	170.	—	170.	—	3 × 10 ⁻⁷
75	0.00029	272.	—	272.	—	4 × 10 ⁻⁷
100	0.00039	314.	—	314.	—	5 × 10 ⁻⁷
200	0.00078	298.	—	298.	—	8 × 10 ⁻⁷
500 eV	0.00195	194.	—	194.	—	2 × 10 ⁻⁶
1 keV	0.00390	126.	—	126.	—	5 × 10 ⁻⁶
2	0.00778	77.5	—	77.5	—	2 × 10 ⁻⁵
5	0.0193	42.6	—	42.6	—	8 × 10 ⁻⁵
10	0.0380	23.2	—	23.2	0.0001	0.0002
25	0.0911	11.4	—	11.4	0.0002	0.0012
50	0.170	6.75	—	6.75	0.0004	0.0042
75	0.239	5.08	—	5.08	0.0006	0.0086
100	0.301	4.20	—	4.20	0.0007	0.0140
200	0.483	2.84	0.006	2.85	0.0012	0.0440
500	0.745	2.06	0.010	2.07	0.0026	0.174
700 keV	0.822	1.94	0.013	1.95	0.0036	0.275
1 MeV	0.886	1.87	0.017	1.89	0.0049	0.430
4	0.987	1.91	0.065	1.98	0.0168	2.00
7	0.991	1.93	0.084	2.02	0.0208	2.50
10	0.998	2.00	0.183	2.18	0.0416	4.88
100	0.999+	2.20	2.40	4.60	0.317	32.5
1000 MeV	0.999+	2.40	26.3	28.7	0.774	101.