FIGURE 8.3. Semiempirical shell corrections of Bichsel for selected elements, as a function of the proton energy (ICRU, 1984a). Reproduced with permission from H. Bichsel and the International Commission on Radiological Units and Measurements.
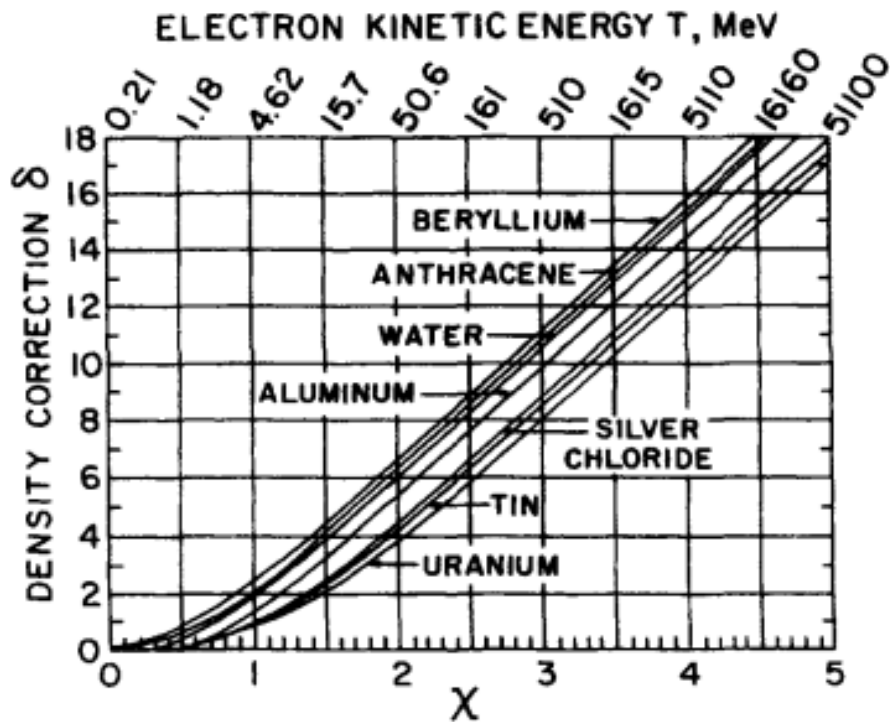

FIGURE 8.4. Density-effect correction δ as a function of χ and electron kinetic energy T. After Sternheimer (1952). Reproduced with permission from R. M. Sternheimer and the American Physical Society.
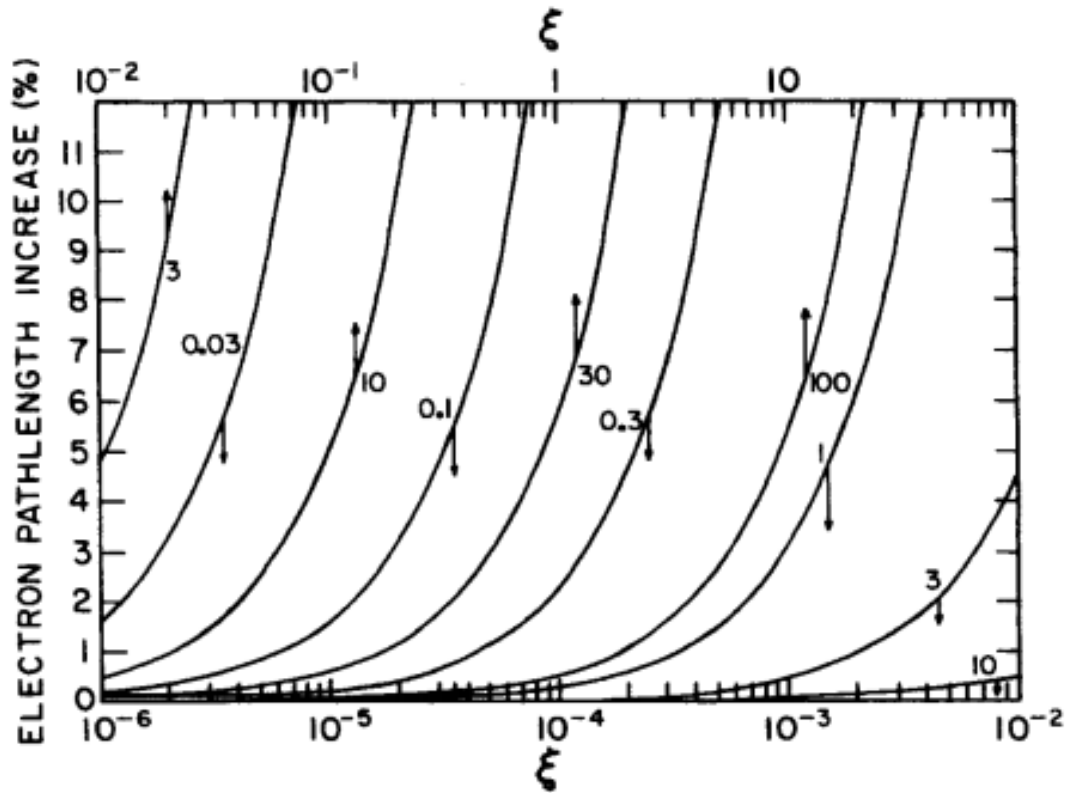
FIGURE 8.11. Percentage increase in mean electron pathlength relative to normalized foil thickness ξ [= foil mass thickness ρt divided by radiation length of the medium; see Eq. (8.28)]. Data were calculated from the "modified Yang theory" according to Birkhoff (1958), given by $50t/w^2$ in Birkhoff's terminology. For a given energy and foil material the percentage increase in pathlength is proportional to foil thickness in the Yang approximation. Numbers on curves give electron energies in MeV.