a probability of about 10^{-4} for radiating a quantum whose energy is 250 kev or higher.

The resultant γ radiation intensity in R units has been estimated for a point removed by one half meter from 1 kilogram of the α decaying substance. Because of absorption in the substance itself, only γ rays of energy above 0.5 Mev contribute appreciably to this intensity. The γ radiation is about 2×10^{-2} R units/hour.

Rigorous Treatment of the Slowing Down of Neutrons - J. Schwinger

A rigorous expression has been obtained for the slowing down range in a pure substance of arbitrary mass, based on the assumption of isotopic scattering in the center of mass system. The formula correctly reduces to that obtained by Fermi for slowing down in hydrogen, and agrees with the usual simplified theory when applied to heavy nuclei. Unfortunately, the labor involved in an accurate numerical evaluation seems quite prohibitive, save possibly in the case of deuterium.

An approximate formula has been developed for the spatial distribution of neutrons slowed down in a medium of high atomic weight. The density near the source is in agreement with that predicted by the age equation, but approaches an exponential behavior at large distances. The transition region can be studied numerically without undue difficulty.