

Radiation provides energy to substances along its pathway. Electrons of substances along the pathway are ejected with the given energy. This is ionization.

The density of energy provided by radiation differs by the type of radiation. Compared with  $\beta$  (beta)-particles and  $\gamma$ -rays,  $\alpha$  (alpha)-particles provide energy more intensively to substances in an extremely small area. Due to such difference in the ionization density, damage to cells differs even with the same absorbed dose.

(Related to p.18 of Vol. 1, "Ionization of Radiation - Property of Ionizing Radiation")

Included in this reference material on March 31, 2013 Updated on March 31, 2019