

Wavelength-Dependent Laser Exposure of the Skin

Laser devices emit monochromatic optical radiation across a very broad spectral range, from UV-C to IR-C. Although skin damage caused by laser radiation is generally considered less significant than eye damage, the skin, due to its larger surface area, is more exposed to radiation. However, eye damage has more severe consequences. Skin damage caused by laser radiation falls into two main categories: thermal damage, such as burns resulting from short-term exposure to high-power laser beams, and photochemical damage, which may occur as a result of prolonged exposure to scattered ultraviolet radiation.

