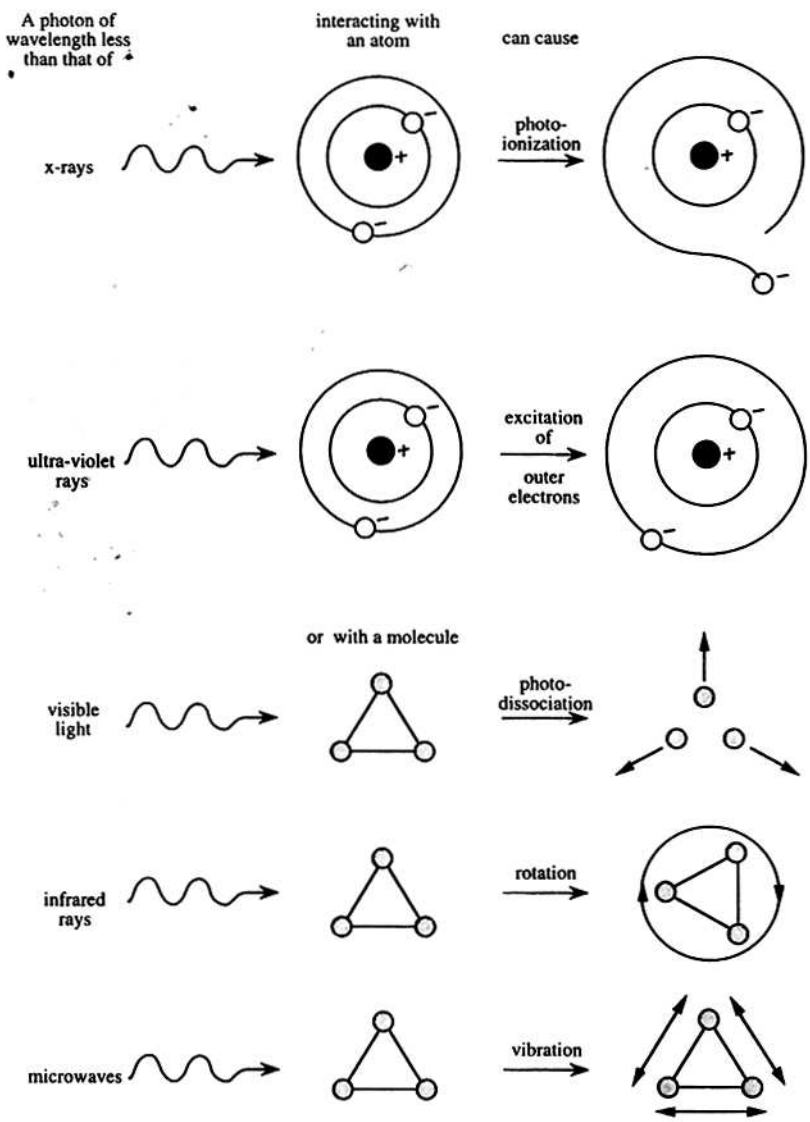
A photon of wavelength less than that of
interacting with an atom
can cause
x-rays
photo-ionization
ultra-violet rays
excitation of outer electrons
or with a molecule
visible light
photo-dissociation
infrared rays
rotation
microwaves
vibration