

Gamma and Xray in Medicine (I)



Ask Mish

Type	GAMMA < 1nm (10 ^{to} -9 m)	X RAY 0.1-10nm
Origin/ Definition	excited nucleus after alfa, beta radiation	excited electrons changing orbitals
Occurrence	1.cosmic NP to E 2. natural radioactivity	1.cosmic NP to E 2 X ray tube
Detection	scintillator	X ray film
Medical use	scintigraphy/SPECT/PET	Xray/ CT scan

NP to E
= non
penetrant
to Earth

Gamma and Xray in Medicine (2)



Ask Mish

Medical use	Gamma	X ray
Source location / body	in the body: emission	out of the body: transmission
Source	Radiotracer	X ray tube
Detection	gamma camera scintillator Anger camera (syn.)	Xray image