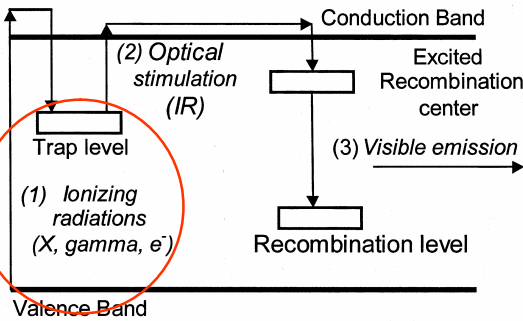


Optically Stimulated Luminescence (OSL) material for dosimetry purposes: How do they work ?

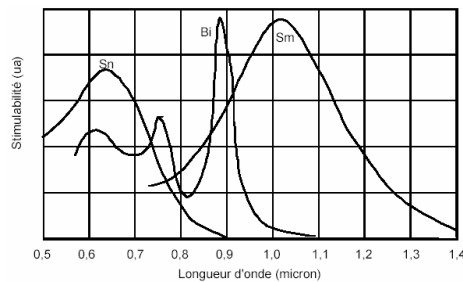
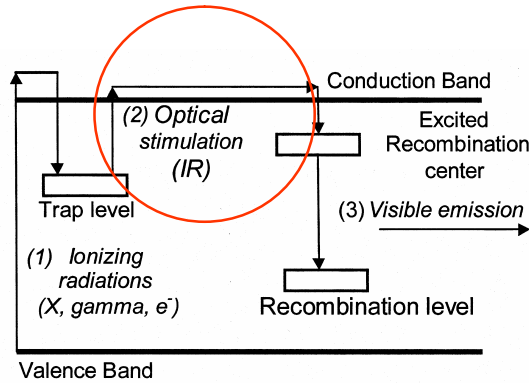


1) Radiation Dose Deposition:

The e/h pairs generated by radiations are trapped in energy levels located in the insulator band gap ..

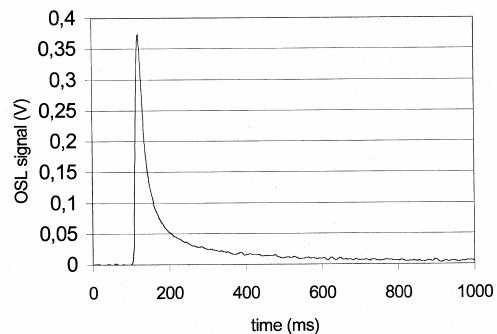
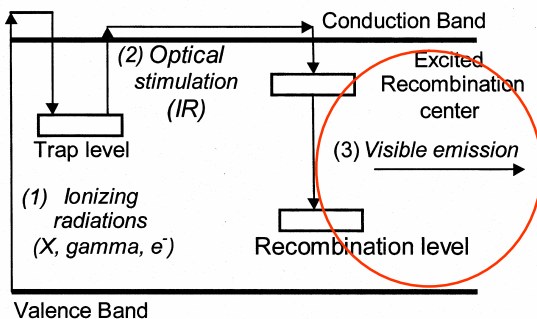


2) Optical Stimulation with IR light:



.. the energy necessary to release the charges is provided by an optical stimulation ..

3) Visible Light Emission:



... a subsequent radiative recombination (500-700 nm) proportional to the absorbed radiation dose is observed. **The material is empty!**