1. crystalline solids:

crystalline solids are those, in which the constituent atoms or molecules are arranged in an orderly fashion throughout in a three dimension pattern

Amorphous solids: - more image 2000 me mage

In Amorphous solids, the constituent atoms are not arranged in an orderly fashion, i.e the same atomic groups are arranged more randomly.

Crystalline solids

Regular arrangement of atoms along the 3D

Have long range order

They are Anisotropic

They have a regular cut

They are most stable

They show all character -istics of solids

Ent Diamond, Nacl, Kcl, coppen, Iron etc

Amorphous solids

No regular arrangement of atoms

Have short range order

No sharp melting point

They are isotropic

They are most unstable

They have irregular

They don't show all characteristics of solids

Ext Glasses, plastic, Pubber

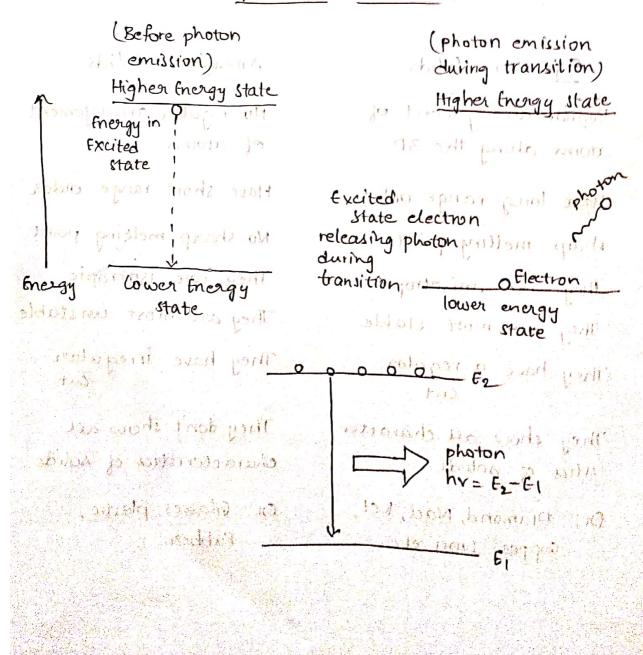
4. spontaneous Emission

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spontaneous emission is an energy conversion process in which an excited electron o't molecular decays to an lower energy level and in the process gives off a photon. This process occurs naturally and does not involve interaction of other photons. The average time for decay by spontaneous emission is called spontaneous emission lifetime.

spontaneous Emission

meaning it in my miderily fostion, i.e The



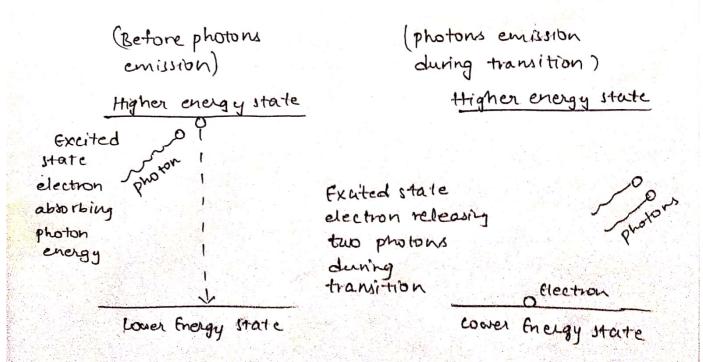
Stimulated Emission and promoty deliberation and

stimulated finision is the process in which an excited electron of molecule interacts with a photon, decays to an available lower energy level and in the process give photon. As with the other processes, this process can occur in isolated atoms, ionic compounds....

If an incoming photon, with energy equal to differen blw allowed energy levels interacts with an electron in an exuited state stimulated emission can occur.

The stimulated photon have some frequency, direction, phase, and electromagnetic polarization as the incoming photon

Stimulated Emission



The stimulated photons have unique properties m phase with incident photon same wavelength as incident photon Trave in same direction as incident photon witness of most of more consider all as here lowed the universe process of the process can extrust in Hotel d alone is to it is the totall if an interest photon, will rough married to different blow allowed energy lovelle interacts with an election in an excited state throwing ted The stimulated photon have some hequency direction, phase and electromagness polarization as the incoming photon Stimulated Constitut Leton photons photones englished (most princip state come compett Buylous entrage starte is also state both 17 PARCHAGO PORTO the whatever CHEST WAS STOP