

Re: Excitation and Emission Spectrum

Source: <http://sci.tech-archive.net/Archive/sci.chem/2005-08/msg00382.html>

- *From:* "Farooq W" <farooq.w@xxxxxxxx>
 - *Date:* 11 Aug 2005 10:00:11 -0700
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raconte@xxxxxxxx wrote:

> Attila the Bum wrote:
>> Blue shifts come from two-photon absorptions,
>> hence their "weak" (low probability) nature?
>
> Right, that's more or less what I meant. :) Remember, lab monkey, not
> Ph.D physicist.
>>
>> Got an example/published report?
>>
>
> No, but there are also phosphor screens manufactured (for example by
> Kodak) as replacements for x-ray film. If the phosphors are exposed to
> x-rays or gamma rays, they become "sensitized". Red laser light causes
> a blue emission of the sensitized areas. The screen is reusable, just
> "erase" with blue light.

Just came across anti-Stokes phosphor while searching for something else; this phosphor converts IR into green light. "YF3 host doped with Yb3+ as a sensitizer and Er3+ as an activator can convert incident IR radiation into green luminescence"

See, if interested:

http://www.radiochemistry.org/periodictable/la_series/L9.html

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- *Follow-Ups:*
 - ◆ ***Re: Excitation and Emission Spectrum***
◇ *From:* Attila the Bum
- *References:*
 - ◆ ***Excitation and Emission Spectrum***
◇ *From:* Farooq W
 - ◆ ***Re: Excitation and Emission Spectrum***
◇ *From:* raconte

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 - ◇ From: Attila the Bum
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- Prev by Date: **Re: Excitation and Emission Spectrum**
- Next by Date: **Re: Excitation and Emission Spectrum**
- Previous by thread: **Re: Excitation and Emission Spectrum**
- Next by thread: **Re: Excitation and Emission Spectrum**
- Index(es):
 - ◆ **Date**
 - ◆ **Thread**