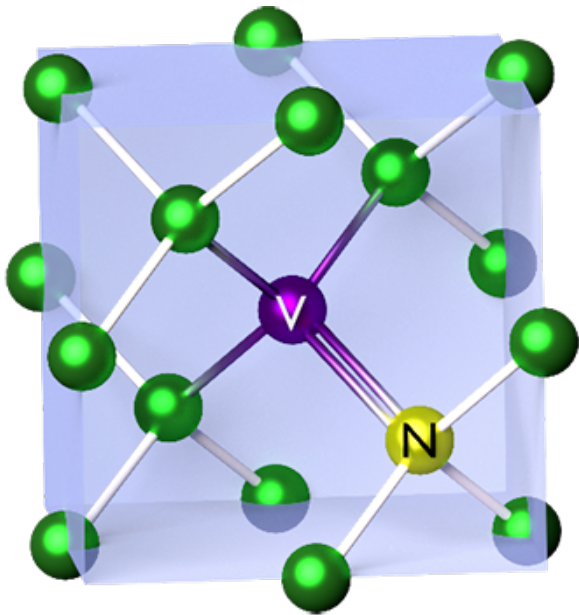
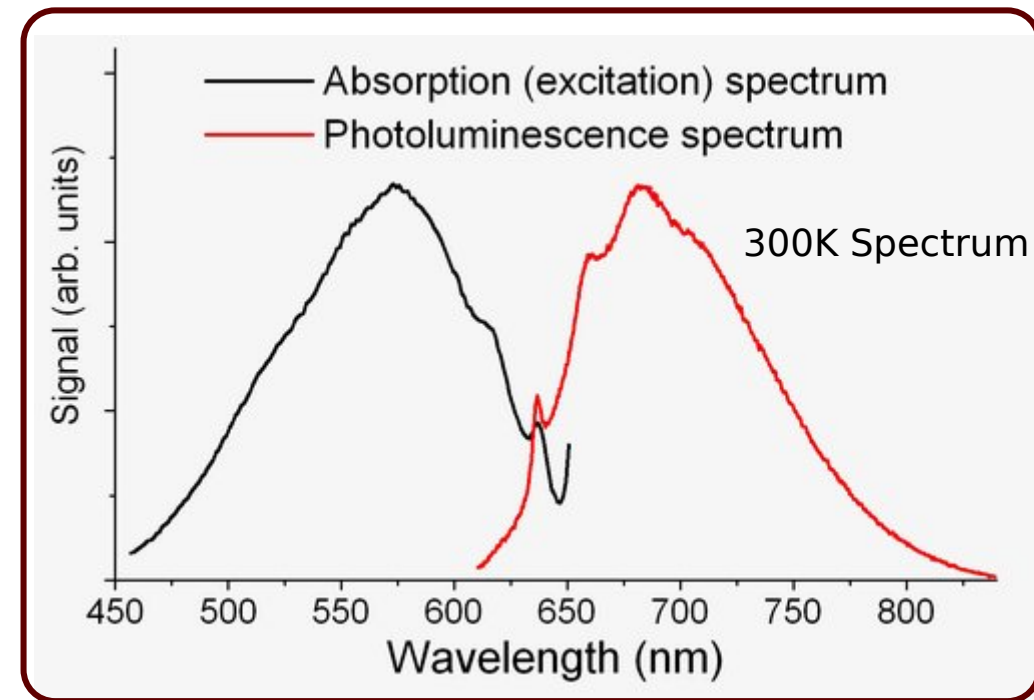


## Crystalline structure

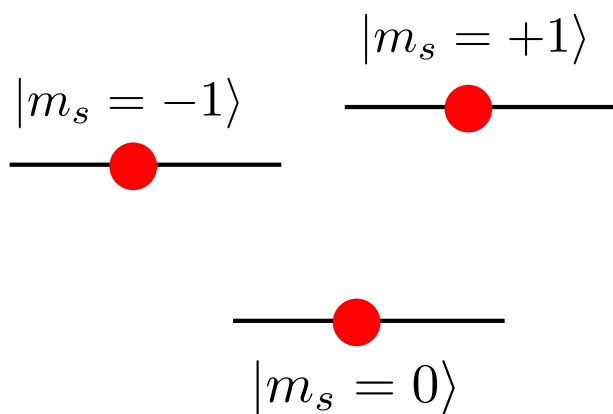


## Optical properties



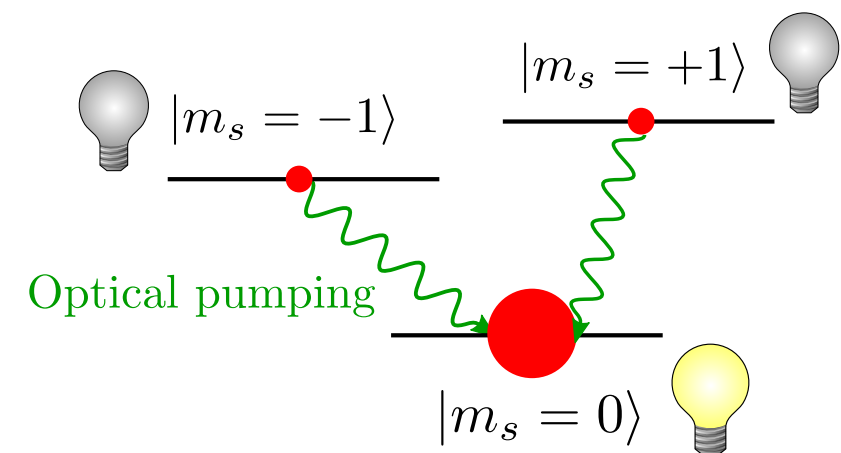
## Spin properties

$S = 1$  in the electronic ground state



Unpolarized at 300 K :  
 $\rho_{00} \approx 1/3 \approx \rho_{+1+1} \approx \rho_{-1-1}$

## Interplay between spin and light



- Optical pumping in the  $|m_s = 0\rangle$  state
- $|m_s = 0\rangle$  state brighter than  $|m_s = \pm 1\rangle$