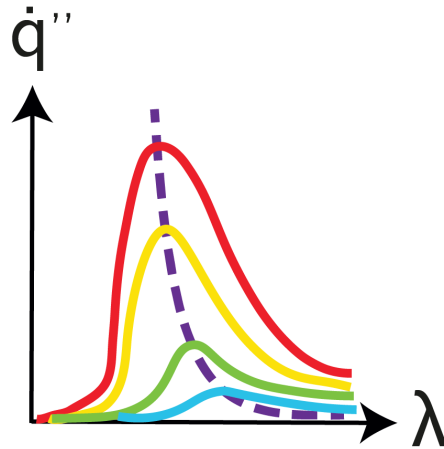




Radiation - Kirchoff 02

Give an expression for the emissivity ϵ of a grey body in terms of its known spectral properties.



Kirchoff's law states for a grey body:

$$\epsilon = \alpha$$

Furthermore, for a radiating body ($\rho + \alpha + \tau = 1$), so therefore:

$$\alpha = 1 - \rho - \tau$$

Which yields:

$$\epsilon = 1 - \rho - \tau$$