Aggregates of quadrupolar dyes: giant two-photon absorption from biexciton states

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SUPPORTING INFORMATION

INTERACTION CONSTANTS

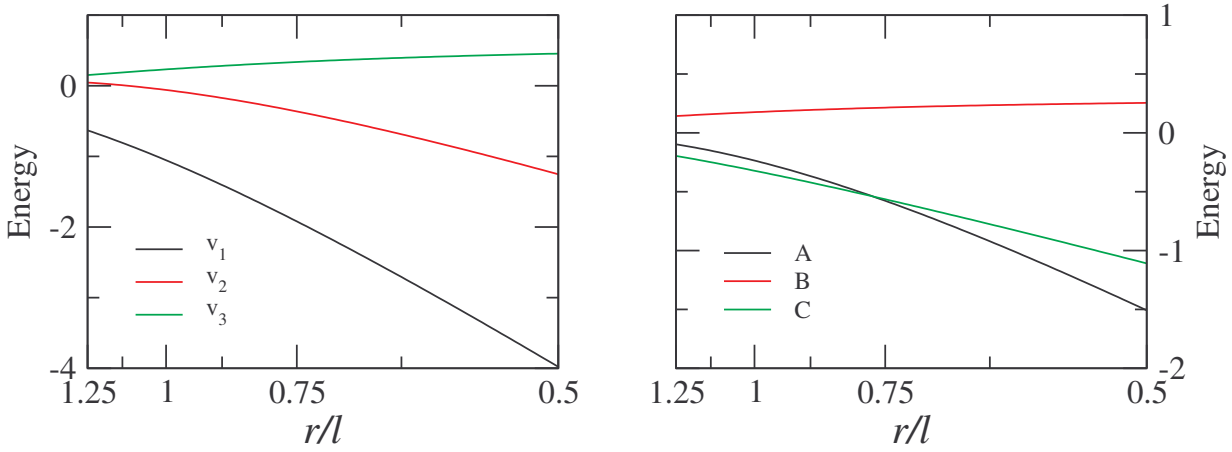
$$v_1 = w\left(\frac{2}{\sqrt{x^2+1}} - \frac{2}{x}\right)$$

$$v_2 = w\left(\frac{2}{\sqrt{x^2+1}} - \frac{1}{x} - \frac{1}{\sqrt{x^2+2}}\right)$$

$$v_3 = w\left(\frac{1}{\sqrt{x^2+1}} - \frac{2}{\sqrt{x^2+2}} + \frac{1}{\sqrt{x^2+3}}\right)$$

Where $x = r/l$ and $w = \frac{e^2}{4\pi\varepsilon_0 l}$.

$$A = \frac{1}{4}(v_1 + 2v_2 + v_3);\ B = \frac{1}{4}(2v_2 - v_1 - v_3);\ C = \frac{1}{4}(v_1 - v_3).$$



Complete reference 5a:

Albota, M.; Beljonne, D.; Brédas, J.-L.; Ehrlich, J. E.; Fu, J.-Y.; Heikal, A. A.; Hess, S. E.; Kogej, T.; Levin, M. D.; Marder, S. R.; McCord-Maughon, D.; Perry, J. W.; Röckel, H.; Rumi, M.; Subramaniam, G.; Webb, W. W.; Wu, X.-L.; Xu, C. *Science* **1998,** *281*, 1653.