

Dual-band vibrational lasing emission from cyanine derivatives

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Streszczenie

The optical properties of cyanine-based compounds are determined by single molecules as well as the dimers and aggregates formed. In our work, we show the influence of the molecular structure of the dye, through the use of modified cyanine derivatives, both on the negative solvatochromic effect and on a tunable, two-band lasing coming from the vibrational states of the molecules. Thus, we demonstrate the dependence of the dye form on optical properties, including nonlinear optical ones.

Słowa kluczowe

Cyanines, Light amplification, Laser spectroscopy, Aggregation

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