

Photochromic cycle of 2'-hydroxyacetophenone azine studied by absorption and emission spectroscopy in different solvents.

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Streszczenie

This paper reports on the investigations of the synthesized di-(o-hydroxyaryl ketoimine) compound by the steady state absorption and emission techniques as well as picosecond time resolved emission and femtosecond transient absorption methods in different solvents. The results of the experimental observation have been supported by the theoretical DFT and TD-DFT calculations. The theoretical data have revealed the completed influence of the environmental polarity on particular conformers of studied compound. Dependencies between the activation rate constant and polarizability function as well as Kamlet-Abboud-Taft hydrogen-bonding parameter have been obtained in different solvent. The mechanism of photodynamic changes of di-(o-hydroxyaryl ketoimine) is presented.

Adres publiczny

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