



Dependence of the Third Order Nonlinear Optical Susceptibility on Concentration and Peripheral Substituent of Metallophthalocyanines

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Résumé en anglais	<p>Third order nonlinear optical properties of metallophthalocyanines (MPcs) were investigated using degenerate four wave mixing (DFWM) method. We also studied how the replacement of peripheral substituent around the MPcs cores correlates with nonlinear optical properties. Therefore third order nonlinear optical susceptibilities ($\chi^{(3)}$) of MPcs with liquid crystal (MPcs-LC) were investigated. We found that the $\chi^{(3)}$ values of MPcs-LC increase in comparison with the corresponding values of MPcs. We supposed that this is caused by the increase of the charge transfer effects and change of the dipole moments of the molecule with the increase of molecules dimension.</p>
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- [7] <http://okina.univ-angers.fr/bouchta.sahraoui/publications>
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