Light Induced Properties of Chalcones Correlated with Molecular Structure and Photophysical Properties for Permanent Optical Storage Device

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ABSTRACT

The photoisomerization effect on new chalcone derivative is reported. The synthesized chalcone was characterized by different spectral analysis such as 1H-NMR, 13C-NMR, FTIR, LCMS and UV/Vis. It revealed the photoisomerization effect in solution, the E-Z isomerization occurred around 60sec, whereas Z-E isomerism occurred at 0min. This chalcone derivative is more useful in fabrication of permanent optical storage devices.

KEYWORDS: Chalcone, Electron Donating Groups, Keto-Enol Tautamerism, Photoisomerization

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