



# Thermal stability of blends containing azo-carbazole derivatives and epoxy resin, designed for nonlinear optical applications

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Mots-clés	Carbazole [5], Epoxy resin [6], nonlinear optical properties [7], THG [8]
Résumé en anglais	<p>Many studies have been intended to synthesize new thermally stable organic materials and polymers for nonlinear optical applications. These materials are most often guest-host systems and present some inconveniences like solvents compatibility for both the matrix and the chromophore. In the present work, we propose to use an epoxy resin as matrix for chromophores. Three blends containing an epoxy resin and azo-carbazole derivatives (either physically dispersed or chemically bound) were studied. They were prepared in form of thin films. We report their nonlinear optical properties investigated by third harmonic generation (THG) by Maker fringes technique, as well as thermal stability of these characteristics. The results show different behaviour for dispersed chromophore in a matrix and covalently bounded chromophore.</p>
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## Liens

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