



Second- and Third-Order Nonlinearities of Novel Push-Pull Azobenzene Polymers

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Auteur	El Ouazzani, Hasnaa [1], Iliopoulos, Konstantinos [2], Pranaitis, Mindaugas [3], Krupka, Oksana [4], Smokal, Vitaliy [5], Kolendo, Aleksey [6], Sahraoui, Bouchta [7]
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Résumé en anglais	In this work, the second- and third-order nonlinear optical response of spin-deposited thin films of three different push pull side chain azobenzene polymers is investigated by the second- and third-harmonic Maker fringes techniques using 30 Ps laser pulses at a fundamental wavelength of 1064 nm. Measurements were carried out before and after aligning the chromophores by corona poling of the films, while different polarization configurations have been utilized. Strong dependence of the response upon the structure of the systems has been found, which is related to the different charge transfer within the molecules. The reported findings are compared with already published results.
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