



## Opportunities of deoxyribonucleic acid complexes composites for nonlinear optical applications

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Auteur	Sahraoui, Bouchta [1], Pranaitis, Mindaugas [2], Gindre, Denis [3], Niziol, Jacek [4], Kažukauskas, Vaidotas [5]
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Résumé en anglais	<p>In this paper, we illustrate new functionalities for nonlinear optical applications of bio-molecular systems. This study presents DNA complex with new ionic surfactants. These surfactants enabled DNA solubility in solvents other than alcohols, like aromatic and chlorinated ones. Composites with two nonlinear optical (NLO) active dyes are subjects of the second and third harmonic generation experiments. The found effective nonlinear susceptibilities values are much higher than that for standard fused silica. We also demonstrate any influence of the surfactant on NLO properties. (C) 2011 American Institute of Physics. [doi:10.1063/1.3655985]</p>
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