

## Influence of surfactant on dynamics of photoinduced motions and light emission of a dye-doped deoxyribonucleic

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| R sum  en anglais   | Pure deoxyribonucleic acid (DNA) is known to be soluble in water only and exhibits poor temperature stability. In contrary, it is well known that the complex of DNA - with cetyltrimethyl ammonium (CTMA) is insoluble in water but soluble in alcohols and can be processed into very good optical quality thin films by solution casting or spin deposition. Despite the success of DNA-CTMA, there is still need for new cationic surfactants which would extend the range of available solvents for DNA complex. We test and present experimental results of influence of new surfactants replacing CTMA in the DNA complex and based on benzalkonium chloride (BA) and didecyldimethylammonium chloride (DDCA) on their optical properties. Particularly, we were interested in all optical switching and light generation in amplified spontaneous emission process in these materials. |
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