

## Amplified spontaneous emission in the spiropyran-biopolymer based system

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R�sum� en anglais	Amplified spontaneous emission (ASE) phenomenon in the 6-nitro-1',3',3'-trimethylspiro[2H-1-benzopyran-2,2'-indolin] organic dye dispersed in a solid matrix has been observed. The biopolymer system deoxyribonucleic acid blended with cationic surfactant molecule cetyltrimethyl-ammonium chloride served as a matrix. ASE appeared under sample excitation by UV light pulses ( $\lambda=355$ nm) coming from nanosecond or picosecond neodymium doped yttrium aluminum garnet lasers and has been reinforced with green ( $\lambda=532$ nm) light excitation followed UV light pulse. The ASE characteristics in function of different excitation pulse energies as well as signal gain were measured.
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