MEASURING DYNAMICS OF SCATTERING CENTERS IN THE OCULAR FUNDUS

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Abstract- The study is focused on the analysis of the diffusing-wave-spectroscopy signal recorded invivo on the ocular fundus of a rabbit eye. The motion of the scattered sites was measured as a function of the pressure exerted by a Goldmann contact lens and during the moderate temperature increase induced by a therapeutic laser diode. Temporal fluctuations of the signal revel motion of molecules and thus changes in tissues temperature and chorioretinal blood velocity. Experimental results show the ability of the system to detect motion of the scattering sites in the ocular fundus layers during variations of the ocular pressure and laser heating.