## **S2-2.11** Theoretical Treatment of Millimeter and Terahertz Radiation Action on Biological Media

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In this paper we give a model that describes the nonlinear cooperative stationary phenomena at interaction of Bose-condensed phonons with millimeter or terahertz electromagnetic radiation in a biological media. The expressions that characterize the real and imaginary parts of the dielectric susceptibility and permeability, as well as the refraction and reflection indexes caused by condensed phonons were obtained.