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Title:Special role of structurisation of water-containing environment in an organism in biomedical radioelectronic nanotechnologies on millimetric and terahertz ranges

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Abstract:Experimentally found out dominating role of structurisation of water containing environment at its interaction with electromagnetic radiation of low intensity (EHF) in modern radioelectronic biomedical technologies of millimetric and terahertz ranges is discussed for the first time. It is experimentally shown that only structurisation of water-containing environment at its interaction with EHF at-drives to features of such interaction, change of physical characteristics of waters environments and, in particular, occurrence of the biomedical effects, underlying of biomedical technologies. Without structurisation of the water environment which is reached at the expense of action of the external factors, any features in behaviour of the water environment at its interaction with EHF it is not observed and there is only a thermal heating of environment. This conclusion is represented fundamental and has defining value for development of modern biomedical radioelectronic technologies millimetric and terahertz ranges. On a way to structurisation of a water containing layer the big possibilities open. The results of experiments resulted in work, have shown that in considerable structurisation of water environments results use of many minerals and synthetic materials. Besides, as it is experimentally established, in essential structurisation of a water layer at contact to insoluble materials in water can result not only conductors and dielectrics, but also amino acids and live structures. Such structuring materials can be also nanostructural the objects delivered in live bodies in the form of live nanostructures, nanocapsules, nanocontainers and medical preparations. Close micro -, nanodimensional and parametrical inhomogeneity these structures processes of structurisation of water containing environments start to develop. The first step to a scientific explanation of bases contact crystal of therapy is made. Possibility of sharing of methods of EHF-therapy and crystal of therapy is considered and the conclusion about perspective of such approach becomes.

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