Abstracts

Changes in Liposomes Permeability Induced by Gramicidin D After Microwave Irradiation (Short Papers)

D. Yova, S. Loukas and G. Boudouris. "Changes in Liposomes Permeability Induced by Gramicidin D After Microwave Irradiation (Short Papers)." 1984 Transactions on Microwave Theory and Techniques 32.8 (Aug. 1984 [T-MTT] (Special Issue on Electromagnetic-Wave Interactions with Biological Systems)): 891-893.

The response of model membranes (Iiposomes) to microwave irradiation (9.2 GHz, energy absorption 20 mW/g, continuous 1.5-h exposure in an orthogonal waveguide) was determined spectrophotometrically by recording after irradiation the gramicidin D-induced cation permeability. The irridiation modified the gramicidin D-induced permeability to the cations K/sup +/, Na/sup +/, and Rb/sup +/ through the liposomes and seemed to facilitate the movement of Na/sup +/ and Rb/sup +/. These results are discussed in relation with the hypothesis that microwave radiation may induce changes to the structure of Iiposomes.

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