The internal electric structure of influenza viruses.

Gimsa, J., Prüger, B., Eppmann, P., Müller, T., 1998. *In* Riu Costa, Pere Joan, Rosell Ferrer, Francesc Xavier, R. Bragós Bardia, Ó. Casas Piedrafita (Eds.): Proceedings of the X International Conference on Electrical Bio-Impedance. 175–178, Publication Office of UPC, Barcelona. ISBN 84-7653-686-0. Xth International Conference on Electrical Bio-Impedance, 05.-09. April. Barcelona, Spain.

Abstract: Little is known about the internal electric structure of viruses. To develop a dielectric influenza virus model we combined experiments of dielectrophoretic virus trapping in microstructured electric field cages with electrorotational light scattering (ERLS). Our model assumes a spherical virus with a radius of 50 nm and a single shell dielectric structure. The shell thickness of 18 nm summarizes the dimensions of lipid and hemagglutinin layer. The conductivity of core and shell were 0.1 mS/m and 0.1 µS/m, whereas the relative permittivities were 30 and 80 respectively.

Rostock

Traditio et Innovatio