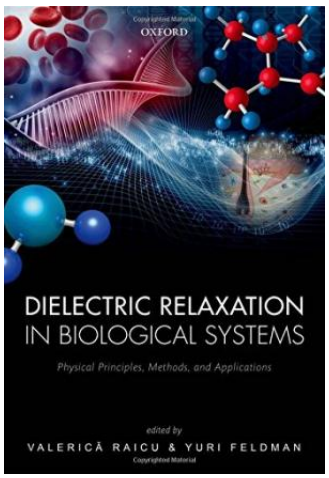

Dielectric Relaxation in Biological Systems: Physical Principles, Methods, and Applications

By Valerica Raicu, Yuri Feldman

Oxford University Press. Hardback. Book Condition: new. BRAND NEW, Dielectric Relaxation in Biological Systems: Physical Principles, Methods, and Applications, Valerica Raicu, Yuri Feldman, The study of dielectric properties of biological systems and their components is important not only for fundamental scientific knowledge but also for its applications in medicine, biology, and biotechnology. The associated technique - known as dielectric spectroscopy - has enabled researchers to quickly and accurately acquire time- or frequency-spectra of permittivity and conductivity and permitted the derivation and testing of realistic electrical models for cells and organelles. This text covers the theoretical basis and practical aspects of the study of dielectric properties of biological systems, such as water, electrolyte and polyelectrolytes, solutions of biological macromolecules, cells suspensions and cellular systems. The authors' combined efforts provide a comprehensive and cohesive book that takes advantage of the expertise of multiple scientists involved in cutting-edge research in the specific sub-fields of bio-dielectric spectroscopy while maintaining its self-consistency through numerous discussions. The first six chapters cover theoretical, methodological and experimental aspects of relaxation and dispersion in biological dielectrics at molecular, cellular and cellular aggregate level. Applications are presented in the following chapters which are organized in the order of increased complexity,...

Reviews

This publication is wonderful. It is amongst the most remarkable pdf i have got read. Its been written in an exceptionally basic way and it is merely after i finished reading through this pdf in which really transformed me, alter the way i really believe.

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It in one of my personal favorite book. Sure, it is engage in, continue to an amazing and interesting literature. I am quickly could possibly get a enjoyment of looking at a published book.

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