1. Record Nr. UNINA9910780715603321

Autore	Vysotskii V. I (Vladimir Ivanovich)
Titolo	Applied biophysics of activated water [[electronic resource]] : the physical properties, biological effects and medical applications of MRET activated water / / Vladimir I. Vysotskii, Alla A. Kornilova, Igor. V. Smirnov
Pubbl/distr/stampa	Singapore ; ; Hackensack, N.J., : World Scientific, c2009
ISBN	1-282-75788-1 9786612757884 981-4271-19-5
Descrizione fisica	1 online resource (338 p.)
Altri autori (Persone)	KornilovaA. A (Alla Aleksandrovna) SmirnovIgor V. <1952->
Disciplina	546.22 572
Soggetti	Water - Composition Water - Molecular aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 311-313) and index.
Nota di contenuto	Contents; The Authors; Preface; Overview; 1. Introduction to the Theory of Water Memory and General Principles of Water Activation; 1.1. Water Structure and the Paradoxes of Water Memory; 1.2. The Clathrate Model and aWater Memory Cell; 1.3. Program, Equipment, and Research Techniques for the Investigation of Activated Water; 2. Molecular Resonance Effect Technology as the Basic Method for Activation of Liquid Substances; 2.1. Introduction to the Theory of Fractal Matrix; 2.2. The Fractal Matrix Characteristics of MRET Polymer Material; 2.2.1. Results and discussions 2.3. Method and Device for the Production of Activated Liquids2.3.1. Testing of device for production of activated liquids; 3. Study of the Physical Properties of MRET ActivatedWater; 3.1. Methods and Equipment to Study the Dielectric Permittivity and the Conductivity of Activated Water; 3.2. Anomalous Electrodynamic Characteristics of Activated Water; 3.3. Procedure and Results of the Measurement of the Viscosity of Activated Water; 3.4. Influence of the Activation of Water on

Hydrogen Index pH; 4. Influence of MRET Activated Water on the Growth of Higher Plants
4.1. General Principles and Methods of the Study of the Influence of Activated Water on Plants4.2. Influence of MRET Activated Water on the Germination of Seeds of Vegetable Crops; 4.3. Influence of MRET Activated Water on the Growth of Stalk and Leaves of Vegetable Crops; 4.3.1. Radish "Red giant"; 4.3.2. Radish "Krasa rannyaya"; 4.3.3. Peas "Alpha"; 4.3.4. String beans "Valentino"; 4.3.5. Cabbage "Dymerskaya"; 4.3.6. Pumpkin "Zhdana"; 4.4. Influence of MRET Activated Water on the Growth of Plants in a Sterile Cultural Medium
4.5. Feature and Paradoxes of the Influence of Activated Water on Shaping and Growth of Callus Tissue5. Effects of MRET ActivatedWater on Microbial Culture and Natural Microbial Associations; 5.1. The Problem and Methods of Studying the Influence of Activated Water on Microbial Cultures and Microbial Associations; 5.1.1. General statement of the problem and initial biological test-objects; 5.1.2. Methods of microbiological studies and equipment; 5.1.3. Method of activation of nutrient media and means of registration of the processes of vital activity of microbiological cultures
5.2. Effect of the Activation of the Aqueous Medium on Metabolic Parameters of the Microbiological Culture Escherichia coli5.2.1. Effect of the duration of activation on the metabolic parameters of culture Escherichia coli grown under aerobic conditions; 5.2.2. Metabolic parameters of Escherichia coli on its growth in the activated water-containing nutrient medium under anaerobic conditions; 5.3. Cultural-Physiological Parameters of Escherichia coli Culture Grown on the Activated Meat-Peptone Agar Under Aerobic Conditions
5.3.1. Effect of different fractions of activated water on the survivability of cells and the growth of colonies on meat-peptone agar under aerobic conditions

Sommario/riassunto

This book provides a detailed review of the modern theories dealing with the structure and properties of water. It also presents an analysis of the research on the effect of activated water on biological systems such as animals, microorganisms, and plants. The results of experiments on the influence of activated water on "pure" microbiological cultures and their natural associations are described, the studies being carried out under both aerobic and anaerobic conditions. The results demonstrate a significant influence of activated water on higher plants (vegetable crops), sterile plants, and