1. Record Nr. UNINA9910821362003321 Autore Sukharev IU. I (IUrii Ivanovich) Titolo Wave oscillations in colloid oxyhydrates / / Yuri I. Sucharev Stafa-Zuerich, Switzerland;; Enfield, New Hampshire:,: Trans Tech Pubbl/distr/stampa Publications, , [2010] ©2010 3-03813-447-3 **ISBN** Descrizione fisica 1 online resource (508 p.) Collana Materials science foundations, , 1422-3597;; volumes 70-71 Disciplina 549/.53 Soggetti Colloids Metallic oxides **Hydroxides** Oscillating chemical reactions Oscillations Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references (pages [491]-497). Nota di bibliografia Wave Oscillations in Colloid Oxyhydrates; Preface; Table of Contents; Nota di contenuto Summary: Table of Contents: 1. Periodical Pulsation Ionic Flow Properties of Oxo-Olic Complexes of Zirconium and Silicium; 1.1 Polymerization of the Hydrated Particles of Zirconium Oxyhydrate: 1.2 Emission-Wave Duality of Behavior of the Periodical Processes in the Dand F-Elements' Oxyhydrates. 1.3 Periodicity of the Efficient Diffusion Coefficients; 1.4 Quantization of the Pacemakers' Radiuses in Oxyhydrate Gels; 1.5 Bifurcation of the Pacemakers' Radius Doubling in Gel Oxyhydrate Systems 1.6 Extensional Dilatancy and Dimensions of the Pacemakers 1.7 The Periodical State Isotherm; Abstract 1.1; 1.8 other Forms and Types of Oscillatory Motions in Oxyhydrate Systems; Abstract 1.2. Instrumental Support; 2. Behavior of Zirconium Oxyhydrate Gels Affected by the Spontaneous Pulsating Electrical Currents; 2.1 Theory; 2.2 Synchronization of the Periodical Oxyhydrate Systems; 2.3 Mathematical Modeling Problem; 2.4 Connections between Certain Self-Organization Parameters: 2.5 Conclusions

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## Sommario/riassunto

Conformers

The importance of coherent chemistry, that is, the chemistry of periodic oscillatory processes, is increasing at a rapid rate in specific chemical disciplines. While being perfectly understood and highly developed in the fields of physical chemistry, chemical physics and biological chemistry, the periodic developmental paradigm of processes and phenomena still remains poorly developed and misunderstood in classical inorganic chemistry and related branches, such as colloid chemistry. The probability is that we miss subtle colloid chemical phenomena that could be of utmost importance if taken in