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Nota di bibliografia	Includes bibliographical references (pages [423]-434).
Nota di contenuto	Genesis of gel oxyhydrate systems of d- and f-elements in the course of their formation second section's title -- Periodic phenomena of the organization of gel oxyhydrate systems -- Dilatancy effect as a specific property of periodicity of gel oxyhydrates -- Liesegang operator as a reflection of nonlinear properties of oxyhydrate gel systems -- Mesophase-like behaviour of gel systems -- The chromatic effect of some oxyhydrate gels -- Experimental studies of optical properties of gels. Observed chromatic effect -- The phisico-chemical nature of polarisation of living gels of heavy metals oxyhydrates -- The influence of electric, magnetic and electromagnetic fields on the structurization processes of Yttrium Oxyhydrate -- Nonlinear sorption properties of oxyhydrate -- Quantum chemical study of the structural models of Zirconium Oxyhydrate -- In place of a conclusion.
Sommario/riassunto	The present monograph is the first systematic study of the non-linear characteristic of gel oxy-hydrate systems involving d- and f- elements. These are the oxyhydrates of rare-earth elements and oxides - hydroxides of d- elements (zirconium, niobium, titanium, etc.) The non-linearity of these gel systems introduces fundamental peculiarities into their structure and, consequently, their properties. The polymer-conformational diversity of energetically congenial gel fragments,

which continuously transform under the effect of, for instance, system dissipation heat, is central to the author's hy