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Nota di contenuto	Background and Overview -- Classification and Definition of “Soft Crystals” -- Theoretical Background of Photophysical Properties -- Vapochromic Soft Crystals Constructed with Metal Complexes -- Luminescent Mechanochromism and the Photosalient Effect of Aryl Gold(I) Isocyanide Complexes -- Elastic and Plastic Soft Crystals with Superelasticity, Ferroelasticity, and Superplasticity -- Triboluminescence of Lanthanide Complexes. Thermosalient Phenomena in Molecular Crystals: A Case Study of Representative Molecules -- Soft Crystal Chemiluminescence Systems Using Organic Peroxides -- Molecular Crystal Calculation Prospects for Structural Phase Transitions -- Approach of Electronic Structure Calculations to Crystal -- Toward the Applications of Soft Crystals.
Sommario/riassunto	This open access book introduces the science of the new materials, soft crystals, by showing various interesting examples. Different from

conventional hard and stable crystals, the soft crystals respond to gentle stimuli such as vapor exposure and rubbing but maintain their structural order. In this book, their exhibition of remarkable visual changes in their shape, color, and luminescence is described. Through the chapters, historical background, recent remarkable developments, and future prospects are described concisely. This book helps readers to understand a new concept of materials that have the characteristics of stimulus-sensitive soft matter and finely controlled crystals and to design novel materials with the characteristics. The English translation of this book from its Japanese language original manuscript was done with the help of artificial intelligence (machine translation by the service DeepL.com). The text has subsequently been revised further by a professional copy editor in order to refine the work stylistically.