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Nota di contenuto	Nucleation and Crystal Growth -- Operation Design of Reactive Crystallization for Organic Crystalline Particles with High Homogeneity -- Nuclei Formation in Pharmaceutical Glasses -- Chapter 3. Surface Plasmon Resonance Induced Nucleation of Protein -- New Aspect of Asymmetric Synthesis Involving Spontaneous Mirror Symmetry Breaking via Dynamic Crystallization -- Heterogeneous Aggregation Dynamics during Solvent Evaporation Process as Revealed by Fluorescence Imaging -- Chirality Switching in Enantiomer Separation via Diastereomeric Salt Formation -- Design of Crystal Structure -- Toward Computational Design of Molecular Crystals -- Structure Determination of Organic Materials from Powder X-ray Diffraction Data: Opportunities

for Multi-Technique Synergy -- Quantitative Crystal Structure Comparison -- Recent Attempts of Time-Resolved Crystallography in Photon Factory -- Design and Construction of Isoreticular Hydrogen-Bonded Organic Frameworks -- Crystal Engineering of the Photochromic Organic Compounds -- Crystal Structure Control and Functionalization of Unique Shape Molecules -- Carbazole-Derivatives as Platforms for Luminescent Organic and Hybrid Crystalline Materials -- -Conjugated Ionic Crystals for Materials Toward Electronics and Photonics Applications -- Crystal Cross-Linking by Using Metal-Organic Frameworks -- Interactions of Charge-Transfer Complexes and Molecular Alignment in Crystals.

Sommario/riassunto

This book summarizes and records the recent notable advances in diverse topics in organic crystal chemistry, which has made substantial progress along with the rapid development of a variety of analysis and measurement techniques for solid organic materials. This volume follows previously published volumes that are prepared periodically, at least every 5 years, with contributions by prominent authors in Japan and from abroad. The first volume was published in 2015, which systematically summarized the remarkable progress in assorted topics of organic crystal chemistry using organic solids and organic–inorganic hybrid materials. The second volume, published in 2020, presented advances in organic solid-state chemistry mainly from 2016 to 2020. The present volume also shows the progress of organic solid-state chemistry, especially focusing on crystal growth and crystal structure design that has been achieved mainly in the last 5 years or so. Crystal growth and crystal structure design described in this book is helpful for not only readers who study organic crystals but also those who study inorganic crystals, materials chemistry, coordination chemistry, and organometallic chemistry.