

1. Record Nr.	UNINA9911018762603321
Autore	Kobatake Seiya
Titolo	Advances in Organic Crystal Chemistry : Comprehensive Reviews 2025 on Crystal Structures // edited by Seiya Kobatake, Hidehiro Uekusa
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	9789819659845
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (474 pages)
Altri autori (Persone)	UekusaHidehiro
Disciplina	548
Soggetti	Crystallography Solid state chemistry Condensed matter Chemical structure Materials Chemistry Computer simulation Crystallography and Scattering Methods Solid-State Chemistry Structure of Condensed Matter Structure And Bonding Computational Design Of Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
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.

2. Record Nr.	UNINA9911049203903321
Autore	Osman Ahmad
Titolo	Advances in Nondestructive Evaluation Technologies for the Preservation of Cultural Heritage // edited by Ahmad Osman, Antonia Moropoulou, Kyriakos Lampropoulos
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-032-13156-1
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (492 pages)
Collana	Springer Proceedings in Materials, , 2662-317X ; ; 101
Disciplina	530.8 530.7
Soggetti	Measurement Measuring instruments Cultural property Cultural property - Protection Historic preservation Measurement Science and Instrumentation Cultural Heritage Conservation and Preservation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	This book reports on the latest advancements of non-destructive testing and structural techniques as applied on a wide range of cultural heritage applications. Specifically, it covers relevant research on advanced sensing techniques and modern signal and image processing for diagnosis, redesign and health monitoring, applications of non-destructive assessment of the resilience of cultural heritage assets to climate change and natural hazards and digital non-destructive documentation techniques and methods for digital heritage. Based on contributions to the 4th International Conference on Transdisciplinary Multispectral Modelling and Cooperation for the Preservation of Cultural Heritage—Addressing World Challenges, TMM-CH2025, held on April 3–9, 2025, in Athens, Greece, thus, the book offers a timely

reference for both academics and scientists, engineers, architects, archaeologists, conservators, geologists, art historians and interested stakeholders and public, as an initial source of recent scientific advancements on non-destructive techniques and technologies that are utilized for monitoring, documenting and preserving the world cultural heritage in a holistic approach.
