





Special Issue Reprint

Pharmaceutical Crystals (Volume II)

www.mdpi.com/books/reprint/6761

Edited by Etsuo Yonemochi Hidehiro Uekusa

ISBN 978-3-0365-5473-0 (Hardback) ISBN 978-3-0365-5474-7 (PDF)



The crystalline state is the most commonly used as an essential solid in active pharmaceutical ingredients (API). The characterization of pharmaceutical crystals encompasses many scientific disciplines. Still, the core is crystal structure analysis, which reveals the molecular structure of essential pharmaceutical compounds. Crystal structure analysis provides important structural information related to the API's wide range of physicochemical properties, such as solubility, stability, tablet performance, color, and hygroscopicity. These properties should be understood in terms of molecular structures and interactions between molecules in crystals. Information on three-dimensional molecular structures also affords insights into the biological activity of molecules.

The second reprint in the series, "Crystalline Pharmaceuticals (Volume II)" focused on the relationship between crystal structure and physicochemical properties. In particular, the new crystal structure of pharmaceutical compounds involving multi-component crystals, such as co-crystals, salts and hydrates, and polymorph crystals, were reported with interest. Such crystal structures contributed to the latest studies that combine morphology, spectroscopic, theoretical calculation, and thermal analysis with the crystallographic study. Thus, this reprint highlights the importance of crystal structure information in many areas of pharmaceutical science and presents current trends in the structure-property study of pharmaceutical crystals. The Guest Editors of this reprint hope the readers enjoy a wide variety of recent studies on "Crystalline Pharmaceuticals."



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/6761



MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG St. Alban-Anlage 66 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

