Special Issue Reprint

Artificial Intelligence in Pathological Image Analysis

Edited by
Masayuki Tsuneki
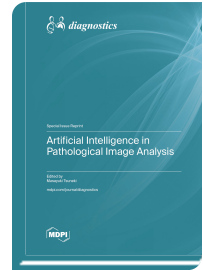
In routine pathological diagnosis, histopathological and cytopathological examination of specimens is conventionally performed under light microscopy. Whole slide images (WSIs) are the digitized counterparts of conventional glass slides obtained via specialized scanning devices. In recent years, the introduction of digital pathology into clinical workflows such as intraoperative consultations and secondary consultations is increasing steadily. The advent of WSIs has led to the application of medical image analysis, machine learning, and deep learning approaches for aiding pathologists in inspecting WSIs and routine diagnosis. Deep learning in particular has found a wide array of applications (e.g., classification, segmentation, and patient outcome predictions) in computational pathology. In a time of distinct paradigm shifts and novel technological innovations, it is necessary for us to establish a unified comprehension(s) of artificial intelligence (AI) approaches in experimental and clinical pathology. In this Special Issue entitled "Artificial Intelligence in Pathological Image Analysis", we collected a review and thirteen research articles in the areas of AI models in clinical and experimental pathology and computer vision in pathological image analysis. The published studies in this Special Issue provide great insights into the latest knowledge about the application of AI for pathological image analysis.

MDPI\Books
Publishing Open Access Books & Series

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.

Learn more ▸ mdpi.com/books