





Special Issue Reprint

Optimization and Flow Characteristics in Advanced Fluid Machinery

www.mdpi.com/books/reprint/7709

Edited by Chuan Wang Li Cheng Qiaorui Si Bo Hu

ISBN 978-3-0365-8293-1 (Hardback) ISBN 978-3-0365-8292-4 (PDF)



Advanced fluid machinery is the key component in the sustainable development of energy and water resources, including various transport processes for liquids. Where fluid flows, fluid machinery works. Therefore, fluid machinery occupies an important position in the social economy. This Special Issue, entitled "Optimization and Flow Characteristics in Advanced Fluid Machinery", provides a platform for the sharing of knowledge among researchers in the field of fluid machinery, and includes theoretical analyses, numerical simulations, and experimental studies. This Special Issue covers a wide range of disciplines as follows: (1) optimization of advanced fluid machinery using different advanced algorithms; (2) flow characteristics of advanced fluid machinery using numerical and experimental methods; (3) vibration and noise of advanced fluid machinery; (4) fluid–structural coupling analysis of advanced fluid machinery; (5) cavitation and multi-phase flow of advanced fluid machinery; (6) simulation and optimization of new energy systems; and (6) other aspects of fluid machinery.

This Special Issue contains 27 manuscripts, including 1 Editorial and 26 scientific articles. We would like to thank all of the authors and peer reviewers for their valuable contributions to this Special Issue.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/7709



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

