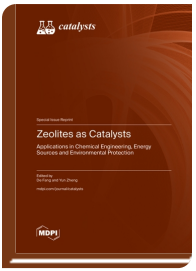
catalysts

IMPACT FACTOR 3.9

CITESCORE 6.3

*Special Issue Reprint*

# Zeolites as Catalysts: Applications in Chemical Engineering, Energy Sources and Environmental Protection




www.mdpi.com/books/reprint/8490

Edited by
De Fang
Yun Zheng

ISBN 978-3-0365-9659-4 (Hardback)
ISBN 978-3-0365-9658-7 (PDF)

Zeolites are crystalline aluminosilicates possessing a 3D network structure. They are widely considered to have been the leading materials of the last few decades in the fields of chemical engineering, energy sources, and environmental protection. Zeolites with various pore sizes can be obtained with different ratios of $SiO_2$ and $Al_2O_3$, demonstrating large specific areas and strong gas adsorption. Therefore, they are commonly used for various processes, such as dehydration, gas separation and synthesis, air pollution control ($H_2S$, $SO_2$, and $NO_x$ decontamination), fuel conversion (electrolyte film), petroleum cracking, and others, playing the roles of a membrane, catalyst, and support.

This Special Issue is dedicated to novel research and discussions on zeolites, with a focus on, but not limited to, the following: (1) Fundamental research on mechanisms of the formation of pores for zeolites; (2) Zeolites used as the membrane, catalyst, and support; (3) Theoretical simulation and machine learning research for zeolites; (4) Novel applications for zeolites; (5) Related porous materials

MDPI

Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/8490

# 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.

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