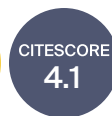




minerals



Special Issue Reprint

Chemical, Mineralogical and Isotopic Studies of Diagenesis of Carbonate and Clastic Sediments

www.mdpi.com/books/reprint/3848

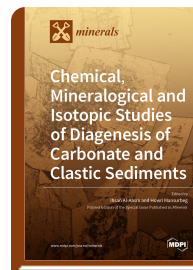
Edited by

Ihsan Al-Aasm

Howri Mansurbeg

ISBN 978-3-0365-0078-2 (Hardback)

ISBN 978-3-0365-0079-9 (PDF)



Diagenesis of carbonates and clastic sediments encompasses the biochemical, mechanical, and chemical changes that occur in sediments subsequent to deposition and prior to low-grade metamorphism. These parameters which, to a large extent, control diagenesis in carbonates and clastic sediments include primary composition of the sediments, depositional facies, pore water chemistry, burial–thermal and tectonic evolution of the basin, and paleo-climatic conditions. Diagenetic processes involve widespread chemical, mineralogical, and isotopic modifications affected by the original mineralogy of carbonate and clastic sediments. These diagenetic alterations will impose a major control on porosity and permeability and hence on hydrocarbon reservoirs, water aquifers, and the presence of other important economic minerals. In this Special Issue, we have submissions focusing on understanding the interplay between the mineralogical and chemical changes in carbonates and clastic sediments and the diagenetic processes, fluid flow, tectonics, and mineral reactions at variable scales and environments from a variety of sedimentary basins. Quantitative analyses of diagenetic reactions in these sediments using a variety of techniques are essential for understanding the pathways of these reactions in different diagenetic environments.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/3848

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.