



*minerals*



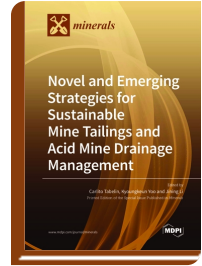
*Special Issue Reprint*

## **Novel and Emerging Strategies for Sustainable Mine Tailings and Acid Mine Drainage Management**

[www.mdpi.com/books/reprint/4901](http://www.mdpi.com/books/reprint/4901)

Edited by  
Carlito Tabelin  
Kyoungkeun Yoo  
Jining Li

ISBN 978-3-0365-2747-5 (Hardback)  
ISBN 978-3-0365-2746-8 (PDF)



Renewable energy and clean storage technologies are at the forefront of the world's fight against climate change, including the UN-led move towards a carbon-neutral society. Because these complex technologies require more 'critical' metals and elements than fossil fuel-based technologies, the demands for raw materials in their manufacturing are skyrocketing and are projected to continue to increase into the foreseeable future.

With ore grades on a steep decline, huge amounts of low-grade ores will have to be mined and processed to satisfy the world's current and future demands for 'critical' metals and elements. Expansion of mining and mineral processing operations would mean more mining-related wastes—tailings, waste rocks and acid mine drainage (AMD)—notorious for their devastating and long-term destructive impacts on the environment.

This Special Issue explored repurposing/reprocessing of tailings and AMD treatment cost reduction as promising alternatives to manage mine wastes more sustainably. It also includes articles on the critical roles of redox conditions and galvanic interactions on mine waste stability, hydrogeochemical controls on waste rock weathering, and climate change impacts on AMD formation in closed mines.



Order Your Print Copy  
You can order print copies at  
[www.mdpi.com/books/reprint/4901](http://www.mdpi.com/books/reprint/4901)

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.