



materials



Special Issue Reprint

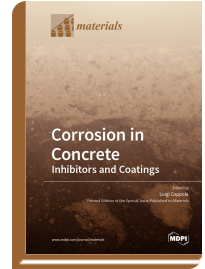
Corrosion in Concrete: Inhibitors and Coatings

www.mdpi.com/books/reprint/5040

Edited by
Luigi Coppola

ISBN 978-3-0365-3301-8 (Hardback)

ISBN 978-3-0365-3302-5 (PDF)



Improving the durability of reinforced concrete structures is a mandatory strategy to reduce the environmental impact of construction materials together with aiming to limit carbon dioxide emissions, energy consumption and natural raw materials depletion. Hence, for both new and existing concrete structures, proper protective techniques are required to prevent premature failure induced by environmental aggressive agents. The book presents the most innovative findings both in designing durable new constructions and toward solving durability deficiencies in existing concrete structures, such as innovative special coatings, hydrophobic impregnations and pore blocking treatments that are very efficient in severe aggressive environments (seawater, biocorrosion, etc.). Moreover, migrant corrosion inhibitors applied on concrete surfaces are able to greatly improve resistance against both chloride and CO_2 . Finally, special reinforcements and fibers, together with a proper designed cathodic protection, can greatly contribute to obtaining long-life reinforced concrete structures, significantly increasing the sustainability of concrete construction.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/5040

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.