



Special Issue Reprint

Cable and Electrical Fires

www.mdpi.com/books/reprint/10405

Edited by Ying Zhang Xiaoyu Ju Xianjia Huang Fuchao Tian

ISBN 978-3-7258-2515-8 (Hardback) ISBN 978-3-7258-2516-5 (PDF)

Cables, as the "arteries" and "nerves" of the national economy, are widely used in energy transmission, information transmission and various motor instruments. However, with the increasing demand for electricity and the energy infrastructure's inevitable aging, cable and electrical fires have become the main cause of fire-related accidents. Our Special Issue, named "Cable and Electrical Fires", compiles current research on cable and electrical fires, as well as present progress to the wider community and encourage further research in this area. Up to now, 11 high-quality articles have been included in this Special Issue. The articles included cover the progress of research on the fire characteristics of cables and wires; hazard and risk evaluation, especially the smoke toxicity hazard; and test standards in cable or electrical fires. We hope that the contributions published within this Special Issue will provide new insights in the field of cable and electrical fire safety. Although considerable research progress has been made on electrical and cable fire mitigation and control, much work remains to be conducted. Here are some promising research directions that may improve cable and electrical fire safety: 1) advanced materials for fire-resistant cables, including non-halogenated flame retardants and smart, self-healing materials; 2) predictive maintenance and monitoring technologies, such as using AI and machine learning to identify patterns indicative of potential fire hazards; and 3) fire safety standards for emerging technologies, including electric vehicles (EVs) and charging stations.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/10405



MDPINBOOKS 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.



ᆔ

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 Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

