



energies



Special Issue Reprint

Structural Prognostics and Health Management in Power & Energy Systems

www.mdpi.com/books/reprint/1982

Edited by

Dong Wang

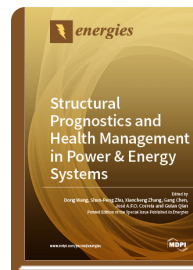
Shun-Peng Zhu

Xiancheng Zhang

Gang Chen

José A.F.O. Correia

Guian Qian



ISBN 978-3-03921-766-3 (Softback)

ISBN 978-3-03921-767-0 (PDF)

The idea of preparing an Energies Special Issue on “Structural Prognostics and Health Management in Power & Energy Systems” is to compile information on the recent advances in structural prognostics and health management (SPHM). Continued improvements on SPHM have been made possible through advanced signature analysis, performance degradation assessment, as well as accurate modeling of failure mechanisms by introducing advanced mathematical approaches/tools. Through combining deterministic and probabilistic modeling techniques, research on SPHM can provide assurance for new structures at a design stage and ensure construction integrity at a fabrication phase. Specifically, power and energy system failures occur under multiple sources of uncertainty/variability resulting from load variations in usage, material properties, geometry variations within tolerances, and other uncontrolled variations. Thus, advanced methods and applications for theoretical, numerical, and experimental contributions that address these issues on SPHM are desired and expected, which attempt to prevent overdesign and unnecessary inspection and provide tools to enable a balance between safety and economy to be achieved. This Special Issue has attracted submissions from China, USA, Portugal, and



26 submissions were received and 11 articles finally published.

Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/1982

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.