



vehicles



Special Issue Reprint

Vehicle Design Processes, 2nd Edition

www.mdpi.com/books/reprint/10843

Edited by
Ralf Stetter
Udo Pulm
Markus Till

ISBN 978-3-7258-3879-0 (Hardback)
ISBN 978-3-7258-3880-6 (PDF)



This Special Issue presents the current state of research activities concerning vehicle design processes. The design of vehicles is one of the most challenging tasks in engineering for several reasons. For example, high consumer expectations as well as intensive global competition impact vehicle design. Recent dramatic changes have influenced vehicle design, primarily due to the transition to electric drive systems and new vehicle application scenarios, especially in the Asian market. Cost-driven design is a necessity, and vehicles need to be economical in their production, operation, and recycling; in fact, sustainable design is also imperative for eco-friendly vehicles. The dynamics of vehicles must be considered in the design of all components, and lightweight design is of fundamental importance. Consumers expect strong functional performance, high product quality, an attractive appearance, high reliability, and interconnected functionality, as well as comprehensible and appealing user interfaces. More and more additional services are being integrated into vehicles. The strict requirements lead to the complex multi-domain design processes of vehicles, since most of the significant decisions are made in the design phase. Production optimization and intelligent operation are also important, but flaws and insufficiencies in the design stage lead to enormous expenditures in later stages and less-than-perfect products. The design processes of vehicles involve thousands of engineers spread across the globe who need to consider multiple product versions and variants, as well as multi-company product platforms.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/10843

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.