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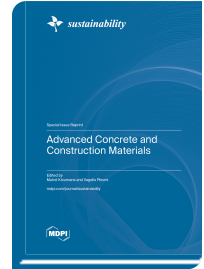
Advanced Concrete and Construction Materials

www.mdpi.com/books/reprint/8960

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ISBN 978-3-7258-0446-7 (Hardback)

ISBN 978-3-7258-0445-0 (PDF)

The reprint *Advanced Concrete and Construction Materials* offers a comprehensive exploration of cutting-edge research and critical insights into the dynamic field of construction materials and structural engineering. This meticulously curated volume delves beyond the traditional perceptions of concrete, examining transformative microstructures and alternative binders, which hold immense potential for revolutionizing construction practices and reducing the carbon footprint of concrete.

Comprising ten diverse studies, the reprint tackles pivotal sustainability, durability, and innovation issues within the construction industry. From enhancing the strength and durability of fly ash aggregate concrete with nanosilica to exploring the utilization of waste tires for reinforcing concrete columns, each contribution offers valuable insights and showcases innovative approaches. Additionally, the reprint delves into numerical modeling techniques for specialized cementitious composites and evaluates the viability of utilizing water-treatment sludge as a sustainable alternative to clay in fired clay bricks.

A valuable resource for academic professionals and researchers, this collection underscores the significance of advancing construction materials. By providing a platform for groundbreaking research and critical reviews, it encourages scholars to contribute to the ongoing discourse, thereby shaping the future of construction.



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