





Special Issue Reprint

Sustainable Concrete Materials and Resilient Structures

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The escalating climate crisis underscores the urgent need for construction practices that are both sustainable and resilient. As the most widely used construction material worldwide, concrete remains indispensable for enabling safer, stronger, and more durable infrastructures, from buildings and bridges to lifeline systems. Beyond its unmatched versatility, concrete offers unique potential to advance the United Nations' Sustainable Development Goals by fostering disaster-resilient, low-maintenance, and cost-effective solutions that address global social, economic, and environmental challenges.

This Reprint, originating from the Special Issue of *Applied Sciences*, presents a curated collection of innovative research on sustainable concrete technologies and resilient structural systems. Contributions span innovative material design, advanced performance assessment, durability enhancement, and eco-efficient applications, collectively pushing the boundaries of knowledge and practice in civil and structural engineering. By integrating sustainability with resilience, the Reprint highlights transformative pathways toward reducing the carbon footprint of construction while strengthening society's capacity to withstand natural and human-induced hazards.

Serving as a timely reference for academics, researchers, graduate students, and practitioners, this Reprint provides both foundational insights and forward-looking strategies to inspire the next generation of sustainable and resilient infrastructure.



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