





Special Issue Reprint

Advances in Energy Infrastructure Construction Technology

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Energy infrastructure is crucial for effective resource utilization, urban functionality, and economic growth. Despite shifts in the research focus over the years, the core objective remains consistent: to establish efficient, reliable, and sustainable energy systems. However, achieving this goal is challenged by complex service environments and diverse, unpredictable loads. Building resilient energy infrastructure requires expertise in geotechnical and structural engineering, energy materials, and construction techniques. Innovations in materials, foundations, and construction methods are vital for enhancing infrastructure performance and longevity. Despite progress in construction technologies, a significant gap remains between energy system demands and the actual state of infrastructure. This Special Issue compiles research on cutting-edge advancements in energy infrastructure, covering topics such as failure patterns of transmission tower–line systems, rapid pipeline installation techniques, and numerical simulations for optimization. These studies are paving the way for future developments in reliability analysis, performance enhancement, and sustainable construction practices, fostering interdisciplinary collaboration and further innovation.





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