



applied sciences



Special Issue Reprint

Beyond Energy Efficiency in Architecture. New Challenges and Research Trajectories for Buildings and the Built Environment

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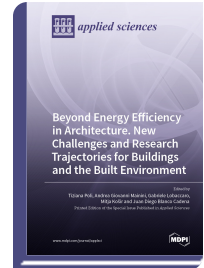
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The reprint provides a comprehensive review of various topics related to sustainable building design and operation, with a particular focus on energy efficiency and environmental impact. It covers a wide range of topics, including visual comfort assessment, decision-making processes of residents, low-cost devices for CO₂ monitoring, and the impact of the COVID-19 pandemic on residential energy use. The reprint also includes discussions on solar energy in urban planning, cost-optimal measures for energy renovation, and passive solar solutions for buildings. It provides insights into the use of different materials and strategies for improving the energy efficiency of building envelopes, including the integration of phase change materials and the use of reflective coatings on building roofs. Several case studies are presented in the book, which explores the implementation of sustainable design strategies in different building types and climates. The authors also discuss the use of advanced modeling techniques to simulate the performance of different building systems, including vertical greenery systems and the solar cadaster.



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