1. Record Nr. UNINA9911049192003321

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| Autore | Krishnamoorthy Lekshmi Ammal Priya |
| Titolo | Proceedings of the 7th International Conference on Modelling and Simulation in Civil Engineering 2024, Volume I : Clean Water, Sanitation and Climate Action: Bridging the Gap for Global Resilience and Sustainability / / edited by Priya Krishnamoorthy Lekshmi Ammal, Brajesh Kr. Dubey, Ali Danandeh Mehr |
| Pubbl/distr/stampa | Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2026 |
| ISBN | 981-9517-26-5 |
| Edizione | [1st ed. 2026.] |
| Descrizione fisica | 1 online resource (534 pages) |
| Collana | Lecture Notes in Civil Engineering, , 2366-2565 ; ; 740 |
| Altri autori (Persone) | DubeyBrajesh Kr<br>Danandeh MehrAli |
| Disciplina | 628 |
| Soggetti | Environmental engineering<br>Civil engineering<br>Refuse and refuse disposal<br>Environmental protection<br>Environmental Civil Engineering<br>Disposal Technology and Management<br>Civil Engineering<br>Soil and Water Protection |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Pollutant Dynamics and Transport -- Water Treatment -- Wastewater Treatment -- Applications of AI and ML -- Persistent Organic Pollutants -- Microplastics -- Design of Environmental Systems -- Community Initiatives and Sanitation -- Hydro Climatology -- Climate Modelling -- Hydrologic Impacts of Climate Change -- Climate Smart Agriculture and Irrigation -- Carbon Capture -- Carbon Sequestration -- Air Quality Monitoring and Modelling -- Greenhouse Gas Reduction -- Carbon Neutral Transport Sector -- LCA/Carbon Footprint Evaluation -- Embodied Energy of Building Materials -- Infrastructure Adapting to Climate Change. |
| Sommario/riassunto | This book offers a comprehensive exploration of the critical issues surrounding the sustainable development goals outlined by the United |

Nations—SDG 6: Clean water and sanitation and SDG 13: Climate action, delving into the multifaceted challenges and innovative solutions that define these vital fields. Through a blend of scholarly analysis, case studies, and practical insights, this book provides a holistic understanding of the complex interplay between water resource management, sanitation infrastructure, and the transformative potential of civil engineering in fostering climate resilience and sustainability. It examines the global water crisis, highlighting disparities in access to clean water and sanitation services while exploring the socioeconomic, environmental, and health implications of inadequate water and sanitation provision. Drawing upon the expertise of leading experts in the field of civil engineering, environmental science and engineering, public health, and policy, this book elucidates the role of technology, governance, and community engagement in advancing the SDG 6 and SDG 13 agenda. It showcases innovative approaches to water treatment, wastewater management, and sanitation solutions, spotlighting best practices and lessons learned from diverse contexts around the world. Additionally, the book underscores the interconnectedness of water and sanitation with other sustainable development goals, emphasizing the importance of integrated approaches and interdisciplinary collaboration. By providing a roadmap for effective climate action, grounded in science, innovation, and collaboration, this book also aims to empower civil engineers to become catalysts for positive change in the fight against climate change.