1. Record Nr. UNINA9910737285003321 Autore Biondini Fabio Titolo Life-Cycle of Structures and Infrastructure Systems: Proceedings of the Eighth International Symposium on Life-Cycle Civil Engineering (ialcce 2023), 2-6 July, 2023, Politecnico Di Milano, Milan, Italy Pubbl/distr/stampa 2023 Milton:,: Taylor & Francis Group,, 2023 ©2023 **ISBN** 1-000-99727-8 1-00-332302-2 1-000-99730-8 1-003-32302-2 Edizione [1st ed.] Descrizione fisica 1 online resource (4241 pages) Classificazione TEC000000TEC009020TEC063000 Altri autori (Persone) FrangopolDan M 624 Disciplina Soggetti Civil engineering Engineering systems Sustainable engineering - China Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Life-Cycle Damaging Processes -- Life-Cycle Assessment and Design Life-Cycle Monitoring, Maintenance, and Management -- Life-Cycle Performance of Special Structures -- Life-Cycle Cost of Structures and Infrastructures -- Life-Cycle Oriented Computational Tools. Sommario/riassunto Life-Cycle of Structures and Infrastructure Systems contains the lectures and papers presented at IALCCE 2023- The Eighth International Symposium on Life-Cycle Civil Engineering, held at Politecnico di Milano, Milan, Italy, 2-6 July, 2023. This book contains the full papers of 514 contributions presented at IALCCE 2023, including the Fazlur R. Khan Plenary Lecture, nine Keynote Lectures. and 504 technical papers from 45 countries. The papers cover recent advances and cutting-edge research in the field of life-cycle civil engineering, including emerging concepts and innovative applications related to life-cycle design, assessment, inspection, monitoring, repair,

maintenance, rehabilitation, and management of structures and

infrastructure systems under uncertainty. Major topics covered include life-cycle safety, reliability, risk, resilience and sustainability, life-cycle damaging processes, life-cycle design and assessment, life-cycle inspection and monitoring, life-cycle maintenance and management, life-cycle performance of special structures, life-cycle cost of structures and infrastructure systems, and life-cycle-oriented computational tools, among others. This Open Access Book provides both an up-to-date overview of the field of life-cycle civil engineering and significant contributions to the process of making more rational decisions to mitigate the life-cycle risk and improve the life-cycle reliability, resilience, and sustainability of structures and infrastructure systems exposed to multiple natural and human-made hazards in a changing climate. It will serve as a valuable reference to all concerned with life-cycle of civil engineering systems, including students, researchers, practicioners, consultants, contractors, decision makers, and representatives of managing bodies and public authorities from all branches of civil engineering.