

1. Record Nr.	UNINA9910760265603321
Autore	Barberio Maurizio
Titolo	Architecture and Design for Industry 4.0 : Theory and Practice // edited by Maurizio Barberio, Micaela Colella, Angelo Figliola, Alessandra Battisti
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
ISBN	3-031-36922-X
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (961 pages)
Collana	Lecture Notes in Mechanical Engineering, , 2195-4364
Altri autori (Persone)	ColellaMicaela FigliolaAngelo BattistiAlessandra
Disciplina	658.4038028563
Soggetti	Industrial engineering Production engineering Computer-aided engineering Building information modeling Internet of things Industrial and Production Engineering Computer-Aided Engineering (CAD, CAE) and Design Building Information Modeling Internet of Things
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The big vision: from Industry 4.0 to 5.0 for a new AEC sector -- Achieving SDGs in Industry 4.0. Between performance-oriented digital design and circular economy -- Industry 4.0 for AEC sector: impacts on productivity and sustainability -- Programming Design Environments to Foster Human-Machine Experiences -- Designing with the chain -- Aductus Architectus Novus on the definition of a new professional figure -- Lotus Aeroad - Pushing the Scale of Tensegrity Structures -- Unlocking Spaces for Everyone -- Parameterization and Mechanical Behavior of Multi-Block Columns.
Sommario/riassunto	This book collects contributions of forefront research and practices

related to the use of the enabling technologies of Industry 4.0 in the architecture and design fields and their impact on the UN's Sustainable Development goals. The book is structured into three sections (research, practice, and technologies), with the goal of creating a new framework useful for widespread awareness necessary to initiate technology transfer processes for the benefit of the public sector, universities, research centers, and innovative companies, and a new professional figure capable of controlling the entire process is essential. Thus, the book chapters arouse a series of relevant topics such as computational and parametric design, performance-based architecture, data-driven design strategies, parametric environmental design and analysis, computational and parametric structural design and analysis, AI and machine learning, BIM and interoperability, VR and AR, digital and robotic fabrication, additive manufacturing and 3D printing, R&D and entrepreneurship, circular architecture, and didactics. In the post-digital era, where the essence of design lies in the control and information of the process that holistically involves all the aspects mentioned above, rather than in formal research, it is necessary to understand technologies and analyze the advantages that they can bring in terms of environmental sustainability and product innovation.

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2. Record Nr.	UNINA9911004737203321
Autore	Lemnitzer Anne
Titolo	Geo-Congress 2022 : Geoenvironmental Engineering; Unsaturated Soils; and Contemporary Topics in Erosion, Sustainability, and Coal Combustion Residuals
Pubbl/distr/stampa	, : American Society of Civil Engineers, , 2022 ©2022
ISBN	9781523144815 1523144815 9780784484050 0784484058
Edizione	[1st ed.]
Descrizione fisica	1 online resource (559 pages)
Collana	Geotechnical Special Publications ; ; v.335
Altri autori (Persone)	StuedleinArmin Wilhelm <1978->
Soggetti	Soil-structure interaction Structural engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	GSP 335 contains 55 peer-reviewed papers on unsaturated soils and geoenvironmental engineering presented at Geo-Congress 2022, held in Charlotte, North Carolina, March 20-23, 2022.