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Titolo	Sustainability and automation in smart constructions : proceedings of the International Conference on Automation Innovation in Construction (CIAC-2019), Leiria, Portugal // Hugo Rodrigues [and three others], editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-35533-0
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XII, 418 p.) : 321 illus., 280 illus. in color
Collana	Advances in Science, Technology & Innovation, IEREK Interdisciplinary Series for Sustainable Development, , 2522-8714
Disciplina	690.0285
Soggetti	Building information modeling Construction industry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	BIM Education Required in Construction Industry -- Introduction to Proactive Design. Towards the implementation of BIM methodology for managing Complexity in architectural projects -- Real estate valuation based on BIM methodology -- Quantity take-off process supported by Building Information Modeling (BIM) methodology -- Information requirements to BIM models -- OpenBIM methods and tools for schedule and cost management -- Buildings functional rehabilitation based on BIM methodology -- Construction and Demolition waste - A shift towards Lean construction and Building Information Model -- Data acquisition of Cultural Heritage buildings using several non-destructive techniques, and its gathering with BIM – the case study of the gothic Monastery of Batalha in Portugal -- BIM applications to pavements and railways. Integration of numerical parameters.
Sommario/riassunto	This book gathers outstanding papers presented at the Conference on Automation Innovation in Construction (CIAC-2019). In recent years, there have been significant transformations in the construction sector regarding production and the use of computers and automation to create smart and autonomous systems. At the same time, innovative construction materials and alternative technologies are crucial to

overcoming the challenges currently facing the building materials industry. The book presents numerous examples of smart construction technologies, discusses the applications of new construction materials and technologies, and includes studies on recent trends in automation as applied to the construction sector.
