

1. Record Nr.	UNINA9910827803503321
Titolo	3D printing of concrete : state of the art and challenges of the digital construction revolution // edited by Arnaud Perrot
Pubbl/distr/stampa	London, England ; ; Hoboken, New Jersey : , : ISTE : , : Wiley, , 2019
ISBN	1-119-61078-8 1-5231-2788-0 1-119-61075-3 1-119-61066-4
Descrizione fisica	1 online resource (175 pages)
Collana	THEi Wiley ebooks
Disciplina	621.988
Soggetti	Three-dimensional printing Three-dimensional printing - Industrial applications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The introduction of digital manufacturing techniques, such as 3D printing applied to concrete material, opens up new perspectives on the way in which buildings are designed. Research on this theme is thriving and there is a high rate of innovation related to concrete. At the same time, the first life-size constructions made from printed concrete are emerging from the ground. This book presents state-of-the-art knowledge on the different printing processes as well as on the concrete material that must adapt to these new manufacturing techniques, such as new hardware and new printers for concrete. The possibilities in terms of architectural design are discussed as well as the pathways that remain to be uncovered. The book also explores the challenges that researchers and companies expect to overcome as they get closer to democratizing this potential revolution that is the digital manufacturing of concrete.