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Descrizione fisica	1 online resource (257 pages)
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Soggetti	Additive manufacturing Construction industry Technology & Engineering, Manufacturing Industrial chemistry & manufacturing technologies
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Nota di contenuto	Contents and Preliminary Pages -- Concrete additive manufacturing -- Shotcrete additive manufacturing -- Powder bed additive manufacturing -- Wire and arc additive manufacturing -- Advanced modelling for additive manufacturing in construction -- Opportunities and future perspectives -- Index.
Sommario/riassunto	Additive Manufacturing for Construction reveals additive manufacturing technologies for building and construction applications. It introduces digital and multiuse technologies for civil applications and informs the reader of their design properties and uses. The book explores on-site and off-site construction techniques, and features design strategies in additive manufacturing which will eliminate production difficulties and minimise assembly costs, both from the academic and industrial perspectives. The unique capabilities of additive manufacturing technologies for large-scale applications combined with 'design for manufacturing' strategies are shown, allowing the reader to understand efficient structural shapes and forms which can provide appropriate level of structural performance with reduced use of materials and

resources. This book gathers knowledge of multidisciplinary investigations into one book to answer challenges and difficulties faced by the construction industry and includes - extrusion-based concrete additive manufacturing - particle bed additive manufacturing - shotcrete additive manufacturing - wire-and-arc metal additive manufacturing - -simulation modelling of concrete 3D printing Additive Manufacturing for Construction is of interest to those in academia and industry including architects, civil engineers, material engineers, manufacturing and industrial engineers, mechatronic engineers and construction experts with an interest/professional requirement to know about large-scale additive manufacturing technologies.