

عنوان مقاله:

Technology Assessment of 3D Printing in the Building Industry

محل انتشار:

دومین کنگره بین المللی علوم، مهندسی و فن آوری های نو (سال: 1403)

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خلاصه مقاله:

The advent of 3D printing technology, which is counted part of Industry 4.0, has undeniably been a revolutionary force in various industries, including construction. It promises numerous benefits such as increased efficiency, reduced waste, and creative design possibilities as part of benefits. However, it is crucial to critically examine its negative aspects and risks, which is the other side of the coin, particularly within the construction sector - Civil engineering, which is the focus sector of this paper. Despite its advantages, challenges like regulatory hurdles, limited material options, potential structural weaknesses in some printed materials, and high initial investment costs must be acknowledged as undeniable facts. These drawbacks might pose significant barriers to widespread adoption and implementation within the construction industry, but it is believed that depends on the case and situation of our requirement from this technology.

کلمات کلیدی:

3D printing, Building industry, Technology, Sustainability, Policy

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