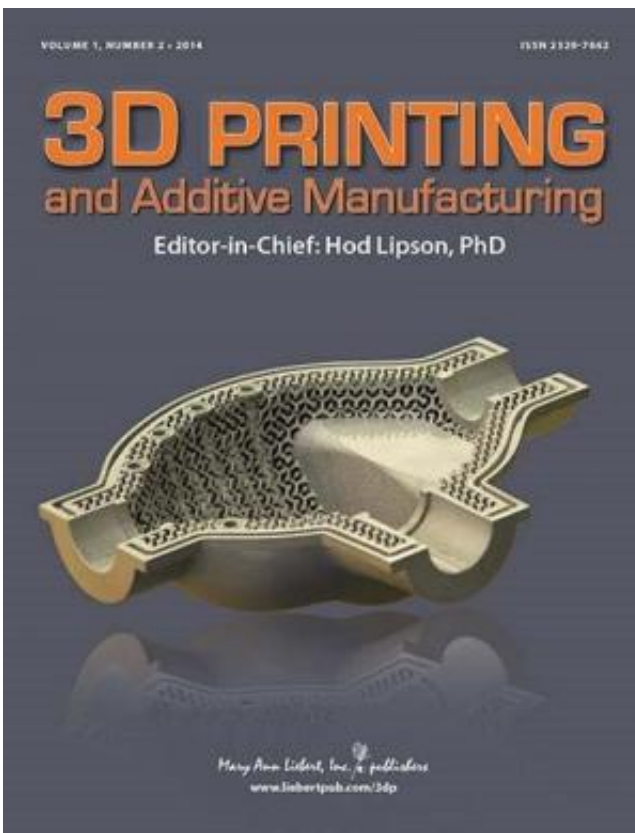


New digital fabrication technique creates interlocking 3D-printed ceramic PolyBricks

June 19 2014



© Mary Ann Liebert, Inc.

An innovative system using automated 3D printing technology and advanced digital tools to create customized, prefabricated ceramic building blocks, called PolyBricks, is enabling the construction of mortarless brick building assemblies at much greater scales than was previously

possible. The new techniques that use 3D printers to produce modular ceramic bricks from a single material that then interlock and assemble easily into larger units for architectural applications are described in an article in [3D Printing and Additive Manufacturing \(3DP\)](#).

Jenny Sabin, Martin Miller, Nicholas Cassab, and Andrew Lucia, of Sabin Design Lab, Cornell University (Ithaca, NY) and Jenny Sabin Studio (Philadelphia, PA), provide a detailed description of the computational design techniques they developed for the digital fabrication and production of [ceramic](#) PolyBrick components. The authors explain how they used available 3D printing technology to produce mass customized components in the article [PolyBrick: Variegated Additive Ceramic Component Manufacturing \(ACCM\)](#)"

"This work offers an exciting new alternative approach for 3D printing at architectural scales, without requiring the large infrastructure that most current methods require. It could open the door to many new applications" says Editor-in-Chief Hod Lipson, PhD, Director of Cornell University's Creative Machines Lab at the Sibley School of Mechanical and Aerospace Engineering, Ithaca, NY.

More information: The article is available free online on the [3D Printing and Additive Manufacturing](#) website.

Provided by Mary Ann Liebert, Inc

Citation: New digital fabrication technique creates interlocking 3D-printed ceramic PolyBricks (2014, June 19) retrieved 24 April 2024 from <https://phys.org/news/2014-06-digital-fabrication-technique-interlocking-3d-printed.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.