

Researchers develop novel 3-D printing method for transparent glass

27 December 2018



G3DP2 printer, which was used to provide proof of concept of the feasibility of creating transparent objects through the deposition of [molten glass](#).

The researchers then describe the complete redesign of the system, upgrading it to an industrial platform capable of achieving architectural output. The four objectives of the upgraded G3DP2 platform were increased speed and scale and improved repeatability and reliability. The scientists report on how to understand and control the behavior of the printed [glass](#), the specifications, engineering and control of the platform, and the product design space.

More information: Chikara Inamura et al, Additive Manufacturing of Transparent Glass Structures, *3D Printing and Additive Manufacturing* (2018). [DOI: 10.1089/3dp.2018.0157](https://doi.org/10.1089/3dp.2018.0157)

Provided by Mary Ann Liebert, Inc

Credit: Mary Ann Liebert, Inc., publishers

A novel additive manufacturing platform was used for the digital fabrication of transparent glass at industrial scale. The G3DP2 platform, developed by MIT scientists and used to turn molten glass into 3-meter tall columns, is described in an article published in *3-D Printing and Additive Manufacturing*.

In the article entitled "Additive Manufacturing of Transparent Glass Structures," Chikara Inamura, Michael Stern, Daniel Lizardo, Peter Houk, and Neri Oxman, Massachusetts Institute of Technology, Cambridge, MA discuss the early

APA citation: Researchers develop novel 3-D printing method for transparent glass (2018, December 27) retrieved 20 January 2021 from <https://phys.org/news/2018-12-d-method-transparent-glass.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.