SMART MATERIALS



A SELF-FOLDING TULIP MADE FROM COMMON 3D PRINTING MATERIAL



Share Tweet Share Email

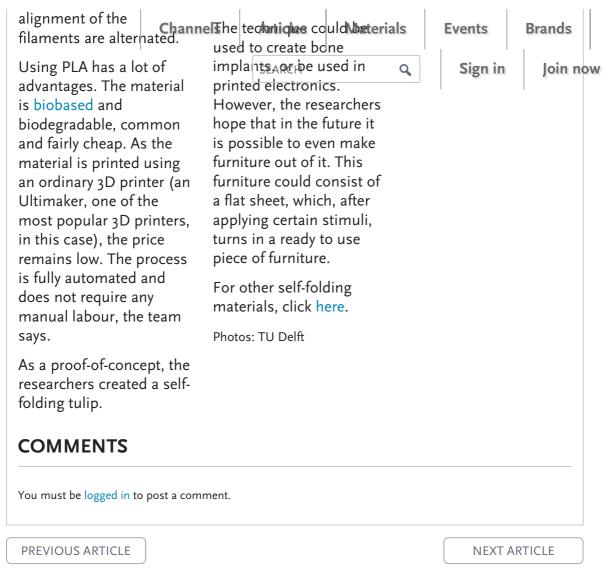
2 January 2018

INNOVATION

Combining origami techniques and 3D printing, researchers at the Technical University of Delft managed to create 3D printed, flat structures that self-fold into 3D structures, starting with a self-folding tulip. The new technique does not require any expensive printers or special materials. Rather, the researchers used only a common 3D printer and PLA, a ubiquitous material.

The material needs to be programmed beforehand, as some parts need to fold faster than others. This is called sequential shape-shifting. The team managed to do this by simultaneously printing and stretching the PLA in certain spots. This causes the stretching to be stored inside the material, like a memory. When the material is heated, the material wants to go back to its original state and thus folds. In addition, the thickness and





HOME / ARTICLES / A SELF-FOLDING TULIP MADE FROM COMMON 3D PRINTING MATERIAL

BACK TO TOP

HOME	MATERIA	CONTACT
	About Materia Contact Advertise Privacy Statement Register Sitemap	Materia Exhibitions Naarden The Netherlands +31 (0)20 71 30 650 info@materia.nl
CONNECT		WEEKLY NEWSLETTER
	SIGN UP NOW!	

© 1998-2018 Materia Exhibitions B.V., All rights reserved