

Accepted Manuscript

Computer-aided design of resistance micro-fluidic circuits for 3D printing

Elishai Ezra Tsur, Ariel Shamir

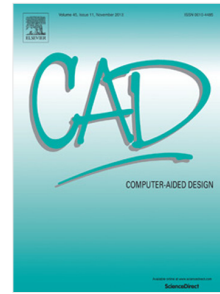
PII: S0010-4485(17)30257-9
DOI: <https://doi.org/10.1016/j.cad.2017.12.004>
Reference: JCAD 2573

To appear in: *Computer-Aided Design*

Received date: 6 March 2017
Accepted date: 23 December 2017

Please cite this article as: Tsur E.E., Shamir A. Computer-aided design of resistance micro-fluidic circuits for 3D printing. *Computer-Aided Design* (2018), <https://doi.org/10.1016/j.cad.2017.12.004>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Computer-Aided Design of Resistance Micro-Fluidic Circuits for 3D printing

Elishai Ezra Tsur^{1, 2}, Ariel Shamir²

¹ Faculty of Engineering, Jerusalem College of Technology, Israel

² Efi Arazi School of Computer Science, The Interdisciplinary Center, Herzelia, Israel

Highlights

- We present an automatic design process for resistance microfluidic circuits that outputs a fabrication-ready circuit model following a given set of specifications
- We defined an algorithm that uses fabrication-related constraint propagation and an optimization protocol to suggest a spatially optimized design for the proposed circuit.
- Finally, we automatically generate a vector-graphics model for 3D printing

Download English Version:

<https://daneshyari.com/en/article/6876433>

Download Persian Version:

<https://daneshyari.com/article/6876433>

[Daneshyari.com](https://daneshyari.com)