

Accepted Manuscript

Title: Thermal behavior of the molten pool, microstructural evolution, and tribological performance during selective laser melting of TiC/316L stainless steel nanocomposites: Experimental and simulation methods

Authors: Bandar AlMangour, Dariusz Grzesiak, Jinquan Cheng, Yavuz Ertas



PII: S0924-0136(18)30029-3
DOI: <https://doi.org/10.1016/j.jmatprotec.2018.01.028>
Reference: PROTEC 15611

To appear in: *Journal of Materials Processing Technology*

Received date: 23-6-2017
Revised date: 20-11-2017
Accepted date: 21-1-2018

Please cite this article as: AlMangour B, Grzesiak D, Cheng J, Ertas Y, Thermal behavior of the molten pool, microstructural evolution, and tribological performance during selective laser melting of TiC/316L stainless steel nanocomposites: Experimental and simulation methods, *Journal of Materials Processing Technology* (2018), <https://doi.org/10.1016/j.jmatprotec.2018.01.028>

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.

Thermal behavior of the molten pool, microstructural evolution, and tribological performance during selective laser melting of TiC/316L stainless steel nanocomposites: Experimental and simulation methods

Bandar AlMangour ^{a,*}, Dariusz Grzesiak ^b, Jinqun Cheng ^c, Yavuz Ertas ^d

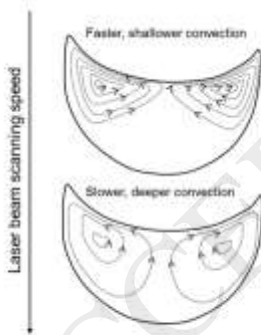
^a School of Engineering and Applied Sciences, Harvard University, Cambridge, MA 02138, USA

^b Department of Mechanical Engineering and Mechatronics, West Pomeranian University of Technology, Szczecin, Aleja Piastów 17, Poland

^c Composite Solutions and Digital Manufacturing LLC, Chandler, AZ, 85248

^d Department of Bioengineering, University of California, Los Angeles, CA 90095, USA

Graphical abstract



* Corresponding author. Tel.: +1 424 2785902; E-mail: balmangour@seas.harvard.edu, balmangour@gmail.com (B. AlMangour)

Download English Version:

<https://daneshyari.com/en/article/7176382>

Download Persian Version:

<https://daneshyari.com/article/7176382>

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