1-Selective laser melting of Ti6Al4V alloy powder

PhD Student: Hassanen Jaber

Supervisor: Dr. Tunde Kovacs

Doctoral School on Materials Sciences and Technologies

Óbuda University



Óbuda University

Problems and The goal of this study



Óbuda University

1- Tensile properties



2- Defects lack of fusion Ga NanoLAB-MOST SEM HV: 20.0 kV Det: SE SEM MAG: 1.00 kx Date(m/d/y): 08/18/19 50 µm

Óbuda University

3- X-ray diffraction (XRD)



Óbuda University

4- Microstructure



Óbuda University

6- EDS



Óbuda University

Planned Publication



📢 🛛 » Browse Volumes & Issues

JOM

The Journal of The Minerals, Metals & Materials Society (TMS)

ISSN: 1047-4838 (Print) 1543-1851 (Online)

Description

JOM is a technical journal devoted to exploring the many aspects of materials science and engineering within the broad topical areas of light metals, structural materials, functional materials, extraction and processing, and materials processing and manufacturing. JOM strives to balance the interests of the laboratory and the marketplace by reporting academic, industrial, and government-sponsored work from around the world.

S ... show all

Browse Volumes & Issues



Search within this journal

Impact Factor	Available
2.305	1949 - 2020
72	846

Óbuda University

1-Selective laser melting of spherical and irregularly mixed powder of Ti6Al4V alloy Q

2-Heat treatment of selective laser melted Ti6Al4V alloy: microstructure and mechanical properties

PhD Student: Hassanen Jaber

Supervisor: Tunde Kovacs

Doctoral School on Materials Sciences and Technologies

Óbuda University



Óbuda University

2-Heat treatment of selective laser melted Ti6Al4V alloy: microstructure and mechanical properties

Experimental Work



Óbuda University

2-Heat treatment of selective laser melted Ti6Al4V alloy: microstructure and mechanical properties

Samples





Óbuda University

2-Heat treatment of selective laser melted Ti6Al4V alloy: microstructure and mechanical properties

Publications

- Selective laser melting of Ti alloys and hydroxyapatite for tissue engineering: progress and challenges <u>https://doi.org/10.1088/2053-1591/ab1dee</u>
- Preparation and Synthesis of Hydroxyapatite Bio-Ceramic from Bovine bone by Thermal Heat Treatment <u>https://doi.org/10.14382/epitoanyag-jsbcm.2019.18</u>
- 3) Dissimilar Resistance Spot Welding of Ferrite-Martensite Dual Phase Steel/Low Carbon Steel: Phase Transformations and Mechanical Properties <u>https://doi.org/10.1007/978-3-319-75677-6_60</u>
- 4) The effect of nano-quenching media on the tensile properties and microstructure of medium carbon steel http://www.ejmse.tuiasi.ro/articles/EJMSE_4_2_6_Jaber.pdf
- 5) Similar and Dissimilar Resistance Spot Welds of DP600 and X8Cr17 steels sheets: Welding Current and Fracture Toughness <u>http://bk.bgk.uni-obuda.hu/index.php/BK/article/view/35</u>

Óbuda University

Thank you very much for your attention