**UMA$^3$ Project No.: 952463**

**WIDESPREAD-05-2020 – Twinning-CSA**

# D1.3. List of peer-reviewed publications in the 3 years prior project start

**Grant Agreement Number:** 952463

**Project Acronym:** UMA$^3$

**Project title:** Unique Materials for Advanced Aerospace Applications

**Starting Date:** 01/09/2020

**Project Duration:** 36 months

**Project Officer:** Antonio Vecchio

**Project Coordinator: University of Miskolc (UniMi)**

**Author(s):** Greta Gergely (UniMi), Zoltán Gácsi (UniMi)

**Contributing partners:** -

**Due Submission Date:** 31/10/2020

**Actual Submission Date:** 27/10/2020

| Status | |
|---|---|
| Draft | |
| Final | X |

| Type | | |
|---|---|---|
| R | Document, report | X |
| DEM | Demonstrator, pilot, prototype | |
| DEC | Websites, patent fillings, videos, etc. | |
| ETHICS | | |

| Dissemination Level | | |
|---|---|---|
| PU | Public | X |
| CO | Confidential, only for members of the consortium (including the Commission Services) | |

**Revision History**

| Date | Lead Author(s) | Comments |
|---|---|---|
| 26/10/2020 | UniMi | Draft |
| 27/10/2020 | UniMi | Final |
| | | |
| | | |
| | | |

**This project has received funding from the European Union's Horizon2020 research and innovation programme under grant agreement No 952463**

# *TABLE OF CONTENTS*

## 1. TASK DESCRIPTION OF D1.3

The task will be to introduce in the Continuous reporting tool on the Funding and tenders portal before the end of month 2 of the project peer-reviewed publications (in the particular field of research) of the coordinating entity during the three years preceding the start date of the project.

The deliverable will be a one-page statement that the task has been completed.

## 2. PEER REVIEWED PUBLICATION OF UNIMI IN THE PAST THREE YEAR (2017-2020)

In case of UniMi-FMSE, the relevant staff of UMA3 is made up of researchers, who are expected to participate in the project.

Data of publications were collected using SciVal[1] webpage based on the Scopus database. The publications are listed in the Table.

In the Table, blue lines are refer to the base line indicators, which data were set in the proposal (H index. 6; number of co-authored publications on materials science and engineering with european counerparts: 39) and strongly fit to this deliverable.

[1] https://www.scival.com/landing

| No. | Publication | Citation |
|---|---|---|
| 1 | Czagány, M., Baumli, P., Kaptay, G. (2017).The influence of the phosphorous content and heat treatment on the nano-micro-structure, thickness and micro-hardness of electroless Ni-P coatings on steel. Applied Surface Science,423160-169 | **40** |
| 2 | Orbulov, I.N., Kemény, A., Filep, Á. and 1 more (...) (2019).Compressive characteristics of bimodal aluminium matrix syntactic foams. Composites Part A: Applied Science and Manufacturing,124 | **11** |
| 3 | Buga, C., Hunyadi, M., Gácsi, Z. and 5 more (...) (2019).Calcium silicate layer on titanium fabricated by electrospray deposition. Materials Science and Engineering C,98401-408 | **9** |
| 4 | Krasznahorkay, A.J., Csatlós, M., Csige, L. and 8 more (...) (2018).New results on the 8Be anomaly. Journal of Physics: Conference Series,1056(1) | **8** |
| 5 | Czagany, M., Baumli, P. (2017).EFfect of ph on the characteristics of electroless Ni-P coatings. Journal of Mining and Metallurgy, Section B: Metallurgy,53(3) 327-332 | **8** |
| 6 | Lekatou, A., Gkikas, N., Karantzalis, A.E. and 4 more (...) (2017).Effect of Wetting Agent and Carbide Volume Fraction on the Wear Response of Aluminum Matrix Composites Reinforced by WC Nanoparticles and Aluminide Particles. Archives of Metallurgy and Materials,62(2) 1235-1242 | **6** |
| 7 | Gyökér, Z., Gergely, G., Koncz Horváth, D. and 2 more (...) (2019).Role of reinforcement surface treatment on the SnAg3Cu0.5 microelectronic joints. Applied Surface Science,475982-985 | 5 |
| 8 | Hunyadi, M., Gácsi, Z., Csarnovics, I. and 5 more (...) (2017).Enhanced growth of tellurium nanowires under conditions of macromolecular crowding. Physical Chemistry Chemical Physics,19(25) 16477-16484 | 5 |
| 9 | Czagány, M., Baumli, P. (2019).Effect of surfactants on the behavior of the Ni-P bath and on the formation of electroless Ni-P-TiC composite coatings. Surface and Coatings Technology,36142-49 | 4 |
| 10 | Sveda, M., Sycheva, A., Miko, T. and 4 more (...) (2017).Effect of Ni and Zr on the microstructural evolution of Ti-based alloys during ball-milling. Journal of Non-Crystalline Solids,47341-46 | 3 |
| 11 | Manoj Kumar, P., Gergely, G., Horváth, D.K. and 1 more (...) (2018).Investigating the Microstructural and Mechanical Properties of Pure Lead-Free Soldering Materials (SAC305 & SAC405). Powder Metallurgy Progress,18(1) 49-57 | 3 |
| 12 | Gergely, G., Koncz-Horváth, D., Weltsch, Z. and 1 more (...) (2017).Development of Crack Detection Method with 2 Dimensionally Generated 3 Dimensionally Reconstructed Images in THT Solder Joints. Archives of Metallurgy and Materials,62(2) 1033-1038 | 3 |
| 13 | Tomolya, K., Sycheva, A., Sveda, M. and 4 more (...) (2017).Synthesis and characterization of copper-based composites reinforced by CuZrAlNiTi amorphous particles with enhanced mechanical properties. Metals,7(3) | 3 |
| 14 | Benke, M., Hlavacs, A., Petho, D. and 4 more (...) (2018).A simple correlation between texture and earing. IOP Conference Series: Materials Science and Engineering,426(1) | 2 |
| 15 | Nuilek, K., Simon, A., Baumli, P. (2019).Synthesis and Characterization of Carbon Nanosheets from Stinging Nettle (Urtica Dioica). IOP Conference Series: Materials Science and Engineering,613(1) | 2 |
| 16 | Gyenes, A., Benke, M., Teglas, N. and 2 more (...) (2017).Investigation of Multicomponent Lead-Free Solders. Archives of Metallurgy and Materials,62(2) 1071-1074 | 1 |

| | | |
|---|---|---|
| 17 | Pal, M.K., Gergely, G., Koncz-Horvath, D. and 1 more (...) (2019).Influence of ceramic particles on the microstructure and mechanical properties of SAC305 lead-free soldering material. Archives of Metallurgy and Materials,64(2) 603-606 | 1 |
| 18 | Al-Azzawi, A.H., Sytchev, J., Baumli, P. (2017).Increasing the Surface Hardness of Cast Iron by Electrodeposition of Borides in Molten Salts. Archives of Metallurgy and Materials,62(2) 1015-1018 | 1 |
| 19 | Al-Azzawi, A., Kristály, F., Rácz, Á. and 3 more (...) (2019).Mechanical alloying of iron-coated NbC and Si in stirred media mill. Journal of Mining and Metallurgy, Section B: Metallurgy,55(2) 209-216 | 1 |
| 20 | Janovszky, D., Kristaly, F., Miko, T. and 2 more (...) (2018).Development of novel Ultrafine Grain Cu metal matrix composites reinforced with Ti-Cu-Co-M (M: Ni, Zr) amorphous-nanocrystalline powder. Journal of Mining and Metallurgy, Section B: Metallurgy,54(3) 349-360 | 1 |
| 21 | Janovszky, D., Kristaly, F., Miko, T. and 4 more (...) (2018).Phase transformation and morphology evolution of Ti50Cu25Ni20Sn5 during mechanical milling. Materials,11(9) | 1 |
| 22 | Pal, M.K., Gergely, G., Koncz-Horváth, D. and 1 more (...) (2020).Investigation of the Electroless Nickel Plated Sic Particles in Sac305 Solder Matrix. Powder Metallurgy and Metal Ceramics,58(9-10) 529-537 | 0 |
| 23 | Somlyai-Sipos, L., Baumli, P., Sycheva, A. and 5 more (...) (2020).Development of Ag nanoparticles on the surface of Ti powders by chemical reduction method and investigation of their antibacterial properties. Applied Surface Science,533 | 0 |
| 24 | Petho, D., Hlavacs, A., Barkoczy, P. and 1 more (...) (2018).The variation of earing and texture components during annealing treatments of a 3003-type aluminium alloy. IOP Conference Series: Materials Science and Engineering,426(1) | 0 |
| 25 | Szabó, G., Mikó, T., Puskás, C. and 1 more (...) (2018).Analysis of tear-off of bonded layers in further rolling 3-layered aluminum sheets. METAL 2018 - 27th International Conference on Metallurgy and Materials, Conference Proceedings,316-322 | 0 |
| 26 | Petho, D., Miko, T., Gacsi, Z. (2020).The characterization of cold pressed molybdenum powders reinforced with ceramic particles. Euro PM 2018 Congress and Exhibition, | 0 |
| 27 | Kazup, A., Karpati, V., Hegedus, B. and 1 more (...) (2020).Semi-continuous casting and microstructure investigation of the AlSi12 alloy. IOP Conference Series: Materials Science and Engineering,903(1) | 0 |
| 28 | Mikóné Mádi, L., Varga, L., Mikó, T. (2017).Examination of the properties of resin bonded core mixtures. Materials Science Forum,885171-177 | 0 |
| 29 | Angel, D., Benke, M., Mertinger, V. (2017).The role of the technological residual stress in spiral bevel gears' degradation. Materials Science Forum,885153-158 | 0 |
| 30 | Nagy, E., Kovács, Á., Barkóczy, P. and 3 more (...) (2018).Following the precipitation process during homogenization by correlative microscopy in aluminium manganese alloy. IOP Conference Series: Materials Science and Engineering,426(1) | 0 |
| 31 | Karpati, V., Hegedus, B., Kazup, A. and 3 more (...) (2020).Semi-continuous casting of aluminium alloys. IOP Conference Series: Materials Science and Engineering,903(1) | 0 |
| 32 | Somlyai-Sipos, L., Janovszky, D., Sycheva, A. and 1 more (...) (2020).Investigation of the Melting Point Depression of Copper Nanoparticles. IOP Conference Series: Materials Science and Engineering,903(1) | 0 |
| 33 | Mikó, T., Szabó, G., Barkóczy, P. (2017).The effect of strain path change form wire drawing to uniaxial compression in Al0.25Mg alloy. Materials Science Forum,885117-122 | 0 |
| 34 | Miko, T., Kristaly, F., Bohacs, K. and 3 more (...) (2018).The effect of process control agents and milling atmosphere on the structural changes of | |

| | | |
|---|---|---|
| | Ti50Cu27,5Ni10Zr10Co2,5 master alloy during short time milling. IOP Conference Series: Materials Science and Engineering,426(1) | |
| 35 | Angel, D.A., Miko, T., Benke, M. and 1 more (...) (2020).Characterization of ceramic particle reinforced titanium composite produced via powder metallurgy. Archives of Metallurgy and Materials,65(2) 515-519 | 0 |
| 36 | Hlavacs, A., Petho, D., Angel, D.A. and 3 more (...) (2018).The effect of Mn content on the texture of aluminium alloys in cold rolled and annealed state. IOP Conference Series: Materials Science and Engineering,426(1) | 0 |
| 37 | Angel, D.A., Hlavacs, A., Petho, D. and 3 more (...) (2018).Characterization of grain structure and crystallographic texture variation during the production of a Properzi semi-product. IOP Conference Series: Materials Science and Engineering,426(1) | 0 |
| 38 | Karpati, V., Miko, T., Barkoczy, P. and 3 more (...) (2018).Examination of the effect of homogenization processes through compression tests in aluminum alloys. IOP Conference Series: Materials Science and Engineering,426(1) | 0 |
| 39 | Angel, D.A., Benke, M., Mikó, T. and 1 more (...) (2020).The effect of the pressing on rutile reinforced titanium. Euro PM 2018 Congress and Exhibition, | 0 |
| 40 | Mertinger, V., Aviles Santillana, I., Benke, M. and 11 more (...) (2020).Deformability Tests of Pure Niobium. IOP Conference Series: Materials Science and Engineering,903(1) | 0 |
| 41 | Somlyai-Sipos, L., Czagány, M., Janovszky, D. and 1 more (...) (2019).Synthesis and investigation of nickel nanoparticles. Proceedings of the World Congress on New Technologies,0 | 0 |
| 42 | Varanasi, D., Szabo, J.T., Baumli, P. (2019).Investigation of the copper penetration and joint microstructure observed in low alloyed steels. NanoWorld Journal,5(3) 36-40 | 0 |
| 43 | Koncz-Horváth, D., Gergely, G., Gácsi, Z. (2017).Whisker-Like Formations in Sn-3.0Ag-Pb Alloys. Archives of Metallurgy and Materials,62(2) 1027-1031 | 0 |
| 44 | Nuilek, K., Simon, A., Kurovics, E. and 3 more (...) (2020).Effect of activation and exfoliation on the formation of carbon nanosheets derived from natural materials. Journal of Physics: Conference Series,1527(1) | 0 |
| 45 | Bubonyi, T., Barkóczy, P., Gácsi, Z. (2020).Comparison of CT and metallographic method for evaluation of microporosities of dye cast aluminum parts. IOP Conference Series: Materials Science and Engineering,903(1) | 0 |
| 46 | Sályi, Z., Veres, Z., Baumli, P. and 1 more (...) (2017).Development of nitrided selective wave soldering tool with enhanced lifetime for the automotive industry. Lecture Notes in Mechanical Engineering,12187-195 | 0 |
| 47 | Molnar, A., Benke, M., Gacsi, Z. (2017).Correlation between Pin Misalignment and Crack Length in THT Solder Joints. Archives of Metallurgy and Materials,62(2) 1063-1066 | 0 |
| 48 | Nagy, A., Krasznahorkay, A.J., Ciemala, M. and 14 more (...) (2019).Searching for the double γ-decay of the X(17) particle. Nuovo Cimento della Societa Italiana di Fisica C,42(2-3) | 0 |
| 49 | Koncz-Horváth, D., Gergely, G., Gyökér, Z. and 1 more (...) (2019).Reliability examinations of saC lead free solder material. Archives of Metallurgy and Materials,64(3) 925-930 | 0 |
| 50 | Sályi, Z., Hatalák, B., Kárpáti, V. and 7 more (...) (2018).The effect of silicon on the homogenization of CDC cast aluminium alloys. IOP Conference Series: Materials Science and Engineering,426(1) | 0 |