

STRUCTURED CV OF AN APPLICANT FOR THE ALLOCATION OF A STARTING APARTMENT

Personal details

Applicant's name: Musiienko Denys
Date of birth: 30/08/1989
Institute: Institute of Physics of the CAS
Position: Postdoctoral researcher
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Education

28/02/2019 **Doctor of Science (Technology) degree approved with distinction** in Doctoral Programme in Engineering Science, School of Engineering Science, Lappeenranta-Lahti University of Technology, Finland.

14/06/2012 **Master's degree** in Applied Mathematics and Physics, Federal State Autonomous Educational Institution of Higher Professional Education Moscow Institute of Physics and Technology (State University), The Russian Federation.

30/06/2010 **Bachelor's degree** in Applied Physics, National Aviation University, Ukraine.

Ph.D. study

Thesis entitled "**Ni-Mn-Ga magnetic shape memory alloy for precise high-speed actuation in micro-magneto-mechanical systems**" for the degree of Doctor of Science (Technology) in Doctoral Programme in Engineering Science was publicly examined on the 17th of January, 2019.

Employment history

26/04/2019 – present **Postdoctoral researcher** at the Institute of Physics of the CAS, Czech Republic.

01/11/2014 – 30/01/2019 **Doctoral student** at Lappeenranta-Lahti University of Technology, Finland.

18/06/2014 – 31/10/2014 **Invited researcher** at Lappeenranta-Lahti University of Technology, Finland.

01/09/2008 – 17/06/2014 **Engineer** at G.V. Kurdyumov Institute for Metal Physics of the NASU, Ukraine.

Participation in scientific projects

Principal Investigator	Organisation	Project title	Funding period	Funding
Ullakko, Kari	LUT University	An exploration of twin dynamics: Nucleation, motion and energy dissipation of twin boundaries in Ni-Mn-Ga	01/09/2014 31/08/2018	507 674 €
Ullakko, Kari	LUT University	Magnetoplastic Ni-Mn-Ga materials to create expressive haptic surfaces and their applications. Consortium: MSMHaptics	01/01/2015 31/12/2016	331 402 €
Ullakko, Kari	LUT University	Kontaktittomat mikropumput biologisiin ja ympäristötekniikan lab-on-chipeihin	01/06/2012 31/10/2014	552 690 €
Ullakko, Kari	LUT University	Mikropumput yksisolutekniikoiden ja lääketieteen avuksi	01/06/2016 31/12/2018	737 498 €
Heczko, Oleg	Fyzikální ústav AV ČR, v.v.i.	Martenzitická transformace tenkých magnetických vrstev	01/01/2019 31/12/2021	9 010 kKč

Conference presentations

Dates	Contribution
02-07/06/2019	Musiienko, D., Saren, A., Straka, L., Vronka, M., Klimša, L., Kopeček, J., Sozinov, O., Ullakko, K. and Heczko, O. Ni-Mn-Ga magnetic shape memory alloy for high-speed actuation in micro-magneto-mechanical systems. <i>The 6th International Conference on Ferromagnetic Shape Memory Alloys, ICFSMA 2019</i>
27-31/08/2018	Musiienko, D., Saren, A., Straka, L., Klimša, L. and Ullakko, K. High-speed actuation of Ni-Mn-Ga micropillars by pulsed magnetic field. <i>The 11th European Symposium on Martensitic Transformations, ESOMAT 2018</i>
25-27/06/2018	Musiienko, D., Straka, L., Klimša, L., Saren, A., Sozinov, A., Heczko, O. and Ullakko, K. Magnetic-field-induced actuation of Ni-Mn-Ga micropillars. <i>The 16th International Conference and 10th Exhibition on New Actuators and Drive Systems Bremen, ACTUATOR 2018</i>
13-15/06/2016	Musiienko, D., Huimasalo, J., Tellinen, J., Saren, A. and Ullakko, K. Study of Vibration Energy Harvester Based on the Magnetic Shape Memory Effect. <i>The 15th International Conference on New Actuators & 9th Exhibition on Smart Actuators and Drive Systems, ACTUATOR 2016</i>
14-18/09/2015	Musiienko, D., Smith, A.R., Saren, A. and Ullakko, K. Stabilizing a fine twin structure by coating 5M Ni-Mn-Ga with a thin film of tetrahedral amorphous carbon. <i>The 10th European Symposium on Martensitic Transformations, ESOMAT 2015</i>

Prizes and Awards

The fellow received the "**Best Poster Award**" for the poster entitled "High-speed actuation of Ni-Mn-Ga micropillars by pulsed magnetic field" at ESOMAT 2018 conference.

The applicant's doctoral dissertation entitled "Ni-Mn-Ga magnetic shape memory alloy for precise high-speed actuation in micro-magneto-mechanical systems" was accepted with the grade approved with distinction.

Teaching and outreach

During the 2013-2014 academic year the fellow was a tutor in extramural physical and mathematical school of Moscow Institute of Physics and Technology (MIPT) in Kyiv. The fellow has co-supervised master students Yaroslav Komisarov (National Aviation University, Kyiv, Ukraine, 2013-2014) and Ali Saghi (LUT University, Lappeenranta, Finland, 2017). In January 2014 the fellow organized the qualifying round of 53rd visiting olympiad of MIPT in his home town Zhovti Vody, Ukraine.

Peer-reviewed journal articles

Published	Reference	IF	Cited
15/03/2020	Sozinov, A., Musiienko, D. , Saren, A., Veřtát, P., Straka, L., Heczko, O., Zelený, M., Chulist, R. and Ullakko, K., 2020. Highly mobile twin boundaries in seven-layer modulated Ni–Mn–Ga–Fe martensite. <i>Scripta Materialia</i> , 178, pp. 62-66.	4.539	0
15/03/2019	Musiienko, D. , Saren, A., Straka, L., Vronka, M., Kopeček, J., Heczko, O., Sozinov, A. and Ullakko, K. Ultrafast actuation of Ni-Mn-Ga micropillars by pulsed magnetic field. <i>Scripta Materialia</i> , 162, pp. 482-485.	4.539	1
01/01/2019	Pérez-Checa, A., Musiienko, D. , Saren, A., Soroka, A., Feuchtwanger, J., Sozinov, A., Barandiaran, J.M., Ullakko, K. and Chernenko, V.A.. Study of the critical parameters for magnetic field-induced strain in high temperature Ni-Mn-Ga-Co-Cu-Fe single crystals. <i>Scripta Materialia</i> , 158, pp. 16-19.	4.539	2
01/06/2018	Musiienko, D. , Straka, L., Klimša, L., Saren, A., Sozinov, A., Heczko, O. and Ullakko, K.. Giant magnetic-field-induced strain in Ni-Mn-Ga micropillars. <i>Scripta Materialia</i> , 150, pp. 173-176.	4.539	9
01/10/2017	Musiienko, D. , Saren, A. and Ullakko, K. Magnetic shape memory effect in single crystalline Ni-Mn-Ga foil thinned down to 1 μm . <i>Scripta Materialia</i> , 139, pp. 152-154.	4.539	3

Published	Reference	IF	Cited
01/06/2017	Pérez-Checa, A., Feuchtwanger, J., Musiienko, D. , Sozinov, A., Barandiaran, J.M., Ullakko, K. and Chernenko, V.A. High temperature $Ni_{45}Co_5Mn_{25-x}Fe_xGa_{20}Cu_5$ ferromagnetic shape memory alloys. <i>Scripta Materialia</i> , 134, pp. 119-122.	4.539	7
01/03/2016	Saren, A., Musiienko, D. , Smith, A.R. and Ullakko, K. Pulsed magnetic field-induced single twin boundary motion in Ni–Mn–Ga 5M martensite: a laser vibrometry characterization. <i>Scripta Materialia</i> , 113, pp. 154-157.	4.539	9
01/09/2015	Saren, A., Musiienko, D. , Smith, A.R., Tellinen, J. and Ullakko, K. Modeling and design of a vibration energy harvester using the magnetic shape memory effect. <i>Smart Materials and Structures</i> , 24(9), 095002.	3.543	10
06/03/2015	Musiienko, D. , Smith, A.R., Saren, A. and Ullakko, K. Stabilization of a fine twin structure in Ni–Mn–Ga by a diamond-like carbon coating. <i>Scripta Materialia</i> , 106, pp. 9-12.	4.539	2
<i>The fellow's h-index is 5 and total number of citations, excluding self-citation (Scopus)</i>			43