

Content

547-551
<b>Experimental Study of Copper Alloys by Electronic Speckle Pattern Interferometry</b> <i>Dana Bakošová</i>
552-558
<b>Effect of Zr on Selected Properties and Porosity of AlSi9Cu1Mg Alloy for the Purpose of Production of High-precision Castings</b> <i>Dana Bolibruchová, Michal Kuriš, Marek Matejka</i>
559-562
<b>The Crack Analysis of Fatigue Tested Steel Construction</b> <i>Zbynek Bunda, Ludmila Kucerova, Miloslav Kepka</i>
563-572
<b>Assessment of Surface Structure of Machined Surfaces</b> <i>David Dobrocký, Zbyněk Studený, Zdeněk Pokorný, Zdeněk Joska, Petr Faltejsek</i>
573-578
<b>Measuring the Performance Characteristics of a Motorcycle</b> <i>Adam Hamberger, Milan Daňa</i>
579-582
<b>Specially Designed Lattice Structure for Milling Cutter Supported by FEA</b> <i>Pavel Hanzl, Ivana Zetková, Miroslav Zetek</i>
583-588
<b>Influence of Cooling Rate on Microstructure and Mechanical Properties of 42SiCr Steel after Q&amp;P Process</b> <i>Tomáš Janda, Hana Jirková, Štěpán Jeníček, Ludmila Kučerová</i>
589-595
<b>The Investigation of the Influence of Modern Coating Applied to the Cutting Inserts During Machining</b> <i>Ales Jaros, Josef Sedlak, Petr Jasek, Jozef Majerik, Igor Barenyi, Jan Bezecny</i>
596-603
<b>Assessment of Selected Operating Characteristics of Polymer Composites with Non-Ferrous Materials Used in Friction Pairs</b> <i>Jerzy Józwick</i>
604-608
<b>Noise and Vibration Analysis of Conveyor Belt</b> <i>Frantisek Klimenda, Josef Soukup, Jan Sterba</i>
609-612
<b>Microscopic Evaluation of Cast Iron with Flake Shape of Graphite</b> <i>Petra Kováčiková, Andrej Dubec, Ján Vavro</i>
613-618
<b>Influence of Production Parameters on the Properties of 3D Printed Magnesium Alloy Mg-4Y-3RE-Zr (WE43)</b> <i>Patricia Krištofová, Michaela Roudnická, Jiří Kubásek, David Paloušek, Jan Suchý, Dalibor Vojtěch</i>
619-623
<b>Corrosion Resistance of Low Temperature Plasma Nitrided X12CrMoWVNbN10-1-1 Martensitic Stainless Steel</b> <i>David Kusmič, Petr Faltejsek</i>
624-631
<b>Influence of Heat Treatment Regime on Corrosion Resistance of Clad Aluminium Alloy</b> <i>Sylvia Kusmierczak, Frantiska Peslova, Natasa Naprstkova</i>
632-636
<b>Zinc-based Degradable Biomaterials – Limitations and Enhancements</b> <i>Tomáš Lovaši, Jan Pinc, Ilona Voňavková</i>
637-643
<b>Residual Stresses and Cracks in Forgings of Heat-treatable Aluminium Alloys</b> <i>Jan Luštinec, Vladivoj Očenášek</i>
644-646
<b>Microstructure Study of the Stainless Steel Layer on AlSi Cast Alloy Prepared by Laser Deposition</b> <i>Štefan Michna, Iryna Hren, Lenka Michnová, Michal Lattner</i>
647-654
<b>Effect of Waterjet Machining Parameters on Cut Quality of Polymeric Composite Materials Based on Biological Reinforcement in Form of Cotton Post-harvest Line Residues</b> <i>Miroslav Müller, Viktor Kolář, Petr Valášek</i>

Advisory Board

Prof. hab. Dr. Stanislav Adamczak, MSc.  
*Politechnika Kielce, Poland*

Prof. Dana Bolibruchová, MSc. Ph.D.  
*UZ in Zilina, Slovakia*

Prof. Milan Brožek, MSc., Ph.D.  
*CULS in Prague, Czech*

Prof. Dr. M. Numan Durakbasa  
*Vienna University of Technology, Austria*

Prof. Dr. František Holešovský, MSc.  
*president, JEPU in Usti n. Labem, Czech*

Prof. Jiří Hrubý, MSc., Ph.D.  
*VSB TU of Ostrava, Czech*

Prof. h. c. Stanislav Legutko, MSc., Sc.D.  
*Politechnika Poznańska, Poland*

Prof. Antonin Kriz, MSc., Ph.D.  
*University of West Bohemia, Czech*

Prof. Karel Kocman, MSc., Sc.D.  
*TBU in Zlin, Czech*

Prof. Pavel Kovac, MSc., Ph.D.  
*University of Novi Sad, Serbia*

Prof. Dr. János Kundrák, MSc., Sc.D.  
*University of Miskolc, Hungary*

Prof. Ivan Kuric, MSc., Ph.D.  
*UZ in Zilina, Slovakia*

dr hab. inż. Tomasz Lipiński  
*UWMazurski in Olsztyn, Poland*

Prof. Jan Mádl, MSc., Ph.D.  
*CTU in Prague, Czech*

Prof. Ioan D. Marinescu, Ph.D.  
*University of Toledo, USA*

Prof. Štefan Michna, MSc., Ph.D.  
*JEPU in Usti n. Labem, Czech*

Prof. Dr. Ivan Mrkvica, MSc.  
*VSB TU of Ostrava, Czech*

Prof. Iva Nová, MSc., Ph.D.  
*TU in Liberec, Czech*

Prof. Dr. Hitoshi Ohmori, MSc.  
*RIKEN, Japan*

Prof. Eubomír Šooš, MSc., Ph.D.  
*SUT in Bratislava, Slovakia*

Prof. Karol Vasilko, MSc., Sc.D., Dr. h. c.  
*FPT in Presov, TU in Kosice, Slovakia*

Prof. Dr. Dalibor Vojtěch, MSc.  
*ICHT in Prague, Czech*

Col. Assoc. Prof. Milan Chalupa, Ph.D.  
*JEPU in Usti n. Labem, Czech*

Assoc. Prof. Jan Jersák, MSc., Ph.D.  
*TU in Liberec, Czech*

Assoc. Prof. Daniela Kalincova, MSc., Ph.D.  
*TU in Zvolen, Slovakia*

Assoc. Prof. Pavel Novák, MSc., Ph.D.  
*ICHT in Prague, Czech*

Assoc. Prof. Iveta Vaskova, MSc., Ph.D.  
*FM, TU in Kosice, Slovakia*

Dr. Michael N. Morgan  
*John Moores University, Great Britain*

Dr. Thomas Pearce  
*UWE Bristol, Great Britain*

**Editor-in-Chief**  
Assoc. Prof. Martin Novak, Eng. MSc., Ph.D.

**Editor**  
Radek Lattner, MSc.

**Editorial Office Address**  
J. E. Purkyne University in Usti n. Labem  
FME, Campus UJEP, Building H  
Pasteurova 3334/7, 400 01 Usti n. Labem  
Czech Republic  
Tel.: +420 475 285 534  
e-mail: editors.fsi@ujep.cz

**Print**  
PrintPoint Ltd, Prague

**Publisher**  
J. E. Purkyne University in Usti n. Labem  
Pasteurova 1, 400 96 Usti n. Labem  
Czech Republic  
VAT: CZ44555601

Published 6 p. a., 300 pcs.  
published in June 2019  
178 pages

Permission: MK CR E 20470  
ISSN 1213-2489  
indexed on: <http://www.scopus.com>