RAZVOJNI POSTOPKI V STROJNIŠTVU ZA ZELENI IN DIGITALNI PREHOD

UČNI NAČRT PREDMETA/COURSE SYLLABUS

Predmet:	Razvojni postopki v strojništvu za zeleni in digitalni prehod
Course title:	Development Processes in Mechanical Engineering for the Green and Digital Transition
Članica nosilka/UL Member:	UL FS

Študijski programi in stopnja	Študijska smer	Letnik	Semestri	Izbirnost
Strojništvo - projektno aplikativni program, prva stopnja, visokošolski strokovni	Ni členitve (študijski program)	3. letnik	2. semester	izbirni

Univerzitetna koda predmeta/University course code:	0562733
Koda učne enote na članici/UL Member course code:	3032-V

Predavanja /Lectures	Seminar /Seminar	Vaje /Tutorials	Klinične vaje /Clinical tutorials	Druge oblike študija /Other forms of study	Samostojno delo /Individual student work	ECTS
90		90			170	14

Nosilec predmeta/Lecturer:	doc. dr. Andraž Kravos, doc. dr. Boštjan Mavrič, doc. dr. Darja Rupnik Poklukar, doc. dr. Dominik Kozjek, doc. dr. Drago Bračun, doc. dr. Jovan Trajkovski, doc. dr. Katja Klinar, doc. dr. Marko Polajnar, doc. dr. Martin Česnik, doc. dr. Tomaž Berlec, doc. dr. Tomaž Kek, doc. dr. Vid Agrež, izr. prof. dr. Aljoša Peperko, izr. prof. dr. Boris Jerman, izr. prof. dr. Ciril Arkar, izr. prof. dr. Damjan Klobčar, izr. prof. dr. Davorin Kramar, izr. prof. dr. Domen Šeruga, izr. prof. dr. Franc Majdič, izr. prof. dr. Jože Kutin, izr. prof. dr. Jurij Prezelj, izr. prof. dr. Marko Šimic, izr. prof. dr. Matevž Zupančič, izr. prof. dr. Miha Brojan, izr. prof. dr. Miroslav Halilovič, izr. prof. dr. Mitja Mori, izr. prof. dr. Nikola Vukašinović, izr. prof. dr. Nikolaj Mole, izr. prof. dr. Peter Gregorčič, izr. prof. dr. Robert Kunc, izr. prof. dr. Rok Vrabič, izr. prof. dr. Simon Oman, izr. prof. dr. Tomaž Pepelnjak, izr. prof. dr. Uroš Stritih, Jaka Tušek, Joško Valentinčič, Lidija Slemenik Perše , Primož Potočnik, prof. ddr. Janez Žerovnik, prof. dr. Andrej Kitanovski, prof. dr. Božidar Šarler, prof. dr. Edvard Govekar, prof. dr. Franci Pušavec, prof. dr. Gregor Čepon, prof. dr. Iztok Golobič, prof. dr. Janko Slavič, prof. dr. Jernej Klemenc, prof. dr. Marko Hočevar, prof. dr. Marko Nagode, prof. dr. Matevž Dular, prof. dr. Matija Jezeršek, prof. dr. Mihael Sekavčnik, prof. dr. Mitjan Kalin, prof. dr. Niko Herakovič, prof. dr. Primož Podržaj, prof. dr. Rok Petkovšek, prof. dr. Roman Šturm, prof. dr. Sašo Medved, prof. dr. Tomaž Katrašnik, viš. pred. dr. Igor Petrović

Izvajalci predavanj:	
Izvajalci seminarjev:	
Izvajalci vaj:	
Izvajalci kliničnih vaj:	

Izvajalci drugih oblik:	
Izvajalci praktičnega usposabljanja:	

Vrsta predmeta/Course type:	Izbirni strokovni predmet/ Elective specialised course

Jeziki/Languages:	Predavanja/Lectures:	Slovenščina
	Vaje/Tutorial:	Slovenščina

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	**Prerequisites:**
V sklopu predmeta se študent spozna s širšim področjem določenega dela tematike, ki jo bo obdelal v diplomski nalogi. Pri tem bo poseben poudarek posvečen vsebinam, ki so povezane z zeleno in digitalno transformacijo družbe. Zato so pogoj za vključitev v delo opravljene študijske obveznosti prvih štirih semestrov študijskega programa PAP.	As part of the course, the student gets introduced to the broader field of a certain part of the topic, which he will deal with in the Bachelor's degree thesis. Particular emphasis will be focused on content related to the green and digital transformation of society. Therefore, the requirement for the course is completed study obligations of the first four semesters of the PAP study program.

Vsebina:	**Content (Syllabus outline):**
Glede na širši vidik obravnavane strokovne tematike diplomskega dela študent izbere enega nosilca tega predmeta, ki prevzame vlogo mentorja. Predmet se izvaja pri treh izvajalcih, pri čemer sta študentu poleg mentorja dodeljena še dva soizvajalca iz širšega sorodnega strokovnega področja. V sklopu tega predmeta se študentu omogoči širši in multidisciplinarni pogled na obravnavani razvoni problem. Pri tem bo poseben poudatek namenjen vsebinam, ki so povezane s trajnostno transformacijo družbe in ustreznim digitalnim opolnomočenjem na izbranem strokovnem področju študija: • Trajnostne vrednote: uporaba ekološko sprejemljivih in energetsko nevtralnih rešitev, kjer je to mogoče; • Sprejemanje kompleksnosti in trajnosti v smislu sistemskega razmišljanja in reševanja problemov; • Načrtovanje trajnostne prihodnosti z upoštevanjem prilagodljivosti za prihajajoče izzive; • Upoštevanje principov novega evropskega Bauhausa v smislu sistemskega in celovitega pristopa k reševanju izzivov na več ravneh (od globalne do lokalne ravni) ter doslednemu upoštevanju celotnega življenjskega cikla izdelkov, surovin in energije v idustrijskih ekosistemih. Izvajanje predmeta obsega naslednje aktivnosti: 1. Predstavitev ciljev predmeta in posameznih razvojnih tematik, ki jih bodo študentje opravljali tekom leta. 2. Pregled strokovne literature dogovoru z izbranimi nosilci predmeta. 3. Interaktivna predstavitev obdelanih temeljnih vsebin z individualno ali skupinsko diskusijo.	According to the broader aspect of the topic of the degree's thesis, the student chooses one of the course lecturers, who assumes the role of supervisor. The course is delivered by three lecturers; in addition to the supervisor, the student is assigned two additional lecturers from related fields of expertise. Within the scope of this course the student acquires a broader and multidisciplinary view of the considered R&D problem. A strong emphasis is put onto the content related to the sustainable transformation of society and appropriate digital empowerment in the selected professional field of study: • Sustainable values: use of ecologically acceptable and energy-neutral solutions where ever possible; • Acceptance of complexity and sustainability in terms of systemic thinking and problem solving; • Planning of a sustainable future by considering flexibility for upcoming challenges; • Considering the principles of the new European Bauhaus in terms of a systemic and comprehensive approach to solving challenges at multiple levels (from global to local level) and consistent consideration of the entire life cycle of products, raw materials and energy within idustrial ecosystems. The course is composed of the following activities: 1. Presentation of the course objectives and individual research topics that students will undertake throughout the year. 2. Review of the scientific literature in agreement with the chosen lecturers. 3. An interactive presentation of discussed core content through individual or group discussion.

4. Opredelitev individualnega parcialnega problema na obravnavanem področju ob vodenju nosilcev predmeta. 5. Priprava načrta iskanja rešitev za opredeljeni parcialni problem ob vodenju nosilcev predmeta. 6. Pregled in študij teoretičnih osnov izbrane tematike. 7. Študij gradnikov in procesov uporabnih v izbrani razvojni tematiki. 8. Tehnike snovanja in vrednotenja na področju izbrane razvojne tematike. Glede na tematiko bo večji podarek na nealitičnih oziroma numeričnih metodah modeliranja sistemov/procesov izbrane tematike. 9. Interaktivna predstavitev povzetka obdelanih specializiranih vsebin z individualno ali skupinsko diskusijo. 10. Zasnova in razvoj naprave / eksperimentalnega sistema / računskega modela v sklopu izbrane tematike. 11. Razvoj metodologije vrednotenja razvite naprave / eksperimentalnega sistema / računskega modela. 12. Razvoj in izvedba eksperimentalnega dela. 13. Primerjava rezultatov z napovedmi iz dostopne literature. 14. Interaktivna predstavitev eksperimentalnih, računalniških ali analitičnih orodij ter primerjava z ugotovitvami iz dostopne literature. 15. Pregled izzivov za prihodnost na področju izbrane razvojne tematike.	4. Definition of an individual partial problem in the area under consideration guided by lecturers. 5. Preparation of a plan for finding solutions to the defined partial problem guided by lecturers. 6. Review and study of the theoretical basis of the selected topic. 7. Studies of the building blocks and processes applicable in the chosen topic. 8. Design and evaluation techniques in the field of the chosen topic. Depending on the topic, more emphasis will be given to the non-analytical, numerical methods of modelling systems / processes of the selected topic. 9. An interactive presentation of a summary of studied specialized content with individual or group discussion. 10. Design and development of the device / experimental system / computational model within the chosen topic. 11. Development of evaluation methodology of developed device / experimental system / computational model. 12. Development and implementation of experimental work. 13. Comparison of results and predictions from available literature. 14. Interactive presentation of experimental, computer or analytical tools and comparison with findings from available literature. 15. An overview of the challenges ahead for the chosen research topic.

Temeljna literatura in viri/Readings:

Določena je smiselno v dogovoru s tremi nosilci predmeta za vsakega študenta posebej glede na izbrano problematiko. Literatura je dosegljiva v knjižnici laboratorija, fakultetni knjižnici ali širše. Praviloma študent študira iz člankov, ki so obravnavali podoben primer, kakor ga ima sam definiranega.
It is determined appropriately in agreement with three lecturers for each student according to the chosen topic. Literature is available at the lab library, faculty library or beyond. As a rule, a student studies from articles dealing with a similar case as he or she has defined.

Cilji in kompetence:	**Objectives and competences:**
Cilji: 1. Omogočiti študentu širši in multidisciplinarni pogled na obravnavani razvoni problem, predvsem v smislu iskanja trajnostnih in okolju prijaznih rešitev. 2. Omogočiti študentu seznanitev s temeljno in predmetno specifično literature na delu tematike, ki bo obravnavana v diplomski nalogi. 3. Seznanitev z namensko opremo na področju eksperimentiranja in uporabe računalniških orodij. Študent tako spozna osnovno funkcionalnost opreme, ki jo lahko uporabi. 4. Predmet se izvaja v laboratoriju (enem ali več) odvisno od dogovora z mentorjem in nosilci predmeta. **Kompetence:**	**Objectives:** 1. To enable the student to a wider and multidisciplinary overview of the specific R&D problem, especially in terms of finding sustainable and environmentally friendly solutions. 2. To enable the student to get acquainted with the basic and specific literature on the topic that will be discussed in the Bachelor's degree thesis. 3. To familiarize with the specific equipment in the field of experimentation and use of computer tools. Thus the student learns about the basic functionality of the equipment he can use. 4. The course is carried out in the laboratory (one or more), depending on the agreement with the mentor and course lecturers.

S1-PAP: Sposobnost uporabe pridobljenega znanja v praksi. S2-PAP: Sposobnost samostojnega dela v okviru znanj izbrane študijske smeri. S4-PAP: Sposobnost razčlenitve lažjih strokovnih nalog na podnaloge. S5-PAP: Razvijanje sposobnosti kritičnega in samokritičnega mišljenja. S11-PAP: Sposobnost predstavitve strokovnih problemov in njihovih rešitev v svojem okolju in širše. S12-PAP: Sposobnost uporabe informacijsko-komunikacijske tehnologije. S13-PAP: Sposobnost iskanja virov znanja, selekcija najdenih virov in uporaba tako pridobljenega znanja pri svojem delu. P4-PAP: Pozna osnovne merilne instrumente in merilne verige za merjenje osnovnih veličin na področju strojništva. P5-PAP: Pozna glavne okoljske omejitve in probleme. P6-PAP: Obvlada samostojno projektno delo. P7-PAP: Pozna nekatera potrebna programska orodja za računalniško obdelavo podatkov. P9-PAP: Diplomant je sposoben samostojno opravljati razvojno aplikativna, inženirska in strokovna organizacijska dela ter reševati posamezne dobro definirane naloge na področju strojništva.	**Competencies:** S1-PAP: The ability to use the attained knowledge in the practice. S2-PAP: The ability to work autonomously in the framework of knowledge provided by the selected study module. S4-PAP: The ability to break down professional tasks of lesser complexity into subtasks. S5-PAP: Developing the ability of critical and self-critical thinking. S11-PAP: The ability to present professional problems and the solutions thereof in own environment and wider. S12-PAP: The ability to use information and communications technology. S13-PAP: The ability to find sources of knowledge, select among the available resources and use the knowledge acquired for one's work. P4-PAP: Knowing the basic measuring instruments and measuring chains used to measure the basic quantities in the field of mechanical engineering. P5-PAP: Knowing the main environmental restrictions and problems. P6-PAP: Mastering independent project work. P7-PAP: Knowing some software tools necessary for computer data processing. P9-PAP: The graduates are able to independently perform applied developmental, engineering and professional organisational work, and to solve well-defined individual tasks in the field of mechanical engineering.

Predvideni študijski rezultati:	**Intended learning outcomes:**
Znanja: Z1: Poglobljeno strokovno teoretično in praktično znanje na določenem področju, podprto s širšo teoretično in metodološko osnovo. Spretnosti: S1.1 Izvajanje kompleksnih operativno-strokovnih opravil, ki vključujejo tudi uporabo metodoloških orodij. S1.2 Obvladovanje zahtevnih, kompleksnih delovnih procesov ob samostojni uporabi znanja v novih delovnih situacijah. S1.3 Diagnosticiranje in reševanje problemov v različnih specifičnih delovnih okoljih, povezanih s področjem izobraževanja in usposabljanja. S1.4 Osnova za izvirna dognanja/ stvaritve in kritično refleksijo.	Knowledge: Z1: Thorough professional theoretical and practical knowledge in a selected field of expertise that is supported with a broad theoretical and methodological basis. Skills: S1.1 Executing complex operational-professional tasks that incorporate usage of methodological tools. S1.2 Mastering demanding and complex work processes by independent usage of knowledge in new working situations. S1.3 Problem diagnostics and solving in different and specific working environments that are linked to the teaching and training content. S1.4 Basis for unique innovations and critical reflections.

Metode poučevanja in učenja:	**Learning and teaching methods:**
Klasične oblike poučevanja: P1 Avditorna predavanja z reševanjem izbranih - za področje značilnih - teoretičnih in praktično uporabnih primerov. P2 Obravnava snovi po urejeni in vnaprej razloženi sistematiki.	**Conventional teaching methods:** P1 Auditorial lectures with solving selected field-specific theoretical and applied use cases. P2 Presenting the content according to the explained system.

P5 Uporaba študijskega gradiva v obliki skript, knjig, zapiskov, strokovnih člankov in predstavitev predavanj. **Moderne in prožne oblike poučevanja:** P6 Interaktivna predavanja P7 Študij literature in razprava P8 Izdelava in predstavitev aplikativnih seminarskih nalog P14 Virtualni eksperimenti	P5 Application of study material in form of scripts, textbooks, notes, professional artcles and printed lecture presentations. **Contemporary and flexible teaching methods:** P6 Interactive lectures. P7 Literature study and discussion. P8 Making and presenting applied seminar exercises. P14 Virtual experiments.

Načini ocenjevanja:	**Delež/Weight**	**Assessment:**
Ocena predstavitve končnih rezultatov.	50,00 %	Presentation of final results.
Ocena končnega poročila.	50,00 %	Evaluation of final report.

Ocenjevalna lestvica:	**Grading system:**
5 - 10, pri čemer velja, da je pozitivna ocena od 6 - 10	5 - 10, a student passes the exam if he is graded from 6 to 10

Reference nosilca/Lecturer's references:

Vid Agrež:

1. **AGREŽ, Vid**, LOKAR, Žiga, PETKOVŠEK, Rok. Laser induced microbubbles as an alternative driver for liquid pumping. *Optics and laser technology*. [Print ed.]. Oct. 2024, vol. 177, [article no.] 111235, str. 1-9, ilustr. ISSN 0030-3992. https://www.sciencedirect.com/science/article/pii/S0030399224006935, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.optlastec.2024.111235.
2. POŽAR, Tomaž, **AGREŽ, Vid**, PETKOVŠEK, Rok. Laser-induced cavitation bubbles and shock waves in water near a concave surface. *Ultrasonics Sonochemistry*. May 2021, vol. 73, str. 1-11, ilustr. ISSN 1350-4177. https://www.sciencedirect.com/science/article/pii/S1350417720317612, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ultsonch.2020.105456. [COBISS.SI-ID 45742083].
3. HORVAT, Darja, **AGREŽ, Vid**, POŽAR, Tomaž, STARMAN, Bojan, HALILOVIČ, Miroslav, PETKOVŠEK, Rok. Laser-induced shock-wave-expanded nanobubbles in spherical geometry. *Ultrasonics Sonochemistry*. Sep. 2022, vol. 89, str. 1-12, ilustr. ISSN 1350-4177. https://www.sciencedirect.com/science/article/pii/S1350417722002565, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ultsonch.2022.106160. [COBISS.SI-ID 122021123].

Ciril Arkar:

1. DOMJAN, Suzana, MEDVED, Sašo, ČERNE, Boštjan, **ARKAR, Ciril**. Fast modelling of nZEB metrics of office buildings built with advanced glass and BIPV facade structures. Energies. Aug. 2019, vol. 12, iss. 16, f. 1-18, ilustr. ISSN 1996-1073. https://www.mdpi.com/1996-1073/12/16/3194, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.3390/en12163194. [COBISS.SI-ID 16752155].
2. VIDRIH, Boris, **ARKAR, Ciril**, MEDVED, Sašo. Generalized model-based predictive weather control for the control of free cooling by enhanced night-time ventilation. Applied energy. Apr. 2016, vol. 168, str. 482-492, ilustr. ISSN 0306-2619. DOI: 10.1016/j.apenergy.2016.01.109. [COBISS.SI-ID 14543131].
3. DOMJAN, Suzana, **ARKAR, Ciril**, MEDVED, Sašo. Computer-aided supporting tool for LCA evaluation of energy efficiency of the buildings : assessment method and case studies. V: PASSER, Alexander (ur.). SBE19 Graz : transition towards a net zero carbon built environment : conference proceedings. Sustainable built environment D-A-CH conference 2019, Graz 11-14 September 2019, Graz, Austria. [S. l.]: IOP, 2019. Vol. 323, f. 1-9, ilustr. IOP conference series. Earth and environmental science (Online), vol. 323. ISSN 1755-1315. https://iopscience.iop.org/article/10.1088/1755-1315/323/1/012109, DOI: 10.1088/1755-1315/323/1/012109. [COBISS.SI-ID 16793371].

Tomaž Berlec:

1. CIMERMANČIČ, Davorin, KUŠAR, Janez, **BERLEC, Tomaž**. *A procedure for the introduction of leanness into a company*. Central European journal of operations research. 2022, vol. 30, str. 1019–1049, ilustr. ISSN 1435-246X. https://link.springer.com/article/10.1007/s10100-020-00732-3, DOI: 10.1007/s10100- 020-00732-3. [COBISS.SI-ID 48989443], [JCR, SNIP, WoS, Scopus].

2. ŽUŽEK, Tena, GOSAR, Žiga, KUŠAR, Janez, **BERLEC, Tomaž**. *A new product development model for SMEs : introducing agility to the plan-driven concurrent product development approach*. Sustainability. 2021, vol. 13, iss. 21, str. 1-22, ilustr. ISSN 2071-1050. https://www.mdpi.com/2071-1050/13/21/12159, DOI: 10.3390/su132112159. [COBISS.SI-ID 83710979], [JCR, SNIP, WoS do 30. 11. 2022: št. citatov (TC): 3, čistih citatov (CI): 3, čistih citatov na avtorja (CIAu): 0,75, Scopus do 9. 11. 2022: št. citatov (TC): 4, čistih citatov (CI): 4, čistih citatov na avtorja (CIAu): 1,00].
3. **BERLEC, Tomaž**, KUŠAR, Janez, ŽEROVNIK, Janez, STARBEK, Marko. *Optimization of a product batch quantity*. Strojniški vestnik. Jan. 2014, vol. 60, no. 1, str. 35-42, si 9, ilustr. ISSN 0039-2480. DOI: 10.5545/sv-jme.2013.1009. [COBISS.SI-ID 13335579], [JCR, SNIP, WoS do 26. 10. 2022: št. citatov (TC): 8, čistih citatov (CI): 8, čistih citatov na avtorja (CIAu): 2,00, Scopus do 3. 12. 2019: št. citatov (TC): 8, čistih citatov (CI): 8, čistih citatov na avtorja (CIAu): 2,00].
4. RIHAR, Lidija, **BERLEC, Tomaž**, ŽUŽEK, Tena, KUŠAR, Janez. *Management tveganj projekta razvoja izdelka*. V: Akademija strojništva 2017 : inženirstvo - za kakovostnejše življenje. 6. mednarodna konferenca strojnih inženirjev 2017, Ljubljana, Cankarjev dom 26. oktober 2017. Ljubljana: Zveza strojnih inženirjev Slovenije, 2017. Letn. 6, št. 3/4, str. 47, ilustr. Svet strojništva, Letn. 6, št. 3/4. ISSN 1855-6493. http://www.zveza-zsis.si/2017/10/28/svet-strojnistva-sep-okt-2017/. [COBISS.SI- ID 15780123].
5. VIDMAR, Matej, KUŠAR, Janez, **BERLEC, Tomaž**. *Prenova projektnega informacijskega sistema podjetja*. V: BERLEC, Tomaž (ur.), BROJAN, Miha (ur.), DROBNIČ, Boštjan (ur.). Zbornik del : Študentska tehniška konferenca ŠTeKam, Ljubljana, 13. 9. 2018. Ljubljana: Fakulteta za strojništvo, 2018. F. 174-181, ilustr. ISBN 978-961-6980-48-7. [COBISS.SI-ID 16232731].

Drago Bračun:
1. ŠKULJ, Gašper, SLUGA, Alojzij, **BRAČUN, Drago**, BUTALA, Peter, VRABIČ, Rok. Energy efficient communication based on self-organisation of IoT devices for material flow tracking. *CIRP annals*, ISSN 0007-8506, 2019, vol. 68, iss. 1, str. 495-498, ilustr. https://www.sciencedirect.com/science/article/pii/S0007850619300137?via%3Dihub, doi: 10.1016/j.cirp.2019.03.012. [COBISS.SI-ID 16704539]
2. DIACI, Janez, **BRAČUN, Drago**, GORKIČ, Aleš, MOŽINA, Janez. Rapid and flexible laser marking and engraving of tilted and curved surfaces. *Optics and lasers in engineering*, ISSN 0143-8166. [Print ed.], Feb. 2010, vol. 49, iss. 2, str. 195-199, doi: 10.1016/j.optlaseng.2010.09.003. [COBISS.SI-ID 11593243]
3. VUKAŠINOVIĆ, Nikola, **BRAČUN, Drago**, MOŽINA, Janez, DUHOVNIK, Jože. The influence of incident angle, object colour and distance on CNC laser scanning. *International journal of advanced manufacturing technology*, ISSN 0268-3768, Sep. 2010, vol. 50, iss. 1/4, str. 265-274, ilustr., doi: 10.1007/s00170-009-2493-x. [COBISS.SI-ID 11254299].

Miha Brojan:
1. VELDIN, Tomo, BRANK, Boštjan, **BROJAN, Miha**. Computational finite element model for surface wrinkling of shells on soft substrates. *Communications in Nonlinear Science & Numerical Simulation*, ISSN 1007-5704, maj 2019, letn. XX, str. 1-29, ilustr. DOI: 10.1016/j.cnsns.2019.104863. [COBISS.SI-ID 8813409]
2. **BROJAN, Miha**, TERWAGNE, Denis, LAGRANGE, Romain, REIS, Pedro. Wrinkling crystallography on spherical surfaces. *Proceedings of the National Academy of Sciences of the United States of America*, ISSN 0027-8424, Jan. 2015, vol. 112, no. 1, str. 14-19, ilustr., DOI: 10.1073/pnas.1411559112. [COBISS.SI-ID 13852187].
3. TERWAGNE, Denis, **BROJAN, Miha**, REIS, Pedro. Smart morphable surfaces for aerodynamic drag control. Advanced materials, ISSN 0935-9648, Oct. 2014, vol. 26, iss. 38, str. 6608-6611, ilustr., DOI: 10.1002/adma.20140140 [COBISS.SI-ID 13725211]

Gregor Čepon:
1. VRTAČ, Tim, OCEPEK, Domen, ČESNIK, Martin, **ČEPON, Gregor**, BOLTEŽAR, Miha. A hybrid modeling strategy for training data generation in machine learning-based structural health monitoring. *Mechanical systems and signal processing*. Jan. 2024, vol. 207, str. 1-20, ilustr. ISSN 1096-1216. https://www.sciencedirect.com/science/article/pii/S0888327023008452, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ymssp.2023.110937. [COBISS.SI-ID 173198339], [JCR, SNIP, WoS do 28. 5. 2024: št. citatov (TC): 2, čistih citatov (CI): 2, čistih citatov na avtorja (CIAu): 0.40, Scopus do 8. 5. 2024: št. citatov (TC): 2, čistih citatov (CI): 2, čistih citatov na avtorja (CIAu): 0.40]
2. OCEPEK, Domen, TRAINOTTI, Francesco, **ČEPON, Gregor**, RIXEN, Daniel J., BOLTEŽAR, Miha. On the experimental coupling with continuous interfaces using frequency based substructuring. *Mechanical systems and signal processing*. Aug. 2024, vol. 217, [article no.] 111517, str. 1-15, ilustr. ISSN 0888-

3270. https://www.sciencedirect.com/science/article/pii/S0888327024004151, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ymssp.2024.111517. [COBISS.SI-ID 196039939], [JCR, SNIP]

3. **ČEPON, Gregor**, OCEPEK, Domen, KODRIČ, Miha, DEMŠAR, Matija, BREGAR, Tomaž, BOLTEŽAR, Miha. Impact-pose estimation using ArUco markers in structural dynamics. *Experimental techniques*. [Print ed.]. Jun. 2023, [12 str.], ilustr. ISSN 0732-8818. https://link.springer.com/article/10.1007/s40799-023-00646-0, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1007/s40799-023-00646-0. [COBISS.SI-ID 156882179], [JCR, SNIP, WoS do 5. 4. 2024: št. citatov (TC): 1, čistih citatov (CI): 1, čistih citatov na avtorja (CIAu): 0.17, Scopus]
4. KODRIČ, Miha, **ČEPON, Gregor**, BOLTEŽAR, Miha. Expansion of the dynamic strain field in 3D-printed structures using a hybrid modeling approach. *Measurement : journal of the International Measurement Confederation*. [Print ed.]. Jan. 2023, vol. 206, str. 1-10, ilustr. ISSN 0263-2241. https://www.sciencedirect.com/science/article/pii/S0263224122015354, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.measurement.2022.112339. [COBISS.SI-ID 134914563], [JCR, SNIP, WoS, Scopus]

OCEPEK, Domen, VRTAČ, Tim, **ČEPON, Gregor**, BOLTEŽAR, Miha. Estimation of the frequency response functions for operational assemblies using independent source characterization. *Mechanical systems and signal processing*. Jan. 2023, vol. 182, str. 1-14, ilustr. ISSN 0888-3270. https://www.sciencedirect.com/science/article/pii/S0888327022006410, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ymssp.2022.109542. [COBISS.SI-ID 118438147], [JCR, SNIP, WoS do 2. 2. 2024: št. citatov (TC): 1, čistih citatov (CI): 1, čistih citatov na avtorja (CIAu): 0.25, Scopus do 31. 12. 2023: št. citatov (TC): 1, čistih citatov (CI): 1, čistih citatov na avtorja (CIAu): 0.25]

Martin Česnik:

1. **ČESNIK, Martin**, SLAVIČ, Janko. Frequency-dependent fatigue properties of additively manufactured PLA. *Polymers*. 2024, vol. 16, no. 15, art. 2147, str. 1-13, ilustr. ISSN 2073-4360. https://www.mdpi.com/2073-4360/16/15/2147, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.3390/polym16152147. [COBISS.SI-ID 203108099].
2. VRTAČ, Tim, OCEPEK, Domen, **ČESNIK, Martin**, ČEPON, Gregor, BOLTEŽAR, Miha. A hybrid modeling strategy for training data generation in machine learning-based structural health monitoring. *Mechanical systems and signal processing*. Jan. 2024, vol. 207, str. 1-20, ilustr. ISSN 1096-1216. https://www.sciencedirect.com/science/article/pii/S0888327023008452, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ymssp.2023.110937. [COBISS.SI-ID 173198339].
3. PALMIERI, Massimiliano, **ČESNIK, Martin**, SLAVIČ, Janko, CIANETTI, Filippo, BOLTEŽAR, Miha. Non-Gaussianity and non-stationarity in vibration fatigue. *International journal of fatigue*. Apr. 2017, vol. 97, str. 9-19, ilustr. ISSN 0142-1123. DOI: 10.1016/j.ijfatigue.2016.12.017. [COBISS.SI-ID 15186203].

Matevž Dular:

1. YU, Haidong, QUAN, Xiaobo, WEI, Haipeng, **DULAR, Matevž**, FU, Song. Development of a novel nonlinear dynamic cavitation model and its numerical validations. Advances in applied mathematics and mechanics. Jun. 2024, vol. 16, nr. 3, str. 771-804, ilustr. ISSN 2070-0733. https://global-sci.org/intro/article_detail/aamm/22937.html, DOI: 10.4208/aamm.OA-2023-0041. [COBISS.SI-ID 190082819].
2. ZEVNIK, Jure, PATFOORT, Julien, ROSSELLÓ, Juan Manuel, OHL, Claus-Dieter, **DULAR, Matevž**. Dynamics of a cavitation bubble confined in a thin liquid layer at null Kelvin impulse. Physics of fluids. Jun. 2024, vol. 36, iss. 6, [article no.] 063340, str. 1-20, ilustr. ISSN 1070-6631. https://pubs.aip.org/aip/pof/article/36/6/063340/3299546/Dynamics-of-a-cavitation-bubble-confined-in-a-thin, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1063/5.0209287. [COBISS.SI-ID 200352771].
3. GOSTIŠA, Jurij, ŠIROK, Brane, BIZJAN, Benjamin, ORTAR, Jernej, **DULAR, Matevž**, ZUPANC, Mojca. Multiparametric experimental analysis of the pin disc rotational cavitation generator. Engineering science and technology : an international journal. Feb. 2023, vol. 38, str. 1-13, ilustr. ISSN 2215-0986. https://www.sciencedirect.com/science/article/pii/S2215098622002324, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.jestch.2022.101323. [COBISS.SI-ID 137051651].

Iztok Golobič:

1. GREGORČIČ, Peter, ZUPANČIČ, Matevž, **GOLOBIČ, Iztok**. Scalable surface microstructuring by a fiber laser for controlled nucleate boiling performance of high- and low-surface-tension fluids. *Scientific reports*. May 2018, vol. 8, f. 1-8, ilustr. ISSN 2045-2322. https://www.nature.com/articles/s41598-018-25843-5.pdf, DOI: 10.1038/s41598-018-25843-5. [COBISS.SI-ID 16034331]

2. RAVNIK, Jure, **GOLOBIČ, Iztok**, SITAR, Anže, AVANZO, M., IRMAN, Špela, KOČEVAR, K., CEGNAR, Mateja, ZADRAVEC, Matej, RAMŠAK, Matjaž, HRIBERŠEK, Matjaž. Lyophilization model of mannitol water solution in a laboratory scale lyophilizer. *Journal of drug delivery science and technology*. [Print ed.]. June 2018, vol. 45, str. 28-38, ilustr. ISSN 1773-2247. DOI: 10.1016/j.jddst.2018.0015. [COBISS.SI-ID 21209622]
3. ZUPANČIČ, Matevž, NOVAK, Dušan, DIACI, Janez, **GOLOBIČ, Iztok**. An evaluation of industrial ultrafiltration systems for surface water using fouling indices as a performance indicator. *Desalination*. [Print ed.]. Jul. 2014, vol. 344, str. 321-328, ilustr. ISSN 0011-9164. DOI: 10.1016/j.desal.2014.04.002. [COBISS.SI-ID 13420827]

Edvard Govekar:
1. **GOVEKAR, Edvard**, JEROMEN, Andrej, KUZNETSOV, Alexander, LEVY, Gideon N., FUJISHIMA, Makoto. Study of an annular laser beam based axially-fed powder cladding process. CIRP annals. 2018, vol. 67, iss. 1, str. 241-244, ilustr. ISSN 0007-8506. https://www.sciencedirect.com/science/article/pii/S0007850618301069, DOI: 10.1016/j.cirp.2018.04.082. [COBISS.SI-ID 16026395]
2. POTOČNIK, Primož, **GOVEKAR, Edvard**. Semi-supervised vibration-based classification and condition monitoring of compressors. Mechanical systems and signal processing. Sep. 2017, vol. 93, str. 51-65, ilustr. ISSN 0888-3270. http://www.sciencedirect.com/science/article/pii/S088832701730047X, DOI: 10.1016/j.ymssp.2017.01.048. [COBISS.SI-ID 15296539]
3. KUZNETSOV, Alexander, JEROMEN, Andrej, **GOVEKAR, Edvard**. Droplet detachment regimes in annular laser beam droplet generation from a metal wire. CIRP annals. 2014, vol. 63, iss. 1, str. 225-228, ilustr. ISSN 0007-8506. DOI: 10.1016/j.cirp.2014.0051. [COBISS.SI-ID 13402651]

Peter Gregorčič:
1. SENEGAČNIK, Matej, **GREGORČIČ, Peter**. Diffraction-driven laser surface nanostructuring : towards patterning with curved periodic surface structures = Matej Senegačnik, Peter Gregorčič. *Applied Surface Science*. [Print ed.]. Feb. 2023, vol. 610, str. 1-10, ilustr. ISSN 0169-4332. https://www.sciencedirect.com/science/article/pii/S0169433222030148, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.apsusc.2022.155486. [COBISS.SI-ID 129205507].
2. **GREGORČIČ, Peter**. Comment on "Bioinspired reversible switch between underwater superoleophobicity/superaerophobicity and oleophilicity/aerophilicity and improved antireflective property on the nanosecond laser-ablated superhydrophobic titanium surfaces". *ACS applied materials & interfaces*. Jan. 2021, vol. 13, iss. 2, str. 2117-2127, ilustr. ISSN 1944-8244. https://pubs.acs.org/doi/10.1021/acsami.9b23462, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1021/acsami.9b23462. [COBISS.SI-ID 17112859].
3. SENEGAČNIK, Matej, KUNIMOTO, Kohei, YAMAGUCHI, Satoshi, KIMURA, Koki, SAKKA, Tetsuo, **GREGORČIČ, Peter**. Dynamics of laser-induced cavitation bubble during expansion over sharp-edge geometry submerged in liquid - an inside view by diffuse illumination. *Ultrasonics Sonochemistry*. May 2021, vol. 73, str. 1-16, ilustr. ISSN 1350-4177. https://www.sciencedirect.com/science/article/pii/S1350417721000018, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ultsonch.2021.105460. [COBISS.SI-ID 46704131].

Miroslav Halilovič:
1. STARMAN, Bojan, VRH, Marko, KOC, Pino, **HALILOVIČ, Miroslav**. Shear test-based identification of hardening behaviour of stainless steel sheet after onset of necking. *Journal of materials processing technology*. Aug. 2019, vol. 270, str. 335-344, ilustr. ISSN 0924-0136. https://www.sciencedirect.com/science/article/pii/S0924013619300986, DOI: 10.1016/j.jmatprotec.2019.03.010. [COBISS.SI-ID 16527899]
2. **HALILOVIČ, Miroslav**, ISSA, Sally, WALLIN, Mathias, HALLBERG, Håkan, RISTINMAA, Matti. Prediction of the residual state in 304 austenitic steel after laser shock peening : effects of plastic deformation and martensitic phase transformation. *International journal of mechanical sciences*. Jun. 2016, vol. 111/112, str. 24-34, ilustr. ISSN 0020-7403. DOI: 10.1016/j.ijmecsci.2016.03.022. [COBISS.SI-ID 14602779]
3. VRH, Marko, **HALILOVIČ, Miroslav**, STARMAN, Bojan, ŠTOK, Boris, COMSA, Dan-Sorin, BANABIC, Dorel. Capability of the BBC2008 yield criterion in predicting the earingprofile in cup deep drawing simulations. *European journal of mechanics.A, Solids*. [Print ed.]. May/Jun. 2014, vol. 45, str. 59-74, ilustr. ISSN 0997-7538. DOI: 10.1016/j.euromechsol.20111.013. [COBISS.SI-ID 13311771]

Niko Herakovič:

1. **HERAKOVIČ, Niko**, ŠIMIC, Marko, TRDIČ, Francelj, SKVARČ, Jure. A machine-vision system for automated quality control of welded rings. *Machine vision and applications*. [Print ed.]. 2011, vol. 22, no. 6, str. 967-98 ISSN 0932-8092. DOI: 10.1007/s00138-010-0293-9. [COBISS.SI-ID 11512091]
2. DEBEVEC, Mihael, ŠIMIC, Marko, **HERAKOVIČ, Niko**. Virtual factory as an advanced approach for production process optimization. *International journal of simulation modelling*. Mar. 2014, vol. 13, no. 1, str. 66-78, ilustr. ISSN 1726-4529. DOI: 10.2507/IJSIMM13(1)6.260. [COBISS.SI-ID 13367835]
3. PIPAN, Miha, **HERAKOVIČ, Niko**. Closed-loop volume flow control algorithm for fast switching pneumatic valves with PWM signal. *Control engineering practice*. [Print ed.]. Jan. 2018, vol. 70, str. 114-120. ISSN 0967-0661. https://www.sciencedirect.com/science/article/pii/S096706611730240X, DOI: 10.1016/j.conengprac.2017.10.008. [COBISS.SI-ID 15981083]

Marko Hočevar:

1. GATARIĆ, Pero, ŠIROK, Brane, **HOČEVAR, Marko**, NOVAK, Lovrenc. Influence of load mass, drum speed and load composition on evenness of drying in a heat pump tumble dryer. Drying technology. [Print ed.]. 2022, vol. 40, iss. 10, str. 2175-2187, ilustr. ISSN 0737-3937. https://www.tandfonline.com/doi/full/10.1080/07373937.2021.1928688?scroll=top&needAccess=true, DOI: 10.1080/07373937.2021.1928688. [COBISS.SI-ID 65575939].
2. PETROVIĆ, Igor, SEČNIK, Matej, **HOČEVAR, Marko**, BERK, Peter. Vine canopy reconstruction and assessment with terrestrial lidar and aerial imaging. Remote sensing. 2022, vol. 14, iss. 12, str. 1-23, ilustr. ISSN 2072-4292. https://www.mdpi.com/2072-4292/14/22/5894, DOI: 10.3390/rs14225894. [COBISS.SI-ID 132638723].
3. KOZMUS, Gregor, ZEVNIK, Jure, **HOČEVAR, Marko**, DULAR, Matevž, PETKOVŠEK, Martin. Characterization of cavitation under ultrasonic horn tip : proposition of an acoustic cavitation parameter. Ultrasonics sonochemistry. 2022, vol. 89, str. 1-10, ilustr. ISSN 1350-4177. https://www.sciencedirect.com/science/article/pii/S1350417722002553, DOI: 10.1016/j.ultsonch.2022.106159. [COBISS.SI-ID 121319171].

Boris Jerman:

1. HLADNIK, Jurij, **JERMAN, Boris**. Advanced finite element cross-country ski boot model for mass optimization directions considering flexion stiffness. *Proceedings of the Institution of Mechanical Engineers.Part P, Journal of sports engineering and technology (Print)*. 2018, vol. 232, iss. 3, str. 264-274, ilustr. ISSN 1754-3371. https://journals.sagepub.com/doi/abs/10.1177/1754337117745238?journalCode=pipa, DOI: 10.1177/1754337117745238. [COBISS.SI-ID 15789083]
2. HLADNIK, Jurij, SUPEJ, Matej, **JERMAN, Boris**. Force measurement system for roller-ski skating. *Tehnički vjesnik*. Lis. 2018, vol. 25, nr. 5, f. 1291-1297, ilustr. ISSN 1848-6339. https://hrcak.srce.hr/207425, DOI: 10.17559/TV-20161219111250. [COBISS.SI-ID 15536923]
3. **JERMAN, Boris**, HRIBAR, Anton. Dynamics of the mathematical pendulum suspended from a moving mass. *Tehnički vjesnik : znanstveno-stručni časopis tehničkih fakulteta Sveučilišta u Osijeku*. 2013, vol. 20, no. 1, str. 59-64, ilustr. ISSN 1330-3651. http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=143490. [COBISS.SI-ID 12724251]

Matija Jezeršek:

1. ROGELJ, Luka, PAVLOVČIČ, Urban, STERGAR, Jošt, **JEZERŠEK, Matija**, SIMONČIČ, Urban, MILANIČ, Matija. Curvature and height corrections of hyperspectral images using built-in 3D laser profilometry. Applied optics. Tiskana izd. 2019, vol. 58, no. 32, str. 9002-9012, ilustr. ISSN 1559-128X. DOI: 10.1364/AO.58.009002. [COBISS.SI-ID 3383908]
2. GREGORČIČ, Peter, LUKAČ, Nejc, MOŽINA, Janez, **JEZERŠEK, Matija**. In vitro study of the erbium:yttrium aluminum garnet laser cleaning of root canal by the use of shadow photography. Journal of biomedical optics. Jan. 2016, vol. 21, iss. 1, str. 1-7, ilustr. ISSN 1083-3668. DOI: 10.1117/1.JBO.21.1.015008. [COBISS.SI-ID 14461979]
3. PAVLOVČIČ, Urban, DIACI, Janez, MOŽINA, Janez, **JEZERŠEK, Matija**. Wound perimeter, area, and volume measurement based on laser 3D and color acquisition. BioMedical engineering online. Apr. 2015, vol. 14, f. 1-15, ilustr. ISSN 1475-925X. DOI: 10.1186/s12938-015-0031-7. [COBISS.SI-ID 13973787]

Mitjan Kalin:

1. **KALIN, Mitjan**, KUPEC, Alja. The dominant effect of temperature on the fatigue behaviour of polymer gears. *Wear*, ISSN 0043-1648. [Print ed.], Apr. 2017, vol. 376/377, part B, str. 1339-1346, ilustr. https://www.sciencedirect.com/science/article/pii/S0043164817302788?via%3Dihub, doi: 10.1016/j.wear.2017.02.003. [COBISS.SI-ID 15897115]
2. BARTOLOMÉ, Luis, OBLAK, Eva, **KALIN, Mitjan**. Mechanical behaviour and constitutive models of ZDDP tribofilms on DLC coatings using nano-indentation data and finite element modelling. *Tribology international*, ISSN 0301-679X, Mar. 2016, vol. 95, str. 19-26, ilustr. https://www.sciencedirect.com/science/article/pii/S0301679X15004958?via%3Dihub, doi: 10.1016/j.triboint.2015.10.036. [COBISS.SI-ID 14342939]
3. **KALIN, Mitjan**, OBLAK, Eva, AKBARI, Somayeh. Evolution of the nano-scale mechanical properties of tribofilms formed from low- and high-SAPS oils and ZDDP on DLC coatings and steel. *Tribology international*, ISSN 0301-679X, Apr. 2016, vol. 96, str. 43-56, ilustr., doi: 10.1016/j.triboint.2015.12.013. [COBISS.SI-ID 14398491]

Tomaž Katrašnik:
1. **KATRAŠNIK, Tomaž**. An advanced real-time capable mixture controlled combustion model. Energy, ISSN 0360-5442. [Print ed.], Jan. 2016, vol. 95, str. 393-403, ilustr. [COBISS.SI-ID 14407195]
2. MELE, Igor, PAČNIK, Ivo, ZELIČ, Klemen, MOŠKON, Jože, **KATRAŠNIK, Tomaž**. Advanced porous electrode modelling framework based on more consistent virtual representation of the electrode topology. Journal of the Electrochemical Society, ISSN 1945-7111. [Online ed.], 2020, vol. 167, no. 6, str. [1-18]. [COBISS.SI-ID 17157915]
3. KREGAR, Ambrož, TAVČAR, Gregor, KRAVOS, Andraž, **KATRAŠNIK, Tomaž**. Predictive system-level modeling framework for transient operation and cathode platinum degradation of high temperature proton exchange membrane fuel cells. Applied energy, ISSN 0306-2619, 2020, vol. 263, 17 f. [COBISS.SI-ID 17037083]

Tomaž Kek:
1. **KEK, Tomaž**, ŠTURM, Roman, BERGANT, Zoran. Tension and shear behaviour of basalt fiber bio-composites with digital image correlation and acoustic emission monitoring. *Polymers*. 2024, vol. 16, iss. 10, str. 1-14, ilustr. ISSN 2073-4360. https://www.mdpi.com/2073-4360/16/10/1331, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.3390/polym16101331. [COBISS.SI-ID 196372483], [JCR, SNIP, WoS, Scopus].
2. **KEK, Tomaž**, POTOČNIK, Primož, MISSON, Martin, BERGANT, Zoran, SORGENTE, Mario, GOVEKAR, Edvard, ŠTURM, Roman. Characterization of biocomposites and glass fiber epoxy composites based on acoustic emission signals, deep feature extraction, and machine learning. *Sensors*. Sep. 2022, vol. 22, iss. 18, str. 1-16, ilustr. ISSN 1424-8220. https://www.mdpi.com/1424-8220/22/18/6886, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.3390/s22186886. [COBISS.SI-ID 121597443], [JCR, SNIP, WoS , Scopus].
3. **KEK, Tomaž**, KUSIĆ, Dragan, GRUM, Janez. Wavelet packet decomposition to characterize injection molding tool damage. *Applied sciences*. Feb. 2016, vol. 6, iss. 2, f. 1-13, ilustr. ISSN 2076-3417. http://www.mdpi.com/2076-3417/6/2/45, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.3390/app6020045. [COBISS.SI-ID 14587419].

Andrej Kitanovski:
1. LORBEK, Luka, KUHELJ, Anja, DULAR, Matevž, **KITANOVSKI, Andrej**. Two-phase flow patterns in adiabatic refrigerant flow through capillary tubes. *International journal of refrigeration*, ISSN 0140-7007. [Print ed.], 2020, vol. 115, str. 107-116, ilustr., doi: 10.1016/j.ijrefrig.2020.02.030. [COBISS.SI-ID 17060891]
2. POTOČNIK, Primož, VIDRIH, Boris, **KITANOVSKI, Andrej**, GOVEKAR, Edvard. Analysis and optimization of thermal comfort in residential buildings by means of a weather-controlled air-to-water heat pump. *Building and environment*, ISSN 0360-1323. [Print ed.], Aug. 2018, vol. 140, str. 68-79, ilustr. https://www.sciencedirect.com/science/article/pii/S036013231830310X, doi: 10.1016/j.buildenv.2018.05.044. [COBISS.SI-ID 16069915]
3. POREDOŠ, Primož, TOMC, Urban, PETELIN, Nada, VIDRIH, Boris, FLISAR, Uroš, **KITANOVSKI, Andrej**. Numerical and experimental investigation of the energy and exergy performance of solar thermal, photovoltaic and photovoltaic-thermal modules based on roll-bond heat exchangers. *Energy conversion and management*, ISSN 0196-8904. [Print ed.], Apr. 2020, vol. 210, str. 1-21,

https://www.sciencedirect.com/science/article/pii/S0196890420302120?via%3Dihub, doi: 10.1016/j.enconman.2020.112674. [COBISS.SI-ID 17080603]

Jernej Klemenc:

1. **KLEMENC, Jernej**, ŠERUGA, Domen, NAGODE, Marko. A durability prediction for the magnesium alloy AZ31 based on plastic and total energy. *Metals*. Sep. 2019, vol. 9, iss. 9, f. 1-16, ilustr. ISSN 2075-470 https://www.mdpi.com/2075-4701/9/9/973, DOI: 10.3390/met9090973. [COBISS.SI-ID 16772379]
2. MORAL PORTALÉS, Rubén, BOCHONS SANIA, María del Mar, **KLEMENC, Jernej**. Theoretical framework for estimating a product's reliability using a variable-amplitude loading spectrum and a stress-based approach. *Fatigue & fracture of engineering materials & structures*. Aug. 2018, vol. 41, iss. 8, str. 1662-1673, ilustr. ISSN 8756-758X. http://onlinelibrary.wiley.com/doi/10.1111/ffe.12804/epdf, DOI: 10.1111/ffe.12804. [COBISS.SI-ID 15958811]
3. ŠKRLEC, Andrej, **KLEMENC, Jernej**. Parameter identification for a Cowper-Symonds mater ial model using a genetic algorithm combined with a response surface. *Engineering computations*. 2017, vol. 34, iss. 3, str. 1-29, ilustr. ISSN 0264-4401. http://www.emeraldinsight.com/doi/pdfplus/10.1108/EC-03-2016-0099, DOI: 10.1108/EC-03-2016-0099. [COBISS.SI-ID 15420955]

Katja Klinar:

1. **KLINAR, Katja**, LAW, Jia Yan, FRANCO, Victorino, MOYA, Xavier, KITANOVSKI, Andrej. Perspectives and energy applications of magnetocaloric, pyromagnetic, electrocaloric, and pyroelectric materials. *Advanced energy materials*. 2024, 2401739, str. 1-36, ilustr. ISSN 1614-6840. https://onlinelibrary.wiley.com/doi/10.1002/aenm.202401739, DOI: 10.1002/aenm.202401739. [COBISS.SI-ID 207624963].
2. SWOBODA, Timm, **KLINAR, Katja**, KITANOVSKI, Andrej, YALAMARTHY, Ananth Saran, MUÑOZ ROJO, Miguel. Solid-state thermal control devices. *Advanced electronic materials*. Mar. 2021, vol. 7, iss. 3, f. 1-28, ilustr. ISSN 2199-160X. https://onlinelibrary.wiley.com/doi/10.1002/aelm.202000625, DOI: 10.1002/aelm.202000625. [COBISS.SI-ID 47223811].
3. BLATNIK, Mihael, **KLINAR, Katja**, KITANOVSKI, Andrej. State of the art of micro vapour-compression systems. V: ŠARLER, Božidar (ur.), VANOLI, Laura (ur.), DOBRAVEC, Tadej (ur.). *Eurotherm 2024 : 9th European Thermal Sciences Conference, 10/06/2024 - 13/06/2024, Lake Bled, Slovenia*. [S. l.]: IOP publishing, 2024. Vol. 2766, [article no.] 012097, str. 1-6, ilustr. Journal of physics. Conference series (Online), vol. 2766. ISSN 1742-6596. https://iopscience.iop.org/article/10.1088/1742-6596/2766/1/012097, DOI: 10.1088/1742-6596/2766/1/012097. [COBISS.SI-ID 199033091].

Damjan Klobčar:

1. KOSEC, Tadeja, LEGAT, Andraž, KOVAČ, Janez, **KLOBČAR, Damjan**. Influence of laser colour marking on the corrosion properties of low alloyed Ti. *Coatings*. Jun. 2019, vol. 9, iss. 6, str. 1-14, ilustr. ISSN 2079-6412. https://www.mdpi.com/2079-6412/9/6/375, DOI: 10.3390/coatings9060375. [COBISS.SI-ID 2463591]
2. SMOLEJ, Anton, **KLOBČAR, Damjan**, SKAZA, Branko, NAGODE, Aleš, SLAČEK, Edvard, DRAGOJEVIČ, Vukašin, SMOLEJ, Samo. Superplasticity of the rolled and friction stir processed Al-4.5 Mg-0.35Sc-0.15Zr alloy. *Materials Science & Engineering.A, Structural materials: Properties, Microstructure and Processing*. [Print ed.]. Jan. 2014, vol. 590, str. 239-245, ilustr. ISSN 0921-5093. DOI: 10.1016/j.msea.2013.10.027. [COBISS.SI-ID 1315679]
3. **KLOBČAR, Damjan**, TUŠEK, Janez, KOSEC, Ladislav. Suitability of maraging steel weld cladding for repair of die-casting tooling.Part 1, Influence of welding and aging heat treatment on 18% Ni maraging steel weld microstructure and mechanical properties. *International journal of materials research : Zeitschrift für Metallkunde*. 2009, vol. 100, issue 5, str. 713-722. ISSN 1862-5282. DOI: 10.3139/146.110078. [COBISS.SI-ID 10944795]

Dominik Kozjek:

1. **KOZJEK, Dominik**, PORTER, Conor, CARTER, Fred M., MOGONYE, Jon-Erik, CAO, Jian. Data-driven prediction of inter-layer process condition variations in laser powder bed fusion. Additive manufacturing. [Spletna izd.]. May 2024, vol. 88, [article no.] 104230, str. 1-15, ilustr. ISSN 2214-7810. https://www.sciencedirect.com/science/article/pii/S2214860424002768?dgcid=coauthor, DOI: 10.1016/j.addma.2024.104230. [COBISS.SI-ID 198409987].

2. SAMAEI, Arash, PORTER, Conor, **KOZJEK, Dominik**, MOGONYE, Jon-Erik, CAO, Jian, WAGNER, Gregory J. Understanding coaxial photodiode-based multispectral pyrometer measurements at the overhang regions in laser powder bed fusion for part qualification. Additive manufacturing. [Print ed.]. Aug. 2024, [article no.] 104398, vol. 93, str. 1-17, ilustr. ISSN 2214-8604. https://www.sciencedirect.com/science/article/pii/S2214860424004445, DOI: 10.1016/j.addma.2024.104398. [COBISS.SI-ID 207115523].
3. DUAN, Songlin, **KOZJEK, Dominik**, MEHR, Edward, ANDERS, Mark, CAO, Jian. Forming force prediction in double-sided incremental forming via GNN-based transfer learning. Journal of manufacturing processes. [Online ed.]. Jun. 2024, vol. 120, str. 867-877, ilustr. ISSN 2212-4616. https://www.sciencedirect.com/science/article/pii/S1526612524004535, DOI: 10.1016/j.jmapro.2024.04.093. [COBISS.SI-ID 198433283].

Davorin Kramar:

1. BOROJEVIĆ, S., LUKIC, Dejan, MILOŠEVIĆ, Miloš, VUKMAN, J., **KRAMAR, Davorin**. Optimization of process parameters for machining of Al 7075 thin-walled structures. *Advances in production engineering & management*, ISSN 1854-6250, Jun. 2018, vol. 13, no. 2, str. 125-135, ilustr. http://apem-journal.org/Archives/2018/APEM13-2_125-135.pdf, doi: 10.14743/apem2018.2.278. [COBISS.SI-ID 16188443],
2. ENIKO, Peter, SOKOVIĆ, Mirko, **KRAMAR, Davorin**. Influence of non-productive operations on product quality. *Strojniški vestnik*, ISSN 0039-2480, Mar. 2016, vol. 62, no. 3, str. 197-204, SI 29, ilustr., doi: 10.5545/sv-jme.2015.3109. [COBISS.SI-ID 14547227]
3. PUŠAVEC, Franci, **KRAMAR, Davorin**, KRAJNIK, Peter, KOPAČ, Janez. Transitioning to sustainable production. Part 2, Evaluation of sustainable machining technologies. *Journal of cleaner production*, ISSN 0959-6526. [Print ed.], Aug. 2010, vol. 18, iss. 12, str. 1211-1221, ilustr., https://www.sciencedirect.com/science/article/pii/S0959652610000260 doi:10.1016/j.jclepro.2010.01.015. [COBISS.SI-ID 11299355]

Andraž Kravos:

1. **KRAVOS, Andraž**, VOGLAR, Tit, KREGAR, Ambrož, KATRAŠNIK, Tomaž. Hybrid methodology for parametrisation of proton exchange membrane fuel cell model for diagnostics and control applications. *Journal of the electrochemical society*. [Online ed.]. Nov. 2023, vol. 170, no. 11, [article no.] 114522, str. 1-13, ilustr. ISSN 1945-7111. https://iopscience.iop.org/article/10.1149/1945-7111/ad07a7, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1149/1945-7111/ad07a7. [COBISS.SI-ID 171709443].
2. **KRAVOS, Andraž**, KREGAR, Ambrož, PENGA, Željko, BARBIR, Frano, KATRAŠNIK, Tomaž. Real-time capable transient model of liquid water dynamics in proton exchange membrane fuel cells. *Journal of power sources*. Sep. 2022, vol. 541, str. 1-16, ilustr. ISSN 0378-7753. https://www.sciencedirect.com/science/article/pii/S0378775322006012, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.jpowsour.2022.231598. [COBISS.SI-ID 110908675].
3. **KRAVOS, Andraž**, RITZBERGER, Daniel, TAVČAR, Gregor, HAMETNER, Christoph, JAKUBEK, Stefan, KATRAŠNIK, Tomaž. Thermodynamically consistent reduced dimensionality electrochemical model for proton exchange membrane fuel cell performance modelling and control. *Journal of power sources*. Apr. 2020, vol. 454, str. 1-16, ilustr. ISSN 0378-7753. https://www.sciencedirect.com/science/article/pii/S0378775320302330, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.jpowsour.2020.227930. [COBISS.SI-ID 17079835].

Robert Kunc:

1. BASAN, Robert, FRANULOVIĆ, Marina, PREBIL, Ivan, **KUNC, Robert**. Study on Ramberg-Osgood and Chaboche models for 42CrMo4 steel and some approximations. Journal of constructional steel research. [Print ed.]. sep. 2017, vol. 136, str. 65-74, ilustr. ISSN 0143-974X. http://www.sciencedirect.com/science/article/pii/S0143974X17302341, DOI: 10.1016/j.jcsr.2017.05.010. [COBISS.SI-ID 15531035]
2. BIČEK, Matej, **KUNC, Robert**, ZUPAN, Samo. Mechanical impact on in-wheel motor's performance. Journal of mechanics. [Print ed.]. Oct. 2017, vol. 33, iss. 5, str. 607-618, ilustr. ISSN 1727-7191. https://www.cambridge.org/core/journals/journal-of-mechanics/article/div-classtitlemechanical-impact-on-in-wheel-motorandaposs-performancediv/A4D5DB17B7102D3897C02AAAC07A32A7, DOI: 10.1017/jmech.2016.95. [COBISS.SI-ID 15295259]

3. ŽEROVNIK, Andrej, PEPEL, Vili, PREBIL, Ivan, **KUNC, Robert**. The yield-point phenomenon and cyclic plasticity of the uniaxially loaded specimens. Materials & design. Feb. 2016, vol. 92, str. 971-977, ilustr. ISSN 0264-1275. DOI: 10.1016/j.matdes.2015.12.111. [COBISS.SI-ID 14442011]

Jože Kutin:

1. SVETE, Andrej, **KUTIN, Jože**. Experimental validation of an improved mathematical model for pneumatic pressure measurement systems with connecting tubes. *Measurement science & technology*. [Print ed.]. 2020, vol. 31, no. 1, str. 1-10, ilustr. ISSN 0957-0233. https://iopscience.iop.org/article/10.1088/1361-6501/ab3d50/meta, DOI: 10.1088/1361-6501/ab3d50. [COBISS.SI-ID 16933147]
2. **KUTIN, Jože**, BOBOVNIK, Gregor, BAJSIČ, Ivan. Heat exchange effects on the performance of a clearance-sealed piston prover for gas flow measurements. *Metrologia*. 2015, vol. 52, nr. 6, str. 857-863, ilustr. ISSN 0026-1394. DOI: 10.1088/0026-1394/52/6/857. [COBISS.SI-ID 14310427]
3. RUPNIK, Klemen, **KUTIN, Jože**, BAJSIČ, Ivan. Identification and prediction of the dynamic properties of resistance temperature sensors. *Sensors and actuators.A, Physical*. 2013, vol. 197, str. 69-75, ilustr. ISSN 0924-4247. DOI: 10.1016/j.sna.2013.03.039. [COBISS.SI-ID 12775451]

Franc Majdič:

1. KALIN, Mitjan, POLAJNAR, Marko, KUS, Maja, **MAJDIČ, Franc**. Green tribology for the sustainable engineering of the future. Strojniški vestnik, ISSN 0039-2480, Nov./Dec. 2019, vol. 65, no. 11/12, str. 709-727, ilustr.
2. **MAJDIČ, Franc**, KALIN, Mitjan. Test rig and comparison of pressure changes at transient phenomena in water- and oil-based power-comtrol hydraulics. Journal of vibroengineering, ISSN 1392-8716, Feb. 2014, vol. 16, iss. 1, str. 401-411.
3. **MAJDIČ, Franc**, KALIN, Mitjan. Test rig and comparison of pressure changes at transient phenomena in water- and oil-based power-comtrol hydraulics. Journal of vibroengineering, ISSN 1392-8716, Feb. 2014, vol. 16, iss. 1, str. 401-411.

Boštjan Mavrič:

1. VUGA, Gašper, **MAVRIČ, Boštjan**, HANOGLU, Umut, ŠARLER, Božidar. A hybrid radial basis function-finite difference method for modelling two-dimensional thermo-elasto-plasticity. Part 2, Application to cooling of hot-rolled steel bars on a cooling bed. *Engineering analysis with boundary elements*. Feb. 2024, vol. 159, str. 331-341, ilustr. ISSN 0955-7997. https://www.sciencedirect.com/science/article/pii/S0955799723005714, Repozitorij Univerze v Ljubljani – RUL, DiRROS - Digitalni repozitorij raziskovalnih organizacij Slovenije, DOI: 10.1016/j.enganabound.2023.12.001. [COBISS.SI-ID 179241219].
2. VUGA, Gašper, **MAVRIČ, Boštjan**, ŠARLER, Božidar. Strong-form meshless numerical modelling of visco-plastic material. *Engineering analysis with boundary elements*. Oct. 2024, vol. 167, [art. no.] 105868, str. 1-17, ilustr. ISSN 0955-7997. https://www.sciencedirect.com/science/article/pii/S0955799724003436, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.enganabound.2024.105868. [COBISS.SI-ID 201503491].
3. RANA, Khush Bakhat, **MAVRIČ, Boštjan**, ŠARLER, Božidar. Phase-field formulated meshless simulation of Rayleigh-Taylor instability problem. V: ŠARLER, Božidar (ur.), VANOLI, Laura (ur.), DOBRAVEC, Tadej (ur.). *Eurotherm 2024 : 9th European Thermal Sciences Conference, 10/06/2024 - 13/06/2024, Lake Bled, Slovenia*. [S. l.]: IOP publishing, 2024. Vol. 2766, [article no.] 012163, str. 1-6, ilustr. Journal of physics. Conference series (Online), vol. 2766. ISSN 1742-6596. https://iopscience.iop.org/article/10.1088/1742-6596/2766/1/012163, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1088/1742-6596/2766/1/012163. [COBISS.SI-ID 197787651].

Sašo Medved:

1. DOMJAN, Suzana, **MEDVED, Sašo**, ČERNE, Boštjan, ARKAR, Ciril. Fast modelling of nZEB metrics of office buildings built with advanced glass and BIPV facade structures. Energies. Aug. 2019, vol. 12, iss. 16, f. 1-18, ilustr. ISSN 1996-1073. https://www.mdpi.com/1996-1073/12/16/3194, DOI: 10.3390/en12163194. [COBISS.SI-ID 16752155]
2. ARKAR, Ciril, DOMJAN, Suzana, **MEDVED, Sašo**. Heat transfer in a lightweight extensive green roof under waterfreezing conditions. *Energy and buildings*. [Print ed.]. 2018, vol. 167, str. 187-199, ilustr. ISSN 0378-7788. [COBISS.SI-ID 15947035]

3. VIDRIH, Boris, ARKAR, Ciril, **MEDVED, Sašo**. Generalized model-based predictive weather control for the control of free cooling by enhanced night-time ventilation. *Applied energy*. Apr. 2016, vol. 168, str. 482-492, ilustr. ISSN 0306-2619. DOI: 10.1016/j.apenergy.2016.01.109. [COBISS.SI-ID 14543131]

Nikolaj Mole:

1. KREBELJ, Kristjan, HALILOVIČ, Miroslav, **MOLE, Nikolaj**. The cooling rate dependence of the specific volume in amorphous plastic injection molding. *International journal of advanced manufacturing technology*. 2019, vol. 103, iss. 1/4, str. 1175-1184, ilustr. ISSN 0268-3768. https://link.springer.com/article/10.1007%2Fs00170-019-03617-1, DOI: 10.1007/s00170-019-03617-1. [COBISS.SI-ID 16570395]
2. **MOLE, Nikolaj**, KREBELJ, Kristjan, ŠTOK, Boris. Injection molding simulation with solid semi-crystalline polymer mechanical behavior for ejection analysis. *The international journal of advanced manufacturing technology*. dec. 2017, vol. 93, iss. 9-12, str. 4111-4124, ilustr. ISSN 1433-3015. https://link.springer.com/article/10.1007/s00170-017-0847-3, DOI: 10.1007/s00170-017-0847-3. [COBISS.SI-ID 15602459]
3. **MOLE, Nikolaj**, CAFUTA, Gašper, ŠTOK, Boris. A 3D forming tool optimisation method considering springback and thinning compensation. *Journal of materials processing technology*. Aug. 2014, vol. 214, iss. 8, str. 1673-1685, ilustr. ISSN 0924-0136. DOI: 10.1016/j.jmatprotec.2014.03.017. [COBISS.SI-ID 13403419]

Mitja Mori:

1. **MORI, Mitja**, ŽVAR BAŠKOVIČ, Urban, STROPNIK, Rok, LOTRIČ, Andrej, KATRAŠNIK, Tomaž, ŠIPEC, Robert, LIPAR, Jakob, LESAR, Žiga, DROBNIČ, Boštjan. Green energy hubs for the military that can also support the civilian mobility sector with green hydrogen. *International journal of hydrogen energy*. [Online ed.]. 2023, vol. 48, str. 39138-39153, ilustr. ISSN 1879-3487. https://www.sciencedirect.com/science/article/pii/S0360319923022541, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ijhydene.2023.05.026. [COBISS.SI-ID 153773315]
2. **MORI, Mitja**, STROPNIK, Rok. Comparing environmental impacts of three typical Slovenian electricity providers with hydroelectricity. *Elektrotehniški vestnik*. [Slovenska tiskana izd.]. 2019, letn. 86, št. 3, str. 97-103, ilustr. ISSN 0013-5852. https://ev.fe.uni-lj.si/3-2019/Mori.pdf, Digitalna knjižnica Slovenije - dLib.si. [COBISS.SI-ID 16699931]
3. FÉRRIZ, Ana María, BERNAD, Alfonso, **MORI, Mitja**, FIOROT, Sabina. End-of-life of fuel cell and hydrogen products : a state of the art. *International journal of hydrogen energy*. 2019, vol. 44, iss. 25, str. 12872-12879, ilustr. ISSN 0360-3199. https://www.sciencedirect.com/science/article/pii/S0360319918330969?via%3Dihub#!, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ijhydene.2018.09.176. [COBISS.SI-ID 16334875]

Marko Nagode:

1. ŠOLINC, Urša, KLEMENC, Jernej, **NAGODE, Marko**, ŠERUGA, Domen. A direct approach to modelling the complex response of magnesium AZ31 alloy sheets to variable strain amplitude loading using Prandtl-Ishlinskii operators. *International journal of fatigue*. Oct. 2019, vol. 127, str. 291-304, ilustr. ISSN 0142-1123. https://www.sciencedirect.com/science/article/pii/S0142112319302397, https://repozitorij.uni-lj.si/IzpisGradiva.php?id=108298&lang=slv, DOI: 10.1016/j.ijfatigue.2019.06.009. [COBISS.SI-ID 16674075]
2. ŠERUGA, Domen, **NAGODE, Marko**. A new approach to finite element modelling of cyclic thermomechanical stress-strain responses. *International journal of mechanical sciences*. Dec. 2019, vol. 164, str. 1-14, ilustr. ISSN 0020-7403. https://www.sciencedirect.com/science/article/pii/S0020740319306964?via%3Dihub, DOI: 10.1016/j.ijmecsci.2019.105139. [COBISS.SI-ID 16795675]
3. **NAGODE, Marko**, ŠERUGA, Domen. Fatigue life prediction using multiaxial energy calculations with the mean stress effect to predict failure of linear and nonlinear elastic solids. *Results in physics*. 2016, vol. 6, f. 352-364, ilustr. ISSN 2211-3797. http://www.sciencedirect.com/science/article/pii/S2211379716300407, DOI: 10.1016/j.rinp.2016.06.007. [COBISS.SI-ID 14715163]

Simon Oman:

1. NAGODE, Marko, KLEMENC, Jernej, **OMAN, Simon**, ŠERUGA, Domen. Elasto-viscoplastic material modelling using the multiaxial Prandtl operator approach. *International journal of mechanical sciences*. 2024, vol. 267, [article no.] 108953, str. 1-16, ilustr. ISSN 1879-

2162. https://www.sciencedirect.com/science/article/pii/S002074032300855X, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ijmecsci.2023.108953. [COBISS.SI-ID 183728643].
2. GOSAR, Aleš, KLEMENC, Jernej, NAGODE, Marko, **OMAN, Simon**. On the importance of the experimental setup design in hydrodynamic journal bearing friction measurement. *Tribology international*. Sep. 2024, vol. 197, [article no.] 109800, str. 1-13, ilustr. ISSN 0301-679X. https://www.sciencedirect.com/science/article/pii/S0301679X24005528, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.triboint.2024.109800. [COBISS.SI-ID 196777987].
3. KOCJAN, Tadej, NAGODE, Marko, KLEMENC, Jernej, **OMAN, Simon**. On fatigue crack growth testing and analysis of non-crystallising rubber using planar tension specimen. *Polymer testing*. [Print ed.]. Jan. 2023, vol. 117, str. 1-10, ilustr. ISSN 0142-9418. https://www.sciencedirect.com/science/article/pii/S0142941822003403, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.polymertesting.2022.107819. [COBISS.SI-ID 128185859].

Tomaž Pepelnjak:
1. STEINER PETROVIČ, Darja, ŠTURM, Roman, **PEPELNJAK, Tomaž**. Characterization of macroscopic mechanical anisotropy of magnetocaloric gadolinium cylinders. *JOM : The journal of minerals, metals and materials society*, ISSN 1047-4838, 2019, vol. 71, no. 9, str. 3151-3158, ilustr. https://doi.org/10.1007/s11837-019-03521-9, doi: 10.1007/s11837-019-03521-9. [COBISS.SI-ID 1509034]
2. SATOŠEK, Roman, VALEŠ, Michal, **PEPELNJAK, Tomaž**. Study of influential parameters of the sphere indentation used for the control function of material properties in forming operations. *Strojniški vestnik*, ISSN 0039-2480, 2019, vol. 65, no. 10, str. 585-598, ilustr. https://www.sv-jme.eu/sl/article/study-of-influential-parameters-of-the-sphere-indentation-used-for-the-control-function-of-material-properties-in-forming-oper ations/, doi: 10.5545/sv-jme.2019.6312. [COBISS.SI-ID 16805659]
3. **PEPELNJAK, Tomaž**, MAGOČ, Vladimir, BARIŠIĆ, Branimir. Analysis of shear hat test in digital environment. *Metalurgija*, ISSN 0543-5846, Apr.-Jun. 2012, vol. 51, no. 2, str. 153-156. [COBISS.SI-ID 12107547]

Aljoša Peperko:
1. **PEPERKO, Aljoša**. Inequalities on the spectral radius, operator norm and numerical radius of the Hadamard weighted geometric mean of positive kernel operators. *Linear and Multilinear Algebra*, ISSN 0308-1087, 2019, vol. 67, iss. 8, str. 1637-1652. https://doi.org/10.1080/03081087.2018.1465885, doi: 10.1080/03081087.2018.1465885. [COBISS.SI-ID 18356313]
2. ŽUŽEK, Tena, **PEPERKO, Aljoša**, KUŠAR, Janez. A max-plus algebra approach for generating a non-delay schedule. *Croatian operational research review : CRORR*, ISSN 1848-0225. [Tiskana izd.], 2019, vol. 10, no. 1, str. 35-44, ilustr. https://hrcak.srce.hr/ojs/index.php/crorr/issue/view/377, doi: 10.17535/crorr.2019.0004. [COBISS.SI-ID 16696091]
3. VOGLAR, Jure, ZUPANČIČ, Matevž, **PEPERKO, Aljoša**, BIRBARAH, Patrick, MILJKOVIC, Nenad, GOLOBIČ, Iztok. Analysis of heater-wall temperature distributions during the saturated pool boiling of water. *Experimental thermal and fluid science*, ISSN 0894-1777. [Print ed.], Apr. 2019, vol. 102, str. 205-214, ilustr. https://www.sciencedirect.com/science/article/pii/S089417771830270X, doi: 10.1016/j.expthermflusci.2018.11.012. [COBISS.SI-ID 16368923]

Rok Petkovšek:
1. **PETKOVŠEK, Rok**, NOVAK, Vid, AGREŽ, Vid. High power fiber MOPA based QCW laser delivering pulses with arbitrary duration on demand at high modulation bandwidth. *Optics express*, ISSN 1094-4087, 2015, vol. 23, no. 26, str. 33150-33156, ilustr., doi: 10.1364/OE.23.033150. [COBISS.SI-ID 14385947]
2. ORTHABER, Uroš, **PETKOVŠEK, Rok**, SCHILLE, Jörg, HARTWIG, L., HAWLINA, Gregor, DRNOVŠEK-OLUP, Brigita, VREČKO, Andrej, POBERAJ, Igor. Effect of laser-induced cavitation bubble on a thin elastic membrane. *Optics and laser technology*, ISSN 0030-399 [Print ed.], Dec. 2014, vol. 64, str. 94-100, ilustr., doi: 10.1016/j.optlastec.2014.05.008. [COBISS.SI-ID 14498843]
3. MUR, Jaka, **PETKOVŠEK, Rok**. Near-THz bursts of pulses : governing surface ablation mechanisms for laser material processing. *Applied Surface Science*, ISSN 0169-4332. [Print ed.], Jun. 2019, vol. 478, str. 355-360, ilustr. https://www.sciencedirect.com/science/article/pii/S0169433219302120?via%3Dihub, doi: 10.1016/j.apsusc.2019.01.182. [COBISS.SI-ID 16467995]

Igor Petrović:

1. **PETROVIĆ, Igor**, ŠAJN, Viktor, KOSEL, Tadej, MARZOCCA, Pier. Aerodynamics and static aeroelastic behavior of low-Reynolds number deformable membrane wings. *Journal of aerospace engineering*. May 2016, vol. 29, iss. 3, str. 1-12, ilustr. ISSN 0893-1321. http://ascelibrary.org/doi/10.1061/%28ASCE%29AS.1943-5525.0000555, DOI: 10.1061/(ASCE)AS.1943-5525.0000555. [COBISS.SI-ID 14280475], [JCR, SNIP, WoS do 27. 7. 2022: št. citatov (TC): 4, čistih citatov (CI): 4, čistih citatov na avtorja (CIAu): 1,00, Scopus do 21. 7. 2022: št. citatov (TC): 4, čistih citatov (CI): 4, čistih citatov na avtorja (CIAu): 1,00] (1.01)
2. **PETROVIĆ, Igor**, KOSEL, Franc, ŠAJN, Viktor. Aerodynamic investigation of the deformable membrane airfoil with excess length. *Tehnički vjesnik : znanstveno-stručni časopis tehničkih fakulteta Sveučilišta u Osijeku*. 2015, vol. 22, no. 3, str. 573-580, ilustr. ISSN 1330-3651. DOI: 10.17559/TV-20131210105304. [COBISS.SI-ID 14036251], [JCR, SNIP, WoS do 9. 8. 2021: št. citatov (TC): 1, čistih citatov (CI): 1, čistih citatov na avtorja (CIAu): 0,33, Scopus do 3. 12. 2019: št. citatov (TC): 1, čistih citatov (CI): 1, čistih citatov na avtorja (CIAu): 0,33] (1.01)
3. **PETROVIĆ, Igor**, SHEA, Sean P., SMITH, Ian P., KOSEL, Franc, MARZOCCA, Pier. Numerical and experimental investigation of membrane wing for micro aerial vehicle applications. V: *ASME 2014 : IMECE2014*. International Mechanical Engineering Congress & Exposition, November 14-20, 2014, Montreal, Quebec, Canada. [New York etc.]: ASME, 2014. F. 1-6, ilustr. [COBISS.SI-ID 13862939], [Scopus do 31. 8. 2017: št. citatov (TC): 2, čistih citatov na avtorja (CIAu): 0,00] (1.08)
4. **PETROVIĆ, Igor**, CAMPAGNOLO, Filippo, KOSEL, Tadej, BOTTASSO, Carlo L. Implementation of the BEM skewed-wake model within the multibody aero-elastic solver Cp-Lambda. V: KOLHE, Mohan Lal (ur.). *ICACER 2020 : the 5th International Conference on Advances and Clean Energy Research : Barcelona, Spain, April 23-25, 2020*. Les Ulis: EDP Sciences, 2020. F. 1-6, ilustr. E3S Web of Conferences, Vol. 173, 2020. ISSN 2267-1242. https://www.e3s-conferences.org/articles/e3sconf/pdf/2020/33/e3sconf_icacer2020_02004.pdf, DOI: 10.1051/e3sconf/202017302004. [COBISS.SI-ID 20780547], [SNIP, WoS, Scopus] (1.08)

Primož Podržaj:

1. SIMONČIČ, Samo, **PODRŽAJ, Primož**. An enhanced algorithm for estimation of a digitized curve length using B-splines. Measurement : journal of the International Measurement Confederation, ISSN 0263-224 [Print ed.], Dec. 2016, vol. 94, str. 168-176 [COBISS.SI-ID 14998299]
2. SIMONČIČ, Samo, KLOBČAR, Damjan, **PODRŽAJ, Primož**. Kalman filter based initial guess estimation for digital image correlation. Optics and lasers in engineering, ISSN 0143-8166. [Print ed.], Oct. 2015, vol. 73, str. 80-88 [COBISS.SI-ID 14176283]
3. SIMONČIČ, Samo, **PODRŽAJ, Primož**. Image-based electrode tip displacement in resistance spot welding. Measurement science & technology, ISSN 0957-023 [Print ed.], 2012, vol. 23, no. 6, str. 1-7 [COBISS.SI-ID 12476699]
4. **PODRŽAJ, Primož**, POLAJNAR, Ivan, DIACI, Janez, KARIŽ, Zoran. Estimating the strength of resistance spot welds based on sonic emission. Science and technology of welding and joining, ISSN 1362-1718, 2005, letn. 10, št. 4, str. 399-405. [COBISS.SI-ID 8437275]
5. ŽERJAV, Matej, **PODRŽAJ, Primož**. Arduino based automatic guitar tuning system. V: Proceedings : ICESS2017. New Castle (DE): The Society of Digital Information and Wireless Communications. 2017, str. 156-159. [COBISS.SI-ID 16110107]

Marko Polajnar:

1. **POLAJNAR, Marko**, ČOGA, Lucija, KALIN, Mitjan. Base lubricants for green stamping : the effects of their structure and viscosity on tribological performance. *Friction*. Sep. 2023, vol. 11, iss. 9, str. 1741–1754, ilustr. ISSN 2223-7690. https://link.springer.com/article/10.1007/s40544-022-0706-6, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1007/s40544-022-0706-6. [COBISS.SI-ID 150831619].
2. NOVAK, Nejc, TRAJKOVSKI, Ana, **POLAJNAR, Marko**, KALIN, Mitjan, MAJDIČ, Franc. Wear of hydraulic pump with real particles and medium test dust. *Wear*. [Print ed.]. Nov. 2023, vol. 532/533, str. 1-13, ilustr. ISSN 0043-1648. https://www.sciencedirect.com/science/article/pii/S0043164823004842, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.wear.2023.205101. [COBISS.SI-ID 162606851].
3. **POLAJNAR, Marko**. Adsorpcija aditivov za doseganje oleofobnih jeklenih površin za nizko EHD trenje. V: *SLOTRIB 2024 : Posvetovanje o tribologiji, mazivih in zelenih tehnologijah : 10. junij 2024, Portorož*. [Ljubljana]: Slovensko društvo za tribologijo, [2024]. Str. 1-9, ilustr. [COBISS.SI-ID 201761795].

Primož Potočnik:

1. **POTOČNIK, Primož**, JEROMEN, Andrej, GOVEKAR, Edvard. Genetic algorithm-based framework for optimization of laser beam path in additive manufacturing. *Metals*. 2024, vol. 14, iss. 4, [article no.] 410, str. 1-17, ilustr. ISSN 2075-4701. https://www.mdpi.com/2075-4701/14/4/410, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.3390/met14040410. [COBISS.SI-ID 191234563].
2. **POTOČNIK, Primož**, OLMOS LOPEZ-ROSO, Borja, VODOPIVEC, Lučka, SUSIČ, Egon, GOVEKAR, Edvard. Condition classification of heating systems valves based on acoustic features and machine learning. *Applied acoustics*. [Print ed.]. Mar. 2021, vol. 174, str. 1-9, ilustr. ISSN 0003-682X. https://www.sciencedirect.com/science/article/pii/S0003682X20308409?via%3Dihub, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.apacoust.2020.107736. [COBISS.SI-ID 35370243].
3. **POTOČNIK, Primož**, ŠKERL, Primož, GOVEKAR, Edvard. Machine-learning-based multi-step heat demand forecasting in a district heating system. *Energy and buildings*. [Print ed.]. Feb. 2021, vol. 233, str. 1-14, ilustr. ISSN 0378-7788. https://www.sciencedirect.com/science/article/pii/S0378778820334599?via%3Dihub, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.enbuild.2020.110673. [COBISS.SI-ID 45195779].

Jurij Prezelj:

1. **PREZELJ, Jurij**, MUROVEC, Jure. Traffic noise modelling and measurement : inter-laboratory comparison. *Applied acoustics*. [Print ed.]. Dec. 2017, vol. 127, str. 160-168, ilustr. ISSN 0003-682X. DOI: 10.1016/j.apacoust.2017.06.010. [COBISS.SI-ID 15775259]
2. ŠTEBLAJ, Peter, ČUDINA, Mirko, LIPAR, Primož, **PREZELJ, Jurij**. Adaptive muffler based on controlled flow valves. *The Journal of the Acoustical Society of America*. Jun. 2015, vol. 137, iss. 6, str. el503-el509, ilustr. ISSN 0001-4966. DOI: 10.1121/1.4921682. [COBISS.SI-ID 14021147]
3. LIPAR, Primož, ČUDINA, Mirko, ŠTEBLAJ, Peter, **PREZELJ, Jurij**. Automatic recognition of machinery noise in the working environment. Strojniški vestnik, ISSN 0039-2480, Dec. 2015, vol. 61, no. 12, str. 698-708, SI 128, ilustr., doi: 10.5545/sv-jme.2015.2781. [COBISS.SI-ID 14265627]

Franci Pušavec:

1. **PUŠAVEC, Franci**, GRGURAŠ, Damir, KOCH, Matthias, KRAJNIK, Peter. Cooling capability of liquid nitrogen and carbon dioxide in cryogenic milling. *CIRP annals*, ISSN 0007-8506, 2019, vol. 68, iss. 1, str. 73-76, ilustr. https://www.sciencedirect.com/science/article/pii/S0007850619300174, doi: 10.1016/j.cirp.2019.03.016. [COBISS.SI-ID 16614427]
2. GRGURAŠ, Damir, STERLE, Luka, KRAJNIK, Peter, **PUŠAVEC, Franci**. A novel cryogenic machining concept based on a lubricated liquid carbon dioxide. *International journal of machine tools & manufacture : Design, research and application*, ISSN 0890-6955. [Print ed.], Oct. 2019, vol. 145, str. 1-6, ilustr. https://www.sciencedirect.com/science/article/pii/S0890695519307953?via%3Dihub, doi: 10.1016/j.ijmachtools.2019.103456. [COBISS.SI-ID 16781851]
3. **PUŠAVEC, Franci**, DESHPANDE, Ashish, YANG, Shu, M'SAOUBI, Rachid, KOPAČ, Janez, DILLON, Oscar W., JAWAHIR, I. S. Sustainable machining of high temperature Nickel alloy - Inconel 718. Part 2, Chip breakability and optimization. *Journal of cleaner production*, ISSN 0959-6526. [Print ed.], Jan. 2015, vol. 87, str. 941-952, ilustr., doi: 10.1016/j.jclepro.2014.10.085. [COBISS.SI-ID 13790491]

Darja Rupnik Poklukar:

1. **RUPNIK POKLUKAR, Darja**, ŽEROVNIK, Janez. Generalized closeness and decay stability of some graphs. *Mathematics*. 2025, vol. 13, no. 6 , [article no.] 939, 9 str., ilustr. ISSN 2227-7390. https://www.mdpi.com/2227-7390/13/6/939, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.3390/math13060939. [COBISS.SI-ID 229055747]
2. BREZOVNIK, Simon, **RUPNIK POKLUKAR, Darja,** ŽEROVNIK, Janez. The 2-rainbow domination number of Cartesian bundles over cycles. *Central European journal of operations research*. 2025, vol. 33, str. 641–659, ilustr. ISSN 1613-9178. https://link.springer.com/article/10.1007/s10100-024-00949-6, DOI: 10.1007/s10100-024-00949-6. [COBISS.SI-ID 216758531]
3. NOVAK, Tina, PEPERKO, Aljoša, **RUPNIK POKLUKAR, Darja**, ZAKRAJŠEK, Helena. *Matematika 2 : naloge in postopki reševanja*. 1. popravljena izd. Ljubljana: Fakulteta za strojništvo, 2024. 171 str., ilustr. ISBN 978-961-6980-33-3. [COBISS.SI-ID 199312899]

Mihael Sekavčnik:

1. LOTRIČ, Andrej, **SEKAVČNIK, Mihael**, POHAR, Andrej, LIKOZAR, Blaž, HOČEVAR, Stanko. Conceptual design of an integrated thermally self-sustained methanol steam reformer : high-temperature

PEM fuel cell stack manportable power generator. *International journal of hydrogen energy*. [Print ed.]. Jun. 2017, vol. 42, iss. 26, str. 16700-16713, ilustr. ISSN 0360-3199. http://www.sciencedirect.com/science/article/pii/S0360319917319225. [COBISS.SI-ID 15546139]

2. MORI, Mitja, MRŽLJAK, Tilen, DROBNIČ, Boštjan, **SEKAVČNIK, Mihael**. Integral characteristics of hydrogen production in alkaline electrolysers. *Strojniški vestnik*. Oct. 2013, vol. 59, no. 10, str. 585-594, si 116, ilustr. ISSN 0039-2480. DOI: 10.5545/sv-jme.2012.858. [COBISS.SI-ID 13158683]
3. LACKO, Rok, DROBNIČ, Boštjan, **SEKAVČNIK, Mihael**, MORI, Mitja. Hydrogen energy system with renewables for isolated households : The optimal system design, numerical analysis and experimental evaluation. *Energy and buildings*. Sep. 2014, vol. 80, str. 106-113, ilustr. ISSN 0378-7788. DOI: 10.1016/j.enbuild.2014.04.009. [COBISS.SI-ID 13429787]

Janko Slavič:

1. LUZNAR, Janez, **SLAVIČ, Janko**, BOLTEŽAR, Miha. Experimental research on structure-borne noise at pulse-width-modulation excitation. Applied acoustics, ISSN 0003-682X. [Print ed.], Aug. 2018, vol. 137, str. 33-39, ilustr. https://www.sciencedirect.com/science/article/pii/S0003682X17308903, doi: 10.1016/j.apacoust.2018.03.005. [COBISS.SI-ID 15939099]
2. SKRINJAR, Luka, **SLAVIČ, Janko**, BOLTEŽAR, Miha. A Review of continuous contact-force models in multibody dynamics. International journal of mechanical sciences, ISSN 0020-7403, Sep. 2018, vol. 145, str. 171-187, ilustr. https://reader.elsevier.com/reader/sd/903B8919459DA3FF13D9A5978641A8FD72722BBB5166ED0277F867AC3F587204A839D299CDEEBD3F76FFEFAB7B5B2E53, doi: 10.1016/j.ijmecsci.2018.07.010. [COBISS.SI-ID 16175131]
3. JAVH, Jaka, **SLAVIČ, Janko**, BOLTEŽAR, Miha. High frequency modal identification on noisy high-speed camera data. Mechanical systems and signal processing, ISSN 0888-3270, Jan. 2018, vol. 98, str. 344-351, ilustr. http://www.sciencedirect.com/science/article/pii/S0888327017302637, doi: 10.1016/j.ymssp.2017.05.008. [COBISS.SI-ID 15504923]

Lidija Slemenik Perše:

1. OSELI, Alen, PRODAN, Ted, SUSIČ, Egon, **SLEMENIK PERŠE, Lidija**. The effect of short fiber orientation on long term shear behavior of 40% glass fiber reinforced polyphenylene sulfide. *Polymer testing*. [Print ed.]. Jan. 2020, vol. 81, str. 1-12, ilustr. ISSN 0142-9418. https://www.sciencedirect.com/science/article/pii/S0142941819316538?via%3Dihub, DOI: 10.1016/j.polymertesting.2019.106262. [COBISS.SI-ID 16981019]
2. **SLEMENIK PERŠE, Lidija**, HUSKIĆ, Miroslav. Rheological characterization of multiarm star copolymers. *European Polymer Journal*. [Print ed.]. Mar. 2016, vol. 76, str. 188-195. ISSN 0014-3057. http://www.sciencedirect.com/science/article/pii/S0014305716300453/pdfft?md5=a6d369cbad988b50a18bb36cc1855544&pid=1-s2.0-S0014305716300453-main.pdf, DOI: .1016/j.eurpolymj.2016.01.045. [COBISS.SI-ID 5862682]
3. **SLEMENIK PERŠE, Lidija**, MIHELČIČ, Mohor, OREL, Boris. Rheological and optical properties of solar absorbing paints with POSS-treated pigments. *Materials chemistry and physics*. [Print ed.]. Jan. 2015, vol. 149/150, str. 368-377. ISSN 0254-0584. http://ac.els-cdn.com/S0254058414006828/1-s2.0-S0254058414006828-main.pdf?_tid=2e86e240-7563-11e4-8658-00000aacb361&acdnat=1417003137_ba8d5da662012336ae2203582f409cb8, DOI: 10.1016/j.matchemphys.2014.10.031. [COBISS.SI-ID 5607706]

Uroš Stritih:

1. MLAKAR, Urška, STROPNIK, Rok, KOŽELJ, Rok, MEDVED, Sašo, **STRITIH, Uroš**. Experimental and numerical analysis of seasonal solar-energy storage in buildings. *International journal of energy research*. 2019, vol. 43, iss. 12, str. 6409-6418, ilustr. ISSN 0363-907X. https://onlinelibrary.wiley.com/doi/abs/10.1002/er.4449, DOI: 10.1002/er.4449. [COBISS.SI-ID 16558619],
2. KRESE, Gorazd, KOŽELJ, Rok, BUTALA, Vincenc, **STRITIH, Uroš**. Thermochemical seasonal solar energy storage for heating and cooling of buildings. *Energy and buildings*. Apr. 2018, vol. 164, str. 239-253, ilustr. ISSN 0378-7788. http://www.sciencedirect.com/science/article/pii/S0378778817301469, DOI: 10.1016/j.enbuild.2017.12.057. [COBISS.SI-ID 15839515]
3. **STRITIH, Uroš**, CHARVÁT, Pavel, KOŽELJ, Rok, KLIMEŠ, Lubomír, OSTERMAN, Eneja, OSTRÝ, Milan, BUTALA, Vincenc. PCM thermal energy storage in solar heating of ventilation air : experimental and numerical investigations. *Sustainable cities and society*. [Spletna izd.]. 2018, vol. 37, f. 104-115, ilustr. ISSN

2210-6715. http://www.sciencedirect.com/science/article/pii/S2210670717309605?via%3Dihub, DOI: 10.1016/j.scs.2017.10.018. [COBISS.SI-ID 15795739]

Božidar Šarler:

1. **ŠARLER, Božidar**, DOBRAVEC, Tadej, GLAVAN, Gašper, HATIĆ, Vanja, MAVRIČ, Boštjan, VERTNIK, Robert, CVAHTE, Peter, GREGOR, Filip, JELEN, Marina, PETROVIČ, Marko. Multi-physics and multi-scale meshless simulation system for direct-chill casting of aluminium alloys. *Strojniški vestnik*. Nov./Dec. 2019, vol. 65, no. 11/12, str. 658-670, ilustr. ISSN 0039-2480. https://www.sv-jme.eu/sl/article/multi-physics-and-multi-scale-meshless-simulation-system-for-direct-chill-casting-of-aluminium-alloys/, DOI: 10.5545/sv-jme.2019.6350. [COBISS.SI-ID 3385188]
2. DOBRAVEC, Tadej, MAVRIČ, Boštjan, **ŠARLER, Božidar**. Reduction of discretisation-induced anisotropy in the phase-field modelling of dendritic growth by meshless approach. *Computational materials science*. [Print ed.]. 2020, vol. 172, [12] str., graf. prikazi, ilustr. ISSN 0927-0256. https://doi.org/10.1016/j.commatsci.2019.109166, DOI: 10.1016/j.commatsci.2019.109166. [COBISS.SI-ID 1527466]
3. KOVAČIČ, Miha, STOPAR, Klemen, VERTNIK, Robert, **ŠARLER, Božidar**. Comprehensive electric arc furnace electric energy consumption modeling : a pilot study. *Energies*. Jun. 2019, vol. 12, iss. 11, f. 1-13, ilustr. ISSN 1996-1073. https://www.mdpi.com/1996-1073/12/11/2142, DOI: 10.3390/en12112142. [COBISS.SI-ID 16647451]

Domen Šeruga:

1. LITROP, Aljaž, ZOBEC, Peter, **ŠERUGA, Domen**, NAGODE, Marko, KLEMENC, Jernej. Experimental analysis of crack initiation and propagation in dynamically shear-loaded aluminium specimens using the digital image correlation method. *Engineering failure analysis*. Sep. 2022, vol. 139, str. 1-11, ilustr. ISSN 1350-6307. https://www.sciencedirect.com/science/article/pii/S1350630722004691, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.engfailanal.2022.106495. [COBISS.SI-ID 111079427].
2. BARTOŠÁK, Michal, NAGODE, Marko, KLEMENC, Jernej, DOUBRAVA, Karel, **ŠERUGA, Domen**. Use of Prandtl operators in simulating the cyclic softening of Inconel 718 under isothermal low-cycle fatigue loading. *International journal of mechanical sciences*. May 2022, vol. 222, str. 1-11, ilustr. ISSN 0020-7403. https://www.sciencedirect.com/science/article/pii/S0020740322001072, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.ijmecsci.2022.107182. [COBISS.SI-ID 102892035].
3. NAGODE, Marko, KLEMENC, Jernej, OMAN, Simon, **ŠERUGA, Domen**. A closed-form solution for temperature-dependent elastoplastic problems using the Prandtl operator approach. *Communications in Nonlinear Science and Numerical Simulation*. Aug. 2021, vol. 99, str. 1-24, ilustr. ISSN 1007-5704. https://www.sciencedirect.com/science/article/pii/S1007570421001519?via%3Dihub, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.cnsns.2021.105839. [COBISS.SI-ID 59481091].

Marko Šimic:

1. JANKOVIČ, Denis, **ŠIMIC, Marko**, HERAKOVIČ, Niko. A data-driven simulation and Gaussian process regression model for hydraulic press condition diagnosis. *Advanced engineering informatics : the science of supporting knowledge-intensive activities*. Jan. 2024, vol. 59, str. 1-22, ilustr. ISSN 1474-0346. https://www.sciencedirect.com/science/article/pii/S1474034623004044, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.aei.2023.102276. [COBISS.SI-ID 174551043].
2. JANKOVIČ, Denis, **ŠIMIC, Marko**, HERAKOVIČ, Niko. A comparative study of machine learning regression models for production systems condition monitoring. *Advances in production engineering & management*. Mar. 2024, vol. 19, nr. 1, str. 78–92, ilustr. ISSN 1854-6250. https://apem-journal.org/Archives/2024/Abstract-APEM19-1_078-092.html, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.14743/apem2024.1.494. [COBISS.SI-ID 201874947].
3. **ŠIMIC, Marko**, HERAKOVIČ, Niko. Investigation of innovative high-response piezoelectric actuator used as smart actuator–sensor system. *Applied sciences*. 2024, vol. 14, iss. 18, art. 8523, str. 1-17, ilustr. ISSN 2076-3417. https://www.mdpi.com/2076-3417/14/18/8523, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.3390/app14188523. [COBISS.SI-ID 208705027].

Roman Šturm:

1. **ŠTURM, Roman**, GRIMBERG, Raimond, SAVIN, Adriana, GRUM, Janez. Destructive and nondestructive evaluations of the effect of moisture absorption on the mechanical properties of polyester-

based composites. *Composites.Part B, Engineering*. [Print ed.]. Mar. 2015, vol. 71, str. 10-16, ilustr. ISSN 1359-8368. DOI: 10.1016/j.compositesb.2014.11.022. [COBISS.SI-ID 13818395]
2. ŽAGAR, Sebastjan, **ŠTURM, Roman**. Influence of grinding on the residual stress measurements of shot peened aluminum alloy AA7075. *Strojniški vestnik*. Jul./Avg. 2019, vol. 65, no. 7/8, str. 401-409, ilustr. ISSN 0039-2480. https://www.sv-jme.eu/article/influence-of-grinding-on-the-residual-stress-measurements-of-shot-peened-aluminum-alloy-aa7075/, DOI: 10.5545/sv-jme.2019.6083. [COBISS.SI-ID 16702235]
3. RAVNIKAR, Dunja, TRDAN, Uroš, NAGODE, Aleš, **ŠTURM, Roman**. Energy density effect of laser alloyed TiB2/TiC/Al composite coatings on LMZ/HAZ, mechanical and corrosion properties. *Metals*. 2020, iss. 3, vol. 10, str. 1-19, ilustr. ISSN 2075-4701. https://www.mdpi.com/2075-4701/10/3/411/htm, DOI: 10.3390/met10030411. [COBISS.SI-ID 17102363]

Jovan Trajkovski:
1. **TRAJKOVSKI, Jovan**, KUNC, Robert. Strain rate sensitivity of low carbon threaded steel rods of grade 4.6 : by Jovan Trajkovski and Robert Kunc. *Materials*. 2024, vol. 17, iss. 24, [art. no.] 6228, str. 1-14, ilustr. ISSN 1996-1944. https://www.mdpi.com/1996-1944/17/24/6228, DOI: 10.3390/ma17246228. [COBISS.SI-ID 220242179]
2. **TRAJKOVSKI, Jovan**. Ballistic response of high–strength steel against small–arm projectiles : numerical modelling. V: KOVÁCS, Tünde Anna (ur.), FÜRSTNER, Igor (ur.). *Critical infrastructure protection : advanced technologies for crisis prevention and response : conference proceedings*. Dordrecht: Springer, 2025. Str. 311-323, ilustr. NATO science for peace and security series. C, Environmental security (Online). ISBN 978-94-024-2308-2. ISSN 1874-6543. https://link.springer.com/chapter/10.1007/978-94-024-2308-2_22, DOI: 10.1007/978-94-024-2308-2_22. [COBISS.SI-ID 236804611]
3. **TRAJKOVSKI, Jovan**, AMBROŽ, Miha, KUNC, Robert. Gravel arrester beds as a safety measure at the motorway exit ramps : experimental and numerical study. *Road materials and pavement design*. 2024, vol. 25, no. 1, str. 99-114, ilustr. ISSN 2164-7402. https://www.tandfonline.com/doi/full/10.1080/14680629.2023.2194442, DOI: 10.1080/14680629.2023.2194442. [COBISS.SI-ID 147609091]

Jaka Tušek:
1. NEBOT-ANDRÉS, Laura, PETRUZZIELLO, Fabio, APREA, Ciro, LLOPIS, Rodrigo, ŽEROVNIK, Andrej, MAIORINO, Angelo, **TUŠEK, Jaka**. Parametric analysis of hybrid elastocaloric – CO2 cooling system. *Applied thermal engineering*. (2024), vol. 253, article no. 123843, str. 1-10, DOI: 10.1016/j.applthermaleng.2024.123843. [COBISS.SI-ID 206758147].
2. AHČIN, Žiga, KITANOVSKI, Andrej, **TUŠEK, Jaka**. Latent thermal energy storage using solid-state phase transformation in caloric materials. *Cell reports physical science*. (2024), vol. 5, iss. 9, article no. 102175, str. 1-18, DOI: 10.1016/j.xcrp.2024.102175. [COBISS.SI-ID 206949635].
3. AHČIN, Žiga, **TUŠEK, Jaka**. Parametric analysis of fatigue-resistant elastocaloric regenerators : Tensile vs. compressive loading. *Applied thermal engineering*. (2023), vol. 231, str. 1-13, DOI: 10.1016/j.applthermaleng.2023.120996. [COBISS.SI-ID 157626371].

Joško Valentinčič:
1. **VALENTINČIČ, Joško**, PRIJATELJ, Miha, JERMAN, Marko, LEBAR, Andrej, SABOTIN, Izidor. Characterization of a custom-made digital light processing stereolithographic printer based on a slanted groove micromixer geometry. *Journal of micro- and nano-manufacturing*, ISSN 2166-0468. [Print ed.], Mar. 2020, vol. 8, str. 010911-1- 010911-6, doi: 10.1115/1.4046044. [COBISS.SI-ID 17038363]
2. GOTOVAC, Gorazd, DETELA, Andrej, LAMPIČ, Gorazd, **VALENTINČIČ, Joško**. Analytical and FEM approach to reduce the cogging torque in in-wheel motors. *Electrical engineering*, ISSN 0948-7921. [Print ed.], Apr. 2015, vol. 97, str. 269-275, doi: 10.1007/s00202-015-0334-5. [COBISS.SI-ID 13945371]
3. BISSACCO, Giuliano, HANSEN, H.N., TRISTO, Gianluca, **VALENTINČIČ, Joško**. Feasibility of wear compensation in micro EDM milling based on discharge counting and discharge population characterization. *CIRP annals*, ISSN 0007-8506, 2011, vol. 60, iss. 1, str. 231-234, doi: 10.1016/j.cirp.2011.03.064. [COBISS.SI-ID 11959579]

Rok Vrabič:
1. **VRABIČ, Rok**, KOZJEK, Dominik, BUTALA, Peter. Knowledge elicitation for fault diagnostics in plastic injection moulding : a case for machine-to-machine communication. CIRP annals, ISSN 0007-8506, 2017, vol. 66, iss. 1, str. 433-436, ilustr. http://ac.els-cdn.com/S000785061730001X/1-s2.0-

S000785061730001X-main. pdf?_tid=cd2847e6-348c-11e7-aaa9-00000aacb360&acdnat=1494316680_7dd186475f057f97faa6af363539e6bb, doi: 10.1016/j.cirp.2017.04.001. [COBISS.SI-ID 15490587]
2. ŠKULJ, Gašper, **VRABIČ, Rok**, BUTALA, Peter, SLUGA, Alojzij. Decentralised network architecture for cloud manufacturing. International journal of computer integrated manufacturing, ISSN 0951-192X. [Print ed.], 2017, vol. 30, nr. 4/5, str. 395-408, ilustr. http://www.tandfonline.com/doi/pdf/10.1080/0951192X.2015.1066861, doi: 10.1080/0951192X.2015.1066861. [COBISS.SI-ID 14075675]
3. ZALETELJ, Viktor, **VRABIČ, Rok**, HOZDIĆ, Elvis, BUTALA, Peter. A Foundational ontology for the modelling of manufacturing systems. Advanced engineering informatics : the science of supporting knowledge-intensive activities, ISSN 1474-0346, Oct. 2018, vol. 38, str. 129-141, ilustr. https://www.sciencedirect.com/science/article/pii/S1474034616301264, doi: 10.1016/j.aei.2018.06.009. [COBISS.SI-ID 16126491]

Nikola Vukašinović:
1. **VUKAŠINOVIĆ, Nikola**, BRAČUN, Drago, MOŽINA, Janez, DUHOVNIK, Jože. A new method for defining the measurement-uncertainty model of CNC laser-triangulation scanner. *International journal of advanced manufacturing technology*. 2012, no. 9/12, str. 1097-1104. ISSN 0268-3768. DOI: 10.1007/s00170-011-3467-3. [COBISS.SI-ID 11915803], [JCR, SNIP, WoS]
2. URBAS, Uroš, ZORKO, Damijan, **VUKAŠINOVIĆ, Nikola**. Machine learning based nominal root stress calculation model for gears with a progressive curved path of contact. *Mechanism and machine theory*. Nov. 2021, vol. 165, str. 1-14, ilustr. ISSN 0094-114X. https://www.sciencedirect.com/science/article/pii/S0094114X21001889, DOI: 10.1016/j.mechmachtheory.2021.104430. [COBISS.SI-ID 69206531], [JCR, SNIP, WoS]
3. **VUKAŠINOVIĆ, Nikola**, ZADNIK, Žiga, DUHOVNIK, Jože. Use of MFF and concurrent engineering to develop a sustainable product : radical redesign of flushing system. V: CHAKRABARTI, Amaresh (ur.). ICoRD'15 - Research into Design Across Boundaries. Vol. 2, Creativity, sustainability, DfX, enabling technologies, management and applications. Fifth International Conference on Research into Design - ICoRD'15, Bangalore, India, 7-9 January 2015. New Delhi [etc.]: Springer, 2015. Vol. 35, f. 171-180, ilustr. Smart innovation, systems and technologies (Internet), Vol. 35. ISBN 978-81-322-2228-6, ISBN 978-81-322-2229-3. ISSN 2190-3026. DOI: 10.1007/978-81-322-2229-3_15. [COBISS.SI-ID 13851419], [SNIP]
4. ORBANIĆ, Henri, **VUKAŠINOVIĆ, Nikola**. The future small home appliances as seen by the university students. V: JUNKAR, Mihael (ur.), et al. MIT 2014 : proceedings of the 13th International Conference on Management of Innovative Technologies, Fiesa, Slovenia, 28th - 30th September 2014. 13th International Conference on Management of Innovative Technologies, Fiesa, Slovenia, 28th - 30th September 2014. Ljubljana: LAT - Laboratory for Alternative Technologies, Faculty of Mechanical Engineering, 2014. F. 39-44, ilustr. ISBN 978-961-6536-76-9. https://mitconference.files.wordpress.com/2014/12/mit2014-conference-proceedings.pdf. [COBISS.SI-ID 13853979]
5. ANIĆ, Dino, ANTONIĆ, Krunoslav, DUHOVNIK, Jože, MARLOT, Jernej, PAVKOVIĆ, Neven, PENCA, Jure, POVŠE, Gregor, SOFALVI, Janos, SZABO, Joszef, TADEJ, Tea, **VUKAŠINOVIĆ, Nikola**, et al. *Handküchengerät mit Schutzabdeckung : EP2394544 (B1), 2014-05-21*. München: Europäisches Patentamt, 2014. 11 f., ilustr. [COBISS.SI-ID 12127259] patentna družina: Objavljen tudi kot: DE102011077343 (A1), 2011-12-15; Objavljen tudi kot: EP2394544 (A2), 2011-12-14; Objavljen tudi kot: ES2472451 (T3), 2014-07-01; Objavljen tudi kot: EP2394544 (A3), 2012-04-11

Matevž Zupančič:
1. HADŽIĆ, Armin, MOŽE, Matic, **ZUPANČIČ, Matevž**, GOLOBIČ, Iztok. Superbiphilic laser-microengineered surfaces with a self-assembled monolayer coating for exceptional boiling performance. *Advanced functional materials*. [Online ed.]. Mar. 2024, vol. 34, iss. 10, [article no.] 2310662, str. 1-14, ilustr. ISSN 1616-3028. https://onlinelibrary.wiley.com/doi/full/10.1002/adfm.202310662, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1002/adfm.202310662. [COBISS.SI-ID 173601027].
2. **ZUPANČIČ, Matevž**, FONTANAROSA, Donato, MOŽE, Matic, BUCCI, Mattia, VODOPIVEC, Matevž, NAGARAJAN, Balasubramanian, VETRANO, Maria Rosaria, CASTAGNE, Sylvie, GOLOBIČ, Iztok. Enhanced nucleate boiling of Novec 649 on thin metal foils via laser-induced periodic surface structures. *Applied thermal engineering*. [Print ed.]. Jan. 2024, vol. 236, pt. d, str. 1-13, ilustr. ISSN 1359-4311.

https://www.sciencedirect.com/science/article/pii/S135943112301832X, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.applthermaleng.2023.121803. [COBISS.SI-ID 170665731].

3. BERCE, Jure, ARHAR, Klara, HADŽIĆ, Armin, **ZUPANČIČ, Matevž**, MOŽE, Matic, GOLOBIČ, Iztok. Boiling-induced surface aging and crystallization fouling of functionalized smooth and laser-textured copper interfaces. *Applied thermal engineering*. [Print ed.]. Apr. 2024, vol. 242, [article no.] 122540, str. 1-17, ilustr. ISSN 1359-4311. https://www.sciencedirect.com/science/article/pii/S1359431124002084, Repozitorij Univerze v Ljubljani – RUL, DOI: 10.1016/j.applthermaleng.2024.122540. [COBISS.SI-ID 182964995].

Janez Žerovnik:

1. YE, Ansheng, MIAO, Fang, SHAO, Zehui, LIU, Jia-Bao, **ŽEROVNIK, Janez**, REPOLUSK, Polona. More results on the domination number of Cartesian product of two directed cycles. *Mathematics*, ISSN 2227-7390, 2019, vol. 7, no. 2, str. 1-9, doi: 10.3390/math7020210. [COBISS.SI-ID 24462088]
2. KALJUN, David, NOVAK, Tina, **ŽEROVNIK, Janez**. Improved approximation of spatial light distribution. *PloS one*, ISSN 1932-6203, Apr. 2017, vol. 12, nr. 4, f. 1-16, ilustr. http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0176252, doi: 10.1371/journal.pone.0176252. [COBISS.SI-ID 15491355]
3. ERVEŠ, Rija, **ŽEROVNIK, Janez**. Mixed fault diameter of Cartesian graph bundles II. *Ars mathematica contemporanea*, ISSN 1855-3966. [Tiskana izd.], 2015, vol. 8, no. 2, str. 245-258. http://amc-journal.eu/index.php/amc/article/view/390. [COBISS.SI-ID 18419478]