

SCIENTIFIC EXCELLENCE AWARDS

Romanian Academy The „Aurel Vlaicu” Prize awarded in 2020 Assist.Prof. Emanoil LINUL, phd & Nima MOVAHEDI, phd

„Aurel Vlaicu” Award of Romanian Academy to Emanoil LINUL and Nima MOVAHEDI for the group of scientific papers with the common title: „Mechanical characterization of advanced cellular materials”.

Cellular materials (metal, ceramic and polymeric foams) have experienced a considerable development in recent years, both in terms of manufacturing methodologies and by obtaining increasingly high-performance mechanical characteristics.

The year 2018 was a reference in disseminating the results and publishing them in prestigious journals in the field of cellular materials and foam-based composites. The group of papers entitled “Mechanical characterization of advanced cellular materials”, having as main authors Emanoil LINUL (Associate Professor, PhD) and Liviu MARȘAVINA (Academician, Professor, PhD) from the Politehnica University of Timișoara (Romania), respectively Nima MOVAHEDI (PhD) from the University of Newcastle (Australia), contains the following papers:

1. Emanoil Linul, Nima Movahedi, Liviu Marsavina, The temperature and anisotropy effect on compressive behavior of cylindrical closed-cell aluminum-alloy foams, *Journal of Alloys and Compounds* 2018, 740, 1172-1179.



The temperature and anisotropy effect on compressive behavior of cylindrical closed-cell aluminum-alloy foams

Emanoil Linul ^{1,*}, Nima Movahedi ^{2,†}, Liviu Marsavina ³

¹ Politehnica University of Timișoara, Department of Mechanics and Strength of Materials, 1 Mihail Viteazul Avenue, 300 222 Timișoara, Romania

² Independent Researcher (Graduated from Semnan University), Igfishan, Iran

2. Nima Movahedi, Emanoil Linul, Mechanical properties of Light Expanded Clay Aggregated (LECA) filled tubes, *Materials Letters* 2018, 217, 194-197.



Mechanical properties of Light Expanded Clay Aggregated (LECA) filled tubes

Nima Movahedi ^{1,*}, Emanoil Linul ^{2,†}

¹ Independent Researcher (Graduated from Semnan University), Igfishan, Iran

² Department of Mechanics and Strength of Materials, Politehnica University of Timișoara, 1 Mihail Viteazul Avenue, 300 222 Timișoara, Romania

3. Nima Movahedi, Emanoil Linul, Liviu Marsavina, The temperature effect on the compressive behavior of closed-cell aluminum-alloy foams, *Journal of Materials Engineering and Performance* 2018, 27(1), 99-108.

JMEPEG (2018) 27:99-108
https://doi.org/10.1007/s11665-017-3098-4

© ASM International
1059-9495/18/0000



The Temperature Effect on the Compressive Behavior of Closed-Cell Aluminum-Alloy Foams

Nima Movahedi, Emanoil Linul, and Liviu Marsavina

4. Emanoil Linul, Nima Movahedi, Liviu Marsavina, On the lateral compressive behavior of empty and ex-situ aluminum foam-filled tubes at high temperature, *Materials* 2018, 11(4), 554..



Article

On the Lateral Compressive Behavior of Empty and Ex-Situ Aluminum Foam-Filled Tubes at High Temperature

Emanoil Linul ^{1,*}, Nima Movahedi ^{2,*} and Liviu Marsavina ³

¹ Department of Mechanics and Strength of Materials, Politehnica University of Timișoara, 1 Mihail Viteazul Avenue, 300 222 Timișoara, Romania; liviu.marsavina@upt.ro

² Independent Researcher (Graduated from Department of Metallurgy and Materials Engineering, Semnan University, University Blvd.), 35131-19111 Semnan, Iran

* Correspondence: emanoil.linul@upt.ro (E.L.); nima.movahedi@gmail.com (N.M.); Tel.: +40-256-40-3741 (E.L.)

The research topic addressed by the authors aims to broaden the scope of cellular materials in the automotive industry. Although the automotive industry has developed high-strength materials, they are gradually being replaced with new advanced lightweight materials, mainly due to weight and price. The authors identified structures as fillers for the stiffening structural components can absorb structures, showing a significant have a high stiffness-to-weight energy, good corrosion resistance, makes them ideal candidates for materials (e.g. steel, aluminum, results present in the literature in systematic program for mechanical materials and structures filled with numerical and analytical methods. materials mentioned above and radial quasi-static compression tests. The effects of temperature (25–500°C) and anisotropy (three loading directions) were investigated. The mentioned parameters were chosen according to the foam matrix material.



a potential for the use of cellular elements of vehicles. Foam-filled more impact energy than foam-free increase in weight. These materials ratio, high capacity to absorb impact as well as recycling potential, which the replacement of high-density etc.). Due to the limitation of the this field, the authors developed a characterization of both cellular such materials, using experimental, The characterization of the cellular consisted in performing axial

Romanian Academy The „Tudor Tănăsescu” Prize awarded in 2020 Assist.Prof. Raul-Cristian ROMAN and Prof. Radu-Emil PRECUP, phd

As.Dr.Ing. Raul-Cristian ROMAN and Prof.Dr.Ing. Radu-Emil PRECUP have been awarded the “Tudor Tănăsescu Award” prize, given by the Romanian Academy for a group of three papers generically grouped in “Tehnici data-driven de acordare a parametrilor reguletoarelor” – RO, “Data-driven techniques for tuning controller parameters – EN”. The prize was officially awarded during the special session “PREMIILE ACADEMIEI ROMÂNE PENTRU ANUL 2018” – RO, “ROMANIAN ACADEMY AWARDS FOR THE YEAR 2018” – EN in 3.12.2020 at 10:00 in Aula of the Romanian Academy https://acad.ro/com2020/pag_com20_1203.htm

The Romanian Academy is a cultural forum founded in Bucharest, Romania, in 1866. It covers the scientific, artistic, and literary domains. The academy has 181 acting members who are elected for life. According to its bylaws, the academy's main goals are the cultivation of Romanian language and Romanian



literature, the study of the national history of Romania and research into major scientific domains. Some of the academy's fundamental projects are the Romanian language dictionary, the dictionary of Romanian literature, and the treatise on the history of the Romanian people.

As.dr.ing. Raul-Cristian Roman and Prof.dr.ing. Radu-Emil Precup, corresponding member of the Romanian Academy, published in 2018, as main authors, the following three papers in the field of data-driven techniques for tuning the parameters of controllers:

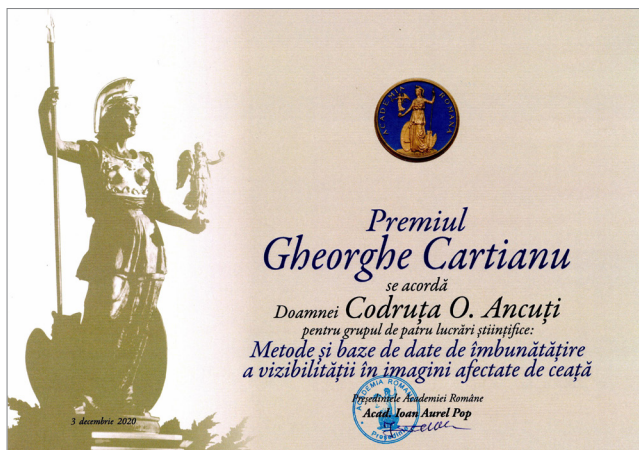
1. R.-C. Roman, R.-E. Precup, R.-C. David, Second order intelligent proportional-integral fuzzy control of twin rotor aerodynamic systems, Sixth International Conference on Information Technology and Quantitative Management (ITQM 2018), Omaha, NE, USA, Procedia Computer Science, Elsevier, vol. 139, pp. 372-380, Oct. 2018.
2. R.-C. Roman, M.-B. Radac, C. Tureac, R.-E. Precup, Data-driven active disturbance rejection control of pendulum cart systems, Proceedings of 2018 IEEE Conference on Control Technology and Applications CCTA 2018, Copenhagen, Denmark, pp. 933-938, Aug. 2018.
3. M.-B. Radac, R.-E. Precup, R.-C. Roman, Data-driven model reference control of MIMO vertical tank systems with model-free VRFT and Q-learning, ISA Transactions, Elsevier, vol. 73, pp. 227-238, Feb. 2018.



These papers have proposed a number of important contributions in the field proposed for award due the fact they ensure autonomy and adaptability to automatic control systems and solve correctly defined control problems without accurate information about the modeled processes.

Romanian Academy The „Gheorghe Cartianu” Prize awarded in 2020 Assoc.Prof. Codruța O. ANCUȚI, phd and Lect. Cosmin ANCUȚI, phd

1. Codruta O. Ancuti, Cosmin Ancuti, Philippe Bekaert and Christophe De Vleeschouwer “Color balance and fusion for underwater image enhancement”. IEEE Transactions on Image Processing, January, 2018, impact factor 9.34 (revista Q1).
2. Codruta O. Ancuti, Cosmin Ancuti, Christophe De Vleeschouwer, Radu Timofte “O-HAZE: a dehazing benchmark with real hazy and haze-free outdoor images”, 2018 NTIRE, IEEE Computer Vision and Pattern Recognition Workshops (CVPRW), Salt Lake City, US 2018
3. Codruta O. Ancuti, Cosmin Ancuti, Christophe De Vleeschouwer, Radu Timofte “I-HAZE: a dehazing benchmark with real hazy and haze-free indoor images”, International Conference on Advanced Concepts for Intelligent Vision Systems, LNCS, Springer, Poitiers, France, 24-27 Sept 2018
4. Cosmin Ancuti, Codruta O. Ancuti, Radu Timofte et al. “NTIRE 2018 challenge on image dehazing: Methods and results”. Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition, NTIRE Workshops, (CVPRW), Salt Lake City, US 2018



The first article introduces an original method that is the first and currently (despite of the advance of the CNN and deep learning field) the only method that proves to be effective to enhance challenging underwater scenes (e.g. deep and artificially illuminated underwater scenes). Due to its highly impact in the underwater imaging and in general in the image processing and computer vision research communities, in 2018 and 2019, our article occupied the first position in the ranking of the most popular articles in IEEE Transactions on Image Processing with more than 50.000 full text views and 100+ citation.

The next three papers are the result of the publication of the results and datasets used in the organization by the authors of the first image dehazing competition ever organized worldwide. This competition was organized during the NTIRE 2018 workshop of the prestigious IEEE Conference on Computer Vision and Pattern Recognition (IEEE CVPR), Utah, US 2018 (+9000 attendees).

Highest honors for the Rector of the Politehnica University of Timisoara – The Doctor Honoris Causa title conferred by the Polytechnic University of Bucharest Prof. Viorel Aurel ȘERBAN, phd

On 27 February 2020, the Polytechnic University of Bucharest conferred to the Rector of the Politehnica University of Timisoara, Univ. prof.dr.eng. Viorel Aurel Serban, the highest distinction that can be bestowed by a higher education institution, that is the title of Doctor Honoris Causa.

At the solemn ceremony, the merits of Univ.prof.dr.eng. Viorel Aurel Serban were highlighted, both at the scientific and the academic management levels, as well as from the perspective of boosting the collaboration between the Politehnica University of Timisoara and the Polytechnic University of Bucharest. Among other things, the motivation of the award states that “For his entire scientific, teaching, managerial and collaboration activity with our university, for the remarkable results of such activity, the Senate of the Polytechnic University of Bucharest has decided to award the highest academic title, DOCTOR HONORIS CAUSA, to Professor Viorel-Aurel Serban”.

The ceremony also included a presentation of the teaching and research activity carried out by Univ.prof.dr.eng. Viorel Aurel Serban.

Such teaching and research activities were added to by a rich activity in the field of academic administration and management, which was crowned by the election as Rector of the Politehnica University of Timisoara, for two terms, between 2012 and 2020. As a Rector, he contributed to the establishment of The Romanian Alliance of Technical Universities – ARUT, in 2016, along with the Rectors of the other technical universities, and became the first President of the Alliance, which position he has occupied ever since.

Furthermore, during the awarding ceremony, his efforts were highlighted and his significant contribution to the development of international cooperation, by having signed numerous agreements with foreign universities and research institutions, as well as his extensive activity in the field of sports and culture.



The Politehnica University of Timisoara, the best Romanian university in the field of information technology, computers and electronic engineering Prof.Radu-Emil PRECUP, phd and Prof. Stefan PREITL, phd

The Politehnica University of Timisoara was ranked as the best Romanian university, in the top 2020 of the best universities with study programs related to information technology, computers and electronic engineering, published by Guide2Research, one of the leading portals for research in such fields. In the world rankings, the Politehnica University of Timisoara ranks 449.

The ranking, based on H-Index and the DBLP publications, was designed so as to offer the academic community more visibility and exposure to research contributions made by leading institutions in the field of informatics, computer and electronic engineering.

Guide2Research

University Ranking for Computer Science in Romania

The University Ranking for Computer Science & Electronics was prepared by Guide2Research, one of the leading portals for computer science research providing trusted data on scientific contributions since 2014.

The ranking represents h-index, and DBLP values gathered by August 25th 2020. It was based on a detailed examination of more than 6000 computer scientists' profiles on Google Scholar and DBLP.

[Read More...](#)

Search by name: SEARCH View by country: Romania (2) ▼

World	National	University	#Scholars	Σ DBLP	Σ H-Index
449	1	Politehnica University of Timisoara Romania	2	254	89
467	2	Babes-Bolyai University Romania	1	27	81

A ranking published by Guide2Research

The Hirsch Index (H-Index) is an assessing tool for the scientific results of researchers and academic institutions and a criterion for quantifying their scientific impact through the number of quotations, whereas the DBLP is the largest database that indexes scientific works in the field of informatics, computers and electronics.

The ranking is based on a sum of the H-index values of all top IT specialists affiliated with a university. The Hirsch index threshold for being a leading scientist was set at 40, provided that most of their scientific work were in the field of information technology, computers and electronics and be indexed in the DBLP

In the Guide2Research ranking, the Politehnica University of Timisoara is present with two prestigious researchers in the field, with a total Hirsch index value of 89 and a total of 254 DBLP publications:

- **Prof.dr.eng. Radu-Emil Precup**, corresponding Member of the Romanian Academy, Dean of the Faculty of Automation and Computing;
- **Prof.dr.eng. Stefan Preitl**, Director of the Center for Scientific Research in Automation and Computing, within the Politehnica University of Timisoara, between 2001 and 2011.

The ranking mirrors the H-Index and DBLP values collected by August 25, 2020 and is based on the detailed examination of more than 6000 engineering and computer profiles from Google Scholar and DBLP.



Professor Nicolae Muntean, an Honorary Member of the Romanian Academy of Technical Sciences



A new reason for pride has occurred for the academic community of the Politehnica University of Timisoara. Professor Nicolae Muntean, from the Faculty of Electrical and Power Engineering, became an Honorary Member of the Romanian Academy of Technical Sciences, due to his scientific, teaching and managerial activities carried out both within the university and the industry.

A graduate of the Polytechnic Institute "Traian Vuia" of Timisoara, specialization of Electric Engineering, class of 1981, Prof. Nicolae Muntean began his career, like many other graduates of the Polytechnic, at the Electrotimis Company, as a design engineer. After a short time spent as a research engineer at ICMET Craiova, he started his teaching career at the Politehnica University of Timisoara in 1990, and took all the necessary steps. He got his doctorate in Electrical Engineering (1994), became a university professor in 2008, and a PhD coordinator in 2009.

Prof.univ.dr.eng. Nicolae Muntean has over 35 years of experience in the fields of electric drives with power electronics, industrial automation, automotive systems and renewable energy sources. He currently manages the Research Center for the Control of Energy Conversion and Storage, and has a special contribution to the development of extraordinary laboratories all over Eastern Europe, in the field of Power Electronics in Smart Microgrids and Automotive. Moreover, Prof. Muntean has developed competitive multi-disciplinary contracts and projects together with domestic and foreign industry companies. He is a Member or a Coordinator in over 20 nationally and internationally funded research programs. He is also an associated editor for the "Journal of Electrical Engineering", indexed INSPEC. Last but not least, Professor Nicolae Muntean also has a rich experience in management, both within the university (having been, over the time, a scientific secretary, a vice-dean, an Interim Dean of the Faculty of Electrical and Power Engineering, as well as director of the PUT Publishing House), and the industry (as the manager of Beespeed Automation Timisoara).



The „Acad. Corneliu Mikloși” Medal awarded to the former Rector of the Politehnica University of Timisoara, Univ.Prof.dr.eng. Viorel-Aurel ȘERBAN

The Romanian Welding Politehnica University of on Wednesday, November Library, the symposium Field at the Centennial included the awarding “Acad. Corneliu Mikloși” Aurel Serban, former The festive moment of the Medal’s delivery to Univ.prof.dr.eng. Viorel-Aurel Serban, was preceded by the reading of the Laudatio by Prof.dr.eng. Dorin Dehelean, President of the local branch of the Romanian Welding Association, who highlighted some points of the activity of Professor Serban, who is a personality of the field of materials science and of the Romanian Academy permanently involved in its related processes. Professor Viorel-Aurel presentation called “The Centennial Politehnica”, emphasized the particularly Politehnica University of academics led by Corneliu development of welding this field, and that such work was the one of pioneers at the time, and placed Timisoara at the forefront of welding education, research and technology.



Association and the Timisoara jointly organized 4th, 2020 at the PUT called “The Welding Politehnica”. The event of the Association Medal to Univ.prof.dr.eng Viorel-Rector of the University. “Acad. Corneliu Mikloși” Serban held the Welding Field at the during which he important role that the Timisoara, through its Mikloși, played in the and of higher education in



European Distance and E-learning Network, EDEN Fellow Award, Prof. Radu VASIU, phd

European Distance and E-learning Network, EDEN Fellow Award, Prof. Radu VASIU, PhD, awarded during the Official Opening Ceremony of the 2020 EDEN Annual Conference, 22 June 2020



The purpose of the EDEN Fellow scheme is to provide validation and support to professionals in Europe in this field, and to enhance their mobility within Europe through a respected scheme of recognition. The first Senior Fellow and Fellow Awards were presented at the 2007 Annual Conference in Naples. The EDEN Fellow title is an expression of acknowledgement of professional merit by the Association, for NAP members, who have demonstrated excellence in professional practice in the field of flexible and distance learning and provided valued support to the evolution and progress of EDEN.

EDEN is pleased to announce that at the Opening Ceremony of the EDEN2020 Annual Virtual Conference in Timisoara, the EDEN Fellow Title has been awarded to Radu VasIU, President of the Politehnica University Timisoara. of the title give to Radu VasIU was exceptional, in honour of the EDEN Conference host, Politehnica University Timisoara.

The 2020 EDEN Fellow Awards will be officially held at the EDEN Research Workshop, Lisbon, Portugal this autumn, the announcement of the title give to Radu VasIU was exceptional, in honour of the EDEN Conference host, Politehnica University Timisoara.



European Distance and E-learning Network, Elected Chair of the NAP Steering Committee Lect. Vlad MIHAESCU, phd

European Distance and E-learning Network, Elected Chair of the NAP Steering Committee, Lect. Vlad MIHAESCU, PhD, September 2020

We are delighted to announce that at their online meeting on June 18, 2020, the NAP Steering Committee elected Vlad Mihaescu by unanimous vote as new Chair of EDEN Network of Academics and Professionals (NAP) Steering Committee.

The NAP is EDEN's professional community, that includes in its membership all individual members as well as our institutional members' individual representatives. The official NAP membership consists over 1100 members. The activities of the community are coordinated by NAP's own Steering Committee (SC), the members of which are elected by the NAP individual community casting their votes once every three years. Vlad Mihaescu has a PhD in educational and technological models of MOOCs and has more than 10 years' experience as a trainer and teacher in areas like multimedia technologies, social media, e-tourism, e-learning, usability, programming, soft skills and leadership. Author of over 25 scientific papers and book chapters published in international conferences and journals, Vlad is involved in several European research projects in the field of eLearning. He is also a lecturer for UPT.



Vlad Mihaescu has a PhD in educational and technological models of MOOCs and has more than 10 years' experience as a trainer and teacher in areas like multimedia technologies, social media, e-tourism, e-learning, usability, programming, soft skills and leadership. Vlad as the Chair of the EDEN NAP Steering Committee at the same time is ex officio a member of the EDEN Executive Committee. EDEN thanks for the devoted and valuable work of former NAP SC Chair, Antonella Poce, and welcomes Vlad Mihaescu in his new position in the management of our Association.



IEEE Senior Member grade elevation, Prof. Corina NAFORNIȚĂ, phd

In 2020, Dr Corina Nafornta was elevated to the grade of Senior Member by IEEE, Signal Processing Society (SPS). IEEE Senior Membership is an honor bestowed only to those who have made significant contributions to the profession and less than 10% of IEEE members achieve this level of professional recognition. Professor Corina Nafornta has been with the Communications Department at Politehnica University of Timisoara since 2003. In 2015, she successfully defended her Habilitation thesis. Her research interests include signal and image processing, radar, watermarking and wavelets. She is an affiliate member of the IEEE SPS SPTM Technical Committee and Secretary for IEEE Romania Section Joint Chapter, SP01/IT12/COM19.

Dr Nafornta's activity started in 2003, in the field of image watermarking using wavelets, also her PhD thesis subject, obtaining results with a significant impact.

The team from which Dr Nafornta is a part of, led by Prof. Alexandru Isar, proposed the hyperanalytic wavelet transform, with improved directional selectivity and quasi shift invariance.

The new transform was used also by other authors and had a large number of citations. One major contribution was the proposal of the Kullback-Leibler divergence for complex generalized Gaussian probability density functions, CGGD, not existing in the literature before, following the collaboration with Prof. Yannick Berthoumieu (Univ. of Bordeaux).

Other contributions are related to the field of Hurst exponent estimation and applications, in collaboration with James Nelson (University College London) and Alexandru Isar, that raised the interest of other known researchers, working in the same field. In 2011 she was invited researcher at IMS-LAPS, ENSEIRB Bordeaux and in 2009 Invited Professor at IMS-LAPS, Universite Bordeaux I, with an EGIDE scholarship for research. In 2018, Dr Nafornta was invited speaker at the University College London, at the Workshop in memory of Dr James Nelson, at the Department of Statistical Science, presenting the talk „Dr James Nelson: from mathematics to engineering. The Hurst exponent: estimation and applications“. In 2018, with the team from UCL and University of Cambridge, Dr Nafornta published a paper that harmonises two significant contributions to the field of wavelet analysis in the past two decades, the locally stationary wavelet process and the family of dual-tree complex wavelets (with James Nelson, Alex Gibberd, Nick Kingsbury). Dr Nafornta was director of an ESA funded grant (budget 150.000 Euros), which studied the coverage extension of EGNOS availability service in Romania. Dr Nafornta is also working in the field of automotive radar, having been a member of the FP7 programme ARTRAC. She advises two PhD students in this field. A third one has already defended his PhD thesis in 2020 in the field of satellite navigation. Dr Nafornta is a reviewer and TPC member for various prestigious conferences and journals.



Winner at German Design Award 2020: “Home of Art” by Prof. Vlad GAIVORONSKI, phd

The German Design Council is the organizer of the annual international competition GDA –German Design Award – which is addressed to the whole world of design and architecture. In 2020 the exhibition dedicated to design products opened in 07.02. 2020 in the morning at Messe Frankfurt and the architecture exhibition was open the same day in the afternoon at the Museum Angewandte Kunst (applied art), the well known building designed by architect Richard Meyer.

Two works by AMA Design from Bucharest and “Home of Art” from Timisoara were declared among the winners . The entire event attracted professionals from all around the world and all projects declared winners were published in the catalogue of the event. Regarding to “Home of Art”, the residential project from Timisoara



which was declared winner also at prior events (BETA Biennial Timisoara, BIG SEE Ljubljana), the statement of the GDA jury considered that *“The project combines a variety of building styles with the existing historical buildings to create a coherent and overall extremely high-quality and elegant-looking*

*ensemble.”*It is for the second time that a contemporary architecture project from Timisoara attracts GDA jury attention. In 2018 City Business Centre was also declared winner. In both cases the project team was almost the same, composed by graduates from the UPT Architecture Faculty.



Honorable Mention #1 in 2020 Best PhD Thesis Award Competition Awarded by IEEE Robotics and Automation Society Assist.Prof. Raul-Cristian ROMAN

As.Dr.Ing. Raul-Cristian ROMAN received "Honorable Mention #1" in 2020 Best PhD Thesis Award Competition awarded by IEEE Robotics and Automation Society for the PhD thesis entitled "Tehnici de tip model-free de acordare a parametrilor reguletoarelor automate" - RO, "Model-Free techniques for tuning the parameters of automatic controllers" - EN having Prof. Radu-Emil PRECUP as supervisor. The award was given during a special session organized at the 24th International Conference on System Theory, Control and Computing Joint Conference SINTES 24, SACCS 20, SIMSIS 24, CONTI 13 8 - 10 October 2020, Sinaia, Romania <http://ace.ucv.ro/icstcc2020/>

The IEEE Robotics and Automation Society – Romania Chapter is pleased to announce the launch of the 2020 Best PhD Thesis Award Competition. The main objective of this award is to recognize and encourage young researchers from the local robotics and automation academic and industrial communities and to increase their engagement with IEEE and with the Robotics and Automation Society.



The PhD thesis discusses a modern subject, of major practical interest, at a high scientific level. The thesis has made innovative theoretical and practical contributions to the development of high performance control systems, focusing on the design and tuning of controllers for processes in various fields including the "unconventional" nonlinear systems.

The main objective accomplished through this thesis was to automatically determine the parameters of the model-free algorithms. The benefit of achieving this objective was used to solve the problem of choosing the best values of the parameters of the initial controllers. Before solutioning this objective, the parameters values were determined heuristically in the case of model-free algorithms studied in thesis (MFC and MFAC), and now the process of determining the parameters of the model-free controllers was optimized by reducing practitioner's precious time.

The second objective accomplished through this thesis was to experimentally validate the model-free techniques. The experimental validations presented in the thesis chapters at that time were the first world-wide applications of the Model-Free Control (MFC) and the Model-Free Adaptive Control MFAC algorithms on the twin rotor aerodynamic system (TRAS) laboratory equipment.

The thesis makes remarkable major theoretical and applied research contributions to the development of very efficient model-free solutions for tuning the parameters of automatic controllers which are widely used in the engineering practice.



Banat Excellence Gala, in 2020 - “Traian Vuia” price for “Engineering Sciences” Prof. Emeritus Radu BĂNCILĂ, phd

Radu Băncilă was born in Timișoara in April 1945. He graduated the “Nikolaus Lenau” High School in 1962 (German language). Absolvent of the Faculty of Civil Engineering in 1967, he went through all the teaching steps, becoming a university professor in 1993. He defended his doctorate in 1981 (PhD. supervisor – Acad. Prof. D. Mateescu). His didactic activity took place in the field of steel constructions and steel bridges at the Faculty for Civil Engineering within the Politehnica University of Timișoara (UPT). Since 2021 he is Professor Emeritus UPT. He became PhD supervisor in 1997; at present are eight doctors with a diploma and four in internships. Professor Băncilă has a rich scientific and technical activity of design and research, in the fields: Steel Constructions and Bridges, with 110 papers printed in prestigious publications – 10 specialized books, 4 in English, 2 in German (Springer Verlag). He was vice-dean and later dean (2004 – 2008), at the Faculty for Civil Engineering Timișoara. He is the initiator and coordinator of the German Teaching branch in Civil Engineering (founded in 1991) and has realized a double degree program with the Technical University of Munich (TUM). Currently, the German Teaching branch has 340 graduates, of which 30 with a double TUM/UPT diploma. He is an expert and checking engineer of the Railway and Highway Administration in the field of bridges. Professor Băncilă has an intense interdisciplinary activity, being since 1998 Lecturer at ASR (Romanian Welding Society)



and ISIM (National Institute for Welding and Material Testing) for the course International Welding Engineer (IWE) and Designer of Welded Metal Constructions (IWS). He participated in the organization of courses in Serbia, Turkey, Republic of Moldova. The most important recognitions of his didactic and educational performances are highlighted: the Silver (2000) and gold (2018) distinction of TU Muenchen, Honorary Professor of the University of PECS – 2006, Professor Emeritus of UPT (2012), the German Federal Cross of Merit – first class (2012), ASR Medal “C. Miklosi” – 2018. He is an honorary

citizen of the tourist resort Bran – Brașov, where the Băncilă family comes from. He is an honorary member of the Romanian Academy of Technical Sciences – ASTR (June 2019).

For his whole activity he was granted with the prestigious “Traian Vuia” price for “Engineering Sciences”, in the frame of the “Banat Excellence Gala, in December 2020. The research conducted within the paper presented at TIMTED 2019 International Conference was supported by a grant of the Romanian National Authority for Scientific Research and Innovation, CNCS-UEFISCDI, project number, PN-II-RU-TE-2014-4-1760, project entitled “The impact of the economic and financial stability on investments, innovation process and entrepreneurial activity in the EU” (Director, Prof. Claudiu ALBULESCU). The paper is accepted for publication in “Environmental Science and Pollution Research”.



Banat Excellence Gala, in 2020 - The Romanian Academy Award Prof.Viorel Aurel ȘERBAN, phd

In order to highlight the work of the Banat elites, the Gala of Excellence was born, which took the model of the Nobel Prize. The event reached its 7th edition, which aims at promoting the values of Timisoara, Banat and the Western region, while supporting the culture of excellence." The Banat Excellence Gala awards 10 awards every year to ten recognized and appreciated personalities of Banat and the Western Region. On 19 December 2020, this time online on the Internet, the 2020 Banat Excellence Gala took place, being linked to the most important historical moment of the contemporary history of Timisoara, that is the December 1989 Revolution. Among the winners of this edition is Prof.Dr.eng. Viorel-Aurel Serban , who was awarded the Romanian Academy Award. The jury was comprised of Acad. Dan Dubina, Assoc.prof.dr.eng. Florin Dragan, from the Politehnica University of Timisoara, Univ.prof.dr. Marilen Gabriel Pirtea, from the West University of Timisoara, Prof. Octavian Cretu, from the "Victor Babes" University of Medicine and Pharmacy of Timisoara, Prof. Cosmin Popescu, from the "King Mihai I of Romania" University of Agricultural Science and Veterinary Medicine of Banat, Timisoara. Professor Viorel-Aurel Serban is a graduate of the „Traian Vuia”



Polytechnic Institute, Faculty of Mechanical Engineering, specialization of Machinery Technology, class of 1978. In 1992 he obtained his PhD in Materials Science and became a lecturer, an associate professor in 1996, and a university professor in 2000. He is a PhD tutor in his field of study, with 20 doctoral graduates. He has participated in over 65 research agreements (in 18 as Director/Coordinator) and has published, as sole author or co-author, over 250 research papers in technical journals, books and session volumes (87 in the ISI circuit) and 19 books and manuals.

Ever since 1996, he has also had a rich managerial activity, being vice-dean of the Faculty of Mechanical Engineering (1996-2004), Vice-rector of the University (2004-2012) and the Rector of the University (2012 - 2020). He was the Chairman of the Materials Engineering Committee of the CNATDCU (2012-2020). He was awarded the Doctor Honoris Causa title by the Obuda University of Budapest (2018), by the Polytechnic University of Bucharest (2020), as well as the "Acad. Corneliu Miklosi" Medal, by the Romanian Wwelding Association. In 2021, Prof. Viorel Aurel Serban was elected a Corresponding Member of the Romanian Academy of Technical Sciences.



The Politehnica University of Timisoara awards excellence

Faithful to the tradition it started in 2016 and followed each year ever since, during Christmas parties, The Politehnica University of Timisoara has once again awarded excellence in the field of research, in appreciation of efforts carried out by Master and doctoral students, as well as of young scientists with most scientific papers published in internationally known journals. Along with a certificate and a plaque, prizes included a supporting grant in the amount of 1000 Euro, out of the University's own funding sources.

Since, because of the pandemic situation, the University's Christmas party could not be held, the management team of the university has decided to keep the tradition, on December 15th 2020, in the form of a small festive gathering, in the Christmas spirit, around the decorated Christmas tree in the main hall of the University Library. Christmas carols sung by the University's choir added to the atmosphere.

Here are the most significant moments of the celebration:



- The Rector of the UPT, Assoc.prof.dr.eng. Florin Drăgan, offered a special award called "The Centennial Award", established on the occasion of the 100 years celebration of the University, to **Acad. Ion Boldea**, a true role model for all academics, for excellence in teaching and research.



- Univ.Prof.dr.eng. Liviu Marșavina, Vicerector of the UPT, offered the award "Excellence in Research", in the category of young researchers under the age of 40, to **Prof.dr.eng. Bogdan Groza**.

- Assoc.prof.dr.eng. Alina Dumitreț, Vicerector of the UPT, offered the award "Excellence in Research" in the master students category, to **Delia Anca Boțilă**.

- Univ.Prof.dr.eng. Radu-Emil Precup, Director of the Doctoral Studies Council, offered the award "Excellence in Research", in the category of doctoral students, to **Melinda Vajda**.



12th European Exhibition of Creativity and Innovation “EUROINVENT 2020” Iasi, online edition 21-23 May 2020 Multiple medals for Politehnica University Timisoara

Politehnica University of Timisoara participated in the EUROINVENT 2020 International Exhibition (virtual edition), from 21 to 23 May 2020, with 20 inventions, research projects, educational programmes, PhD theses, teaching stands and even weekend inventions, obtaining 32 awards and diplomas, as follows: 8 gold medals, 7 silver medals, 2 bronze medals, 3 diplomas of excellence and 12 special awards. Politehnica University of Timisoara was also awarded the EUROINVENT 2020 Popularity Award, given for the diversity, applicability and innovative spirit of the inventions presented at the EUROINVENT 2020 International Exhibition.

The international jury of the EUROINVENT 2020 exhibition have appreciated the following aspects:

- The diversity, novelty, applicability and environmental impact of the 20 inventions, research projects, educational programs, PhD theses, teaching stands and weekend inventions of the team of the Politehnica University of Timisoara;
- The international collaboration of UPT researchers with academic institutions and businesses for the development and implementation of the research projects;
- Recycling of ferrous materials, i.e. municipal pulverous waste, with an impact on the environment;
- Collaboration of the Politehnica University of Timisoara with the CorneliuGroup Association in the educational program “DEXTER’s Laboratory” in order to involve and support UPT students for the realization of the didactic stands;
- Increase in the performance of DRIFT cars by implementing Super Suction Air Filters (ECODrift programme) to reduce fuel consumption and pollutant emissions;
- Realization and development of products in the Weekend Inventions category (SeptoBirCor disinfectant, AIR by CORNELIU soap) in order to prevent and combat the spread of Coronavirus.

1. Cylindrical multi-hollow briquette produced of ferrous pulverous waste

- Inventors: Teodor HEPUI, Eugen CRIȘAN, Erika ARDELEAN, Ana SOCALICI, Marius ARDELEAN
- Diploma of gold medal
- University Politehnica of Bucharest bestows Excellence Innovation Award

2. Method for treatment of municipal solid waste incineration residues by stabilization/solidification into fly ash rock

- Inventors: Reinhold WÄCHTER, Ioana IONEL, Adina NEGREA
- Diploma of gold medal
- University Politehnica of Bucharest bestows Excellence Innovation Award

3. Project: Novel modular stack design for high PREssure PEM water elecTrolyzer tEchnoLogy with wide operation range and reduced cost PRETZEL

- Partners: German Aerospace Center, Stuttgart, Germany, Westphalian University of Applied Sciences, Gelsenkirchen, Germany Armines, France, Politehnica University Timisoara, Romania, Adamant Composites Ltd., Greece, GKN Sinter Metals Filters GmbH, Germany, Centre for Research and Technology Hellas, Thessaloniki, Greece, Soluciones Catalíticas IBERCAT S. L., Madrid, Spain, iGas energy GmbH, Germany

- Diploma of Gold Medal
- Technical University Cluj-Napoca confers “Special Prize”



The 24th International Exhibition of Inventions "INVENTICA 2020" Iasi, online edition, 29-31 July 2020 Multiple medals for Politehnica University Timisoara

The Politehnica University of Timisoara has participated in the International Exhibition INVENTICA 2020 (online edition) with 27 inventions, research projects, doctoral theses, experimental teaching stands and even weekend inventions:

7 Special Awards; and 12 Medals Inventica 2020.

The international jury at INVENTICA 2020 appreciated the following aspects:

- The real technological transfer capacity of UPT inventions in the context of the current situation, in order to reduce the spread of the SARS-CoV-2 virus by implementing the "Device for reducing the microbiological load of exhaled air of mechanically ventilated patients" and the disinfectant "SeptoBirCor" (UPT won the special TECHNOLOGICAL TRANSFER AWARD).

- The environmental impact of UPT inventions based on recycling materials from the incineration of solid waste and waste from ferrous processing.

- The involvement of UPT students through the educational programme "DEXTER's Laboratory" - Corneliu Group Association in actions aimed at non-formal education in order to develop communication skills and improve practical skills.

- The applicability and novelty of the presented research projects carried out by UPT researchers in collaboration with businesses and similar academic institutions.

- The study of human behaviour in interaction with the environment, by monitoring information about the psychomotor level, intensity of cognitive, emotional and behavioural reactions of subjects to various stimuli, in real time or in a virtual situation.

1. In recognition of its high scientific contribution and loyalty to INVENTICA 2020, the Politehnica University of Timisoara received the Award for Technological Transfer.

2. Method for the treatment of municipal solid waste incineration waste by stabilization/solidification into fly ash rock

- Inventors: Reinhold WÄCHTER, Ioana IONEL, Adina NEGREA
- Diploma of Achievement, Inventica 2020

3. Experimental plant for resistance to

thermal fatigue

- Inventors: Camelia PINCA BRETOTEAN
- Diploma of Achievement, Inventica 2020

4. Cylindrical multi-hollow briquette produced of ferrous pulverous waste

- Inventors: Teodor HEPUȚ, Eugen CRIȘAN, Erika ARDELEAN, Ana SOCALICI, Marius ARDELEAN
- Diploma of Achievement, Inventica 2020
- Politehnica University of Bucharest bestows Gold Medal & Diploma for Innovation

5. Device for reducing the microbiological load of the air exhaled by mechanically ventilated patients

- Inventors: Laurențiu Valentin ORDODI, Gabriela Alina DUMITREL, Ana-Maria PANĂ, TODEA Anamaria, Liliana MĂȚIU-IOVAN, Raul Ciprian IONEL, Dorel SĂNDESC, Ovidiu Horea BEDREAG, Marius PĂPURICĂ, Alexandru Florin ROGOBETE, Ion SIMION, Alin MOTICA, Dan Sergiu GROAPĂ, Virgil PĂUNESCU, Maria Florina BOJIN, Oana Isabela GAVRILIUC
- Diploma of Achievement, Inventica 2020
- Politehnica University of Bucharest bestows Gold Medal & Diploma for Innovation

6. Novel modular stack design for high PRESSURE PEM water electrolyzer technology with wide operation range and reduced cost (PRETZEL)

- Inventors: German Aerospace Center, Stuttgart, Germany, Westphalian University of Applied Sciences, Gelsenkirchen, Germany, Armines, France, Politehnica University Timisoara, Romania, Adamant Composites Ltd., Greece, GKN Sinter Metals Engineering GmbH, Germany, Centre for Research and Technology Hellas, Thessaloniki, Greece, Soluciones Catalíticas IBERCAT S. L., Madrid, Spain, iGas energy GmbH, Germany
- Diploma of Excellence, Medal Inventica 2020



The International Exhibition of Inventions and Innovations “TRAIAN VUIA” Timișoara, sixth edition, online 13 - 15 October 2020 Multiple medals for the Politehnica University of Timisoara

The POLITEHNICA TIMIȘOARA UNIVERSITY team participated in the TRAIAN VUIA International Exhibition of Inventions and Innovations, 13-15.10.2020 Timisoara, with 34 inventions, research projects, educational programs, PhD theses, teaching stands and even weekend inventions.

The results obtained after the jury's deliberation are:

- 20 - Gold Medals
- 7 - Silver Medals
- 7 - Bronze Medals
- 8 - Special Prizes
- 11 - Diplomas of Excellence

1. Control method for an automatic capacitive compensator for power factor improvement and load balancing in three-phase four-conductor electrical networks

- Inventors: Adrian PANĂ
- Gold Medal
- Diploma of Excellence awarded by Continental

2. Electrical installation for disinfecting air and surfaces in public transportation

- Inventors: Ștefan PAVEL, Daniel-Viorel UNGUREANU, Alexandru BÎNZAR, Ancuța Letiția TUTELCĂ, Siviu Cristian SUCIU, Călin Marius POPOIU
- Gold Medal

3. Installation for remote monitoring of ground corrosion of zinc coated and uncoated metal constructions

- Inventors: Ștefan PAVEL, Daniel-Viorel UNGUREANU, Alexandru BÎNZAR, Aurel MOLDOVAN
- Gold Medal

4. Device for reducing the microbiological load of the air exhaled by mechanically ventilated patients

- Inventors: Laurențiu Valentin ORDODI, Gabriela Alina DUMITREL, Ana-Maria PANĂ, TODEA Anamaria, Liliana MĂȚIU-IOVAN, Raul Ciprian IONEL, Dorel SĂNDESC, Ovidiu Horea BEDREAG, Marius PĂPURICĂ, Alexandru Florin ROGOBETE, Ion SIMION, Alin MOTICA, Dan Sergiu GROAPĂ, Virgil PĂUNESCU, Maria Florina BOJIN, Oana Isabela GAVRILIUC
- Gold Medal

5. Experimental plant for resistance to thermal fatigue

- Inventors: Camelia PINCA BRETOTEAN
- Gold Medal

6. Intelligent control system for continuous casting based on water flow control in the secondary cooling

- Inventors: Gelu-Ovidiu TIRIAN
- Gold Medal
- Diploma of Excellence - Justin Capră Association



The International Exhibition of Scientific Research, Innovation and Invention “PRO INVENT 2020” Cluj-Napoca, 18th edition, online, 18-20 November 2020 Multiple medals for the Politehnica University of Timisoara

The theme of the fair was related to innovative materials, processes and products (energy, environment, health, agriculture, resources, etc.). Graphic presentations, accompanied by models, prototypes, finished products, series products, video presentations, as well as data on the social and financial impact of the work were appreciated by the jury.

The jury appreciated the diversity, adaptability and practical applicability of the inventions presented by the UPT team, led by Corneliu Birtok-Băneasă, Ph.D., Senior Lecturer.

- Cylindrical multi-hollow briquette produced of ferrous pulverous waste
 - Inventors: Teodor HEPUȚ, Eugen CRIȘAN, Erika ARDELEAN, Ana SOCALICI, Marius ARDELEAN
 - Diploma of excellence and gold medal
- Device for reducing the microbiological load of air exhaled by mechanically ventilated patients
 - Inventors: Laurențiu Valentin ORDODI, Gabriela Alina DUMITREL, Ana-Maria PANĂ, TODEA Anamaria, Liliana MĂȚIU-IOVAN, Raul Ciprian IONEL, Dorel SĂNDESC, Ovidiu Horea BEDREAG, Marius PĂPURICĂ, Alexandru Florin ROGOBETE, Ion SIMION, Alin MOTICA, Dan Sergiu GROAPĂ, Virgil PĂUNESCU, Maria Florina BOJIN, Oana Isabela GAVRILIU
 - Diploma of excellence and gold medal
- Process for the synthesis of silver nanowires coated with low-melting-point metal nanoparticles
 - Inventors: Radu Nicolae BĂNICĂ, Andrea Rozalia KELLENBERGER, Daniel Horațiu URȘU, Liliana CSEH, Petrică Andrei LINUL, Nicolae VASZILCSIN
 - Diploma of excellence and gold medal
- Control method for an automatic capacitive compensator meant to improve the power factor and to load balancing in three-phase four-wire electrical networks
 - Inventors: Adrian PANĂ
 - Diploma of excellence and gold medal
- Technologic procedure for encapsulation of municipal solid waste incineration residue into coal fly ash rock matrix
 - Inventors: Mihail Reinhold WÄCHTER, Ioana IONEL, Adina Georgeta NEGREA
 - Diploma of excellence and gold medal
- Intelligent control system for continuous casting based on water flow control in the secondary cooling
 - Inventors: Gelu-Ovidiu TIRIAN
 - Diploma of excellence and gold medal
- Development of Experimental Laboratory of Applied Ergonomics
 - Inventors: Mihaela POPA, Marcel TOPOR, Amalia DASCĂL
 - Diploma of excellence and gold medal
- Novel modular stack design for high PRessure PEM water elecTrolyZer tEchnoLogy with wide operation range and reduced cost (PRETZEL)
 - Inventors: German Aerospace Center, Stuttgart, Germany, Westphalian University of Applied Sciences, Gelsenkirchen, Germany, Armines, France, Politehnica University Timisoara, Romania, Adamant Composites Ltd., Greece, GKN Sinter Metals Engineering GmbH, Germany, Centre for Research and Technology Hellas, Thessaloniki, Greece, Soluciones Catalíticas IBERCAT S. L., Madrid, Spain, iGas energy GmbH, Germany
 - Diploma of excellence and gold medal



First International Exhibition “InventCor” Deva, online edition, 17-19.12.2020 Multiple medals for the Politehnica University of Timisoara

The online event brought together nearly two hundred and fifty inventions from 14 countries around the world. The creativity of the participants took many forms: from inventions and research projects to products, educational programmes and educational stands. Among the fields represented were environmental protection, agriculture, medicine, nanotechnology, aviation, art, cosmetics and mechanics. The most appreciated inventions were awarded prizes.

InventCor 2020 brought together universities, research institutes, companies and private inventors. The fair aimed to cultivate a spirit of innovation, especially among young people.

1. Sustaining the inventive spirit and promoting innovation and research at international level
 - Politehnica University Timisoara
 - Inventcor Special Prize
2. Cylindrical multi-hollow briquette produced of ferrous pulverous waste
 - Inventors: Teodor HEPUȚ, Eugen CRIȘAN, Erika ARDELEAN, Ana SOCALICI, Marius ARDELEAN
 - Gold medal - Diploma
3. Device for reducing the microbiological load of air exhaled by mechanically ventilated patients
 - Inventors: Laurențiu Valentin ORDODI, Gabriela Alina DUMITREL, Ana-Maria PANĂ, TODEA Anamaria, Liliana MĂȚIU-IOVAN, Raul Ciprian IONEL, Dorel SÂNDESC, Ovidiu Horea BEDREAG, Marius PĂPURICĂ, Alexandru Florin ROGOBETE, Ion SIMION, Alin MOTICA, Dan Sergiu GROAPĂ, Virgil PĂUNESCU, Maria Florina BOJIN, Oana Isabela GAVRILIU
 - Gold medal - Diploma
4. Experimental plant for resistance to thermal fatigue
 - Inventor: Camelia PINCA BRETOTEAN
 - Gold medal – Diploma
 - Antik Special Award
5. Method for treatment of municipal solid waste incineration residues by stabilization/solidification into fly ash rock
 - Inventors: Reinhold WÄCHTER, Ioana IONEL, Adina NEGREA
 - Gold medal - Diploma
6. Tubular briquette from powdery ferrous wastes
 - Inventors: Teodor HEPUȚ, Ana SOCALICI, Erika ARDELEAN, Marius ARDELEAN, Nicolae CONSTANTIN, Miron BUZDUGA, Radu BUZDUGA
 - Silver medal – Diploma
7. Process for the synthesis of silver nanowires coated with low-melting-point metal nanoparticles
 - Inventors: Radu Nicolae BĂNICĂ, Andrea Rozalia KELLENBERGER, Daniel Horațiu URUSU, Liliana CSEH, Petrică Andrei LINUL, Nicolae VASZILCSIN
 - Gold medal – Diploma
8. Control method for an automatic capacitive compensator meant to improve the power factor and to load balancing in three-phase four-wire electrical networks
 - Inventor: Adrian PANĂ
 - Gold medal – Diploma
9. Novel modular stack design for high PRESSure PEM water elecTrolyzer tEchnoLoGy with wide operation range and reduced cost (PRETZEL)
 - Inventors: German Aerospace Center, Stuttgart, Germany, Westphalian University of Applied Sciences, Gelsenkirchen, Germany, Armines, France, Politehnica University Timisoara, Romania, Adamant Composites Ltd., Greece, GKN Sinter Metals Engineering GmbH, Germany, Centre for Research and Technology Hellas, Thessaloniki, Greece, Soluciones Catalíticas IBERCAT S. L., Madrid, Spain, iGas energy GmbH, Germany
 - Gold medal – Diploma
10. New Nature-Inspired Cycloidal Propeller for Low-Reynolds-Number Hovering Flight
 - Inventors: Francisc BERECZKY, Ioan SILEA
 - Diploma Inventcor: Popularity award

EXECUTIVE UNIT FOR FINANCING HIGHER EDUCATION, RESEARCH, DEVELOPMENT AND INNOVATION - UEFISCDI AWARDS - ARTICLES

Through these awards UEFISCDI aims to increase quality, impact and international visibility of Romanian research by recognizing and rewarding significant results published in prestigious journals from international senior scientific stream.

Within this competition can participate the researchers affiliated to institutions in Romania, authors of scientific articles published in journals indexed by Clarivate Analytics Science Citation Index Expanded ("Science"), Social Sciences Citation Index ("Social Sciences") or Arts & Humanities Citation Index ("Arts & Humanities").

More information at <http://uefiscdi.gov.ro/Public/cat/471/Premierea-rezultatelor-cercetarii.html>

1. Albulescu, C.T., Demirel, R., Raheem, I.D., Tiwari, A.K. Does the US economic policy uncertainty connect financial markets? Evidence from oil and commodity currencies, *ENERGY ECONOMICS*, Volume: 83, Pages: 375–388, ISSN: 0140-9883, eISSN: 1873-6181, 2019;
2. Albulescu, C.T., Tiwari, A.K., Yoon, S.M., Kang, S.H. FDI, income, and environmental pollution in Latin America: Replication and extension using panel quantiles regression analysis, *ENERGY ECONOMICS*, Volume: 84, Article Number: UNSP 104504, ISSN: 0140-9883, eISSN: 1873-6181, 2019;
3. Anghel, A.A., Mohora, I., Preda, A.D., Giurea, D., Frigura-Iliasa, F.M. ENVIRONMENTAL TENDENCIES IN MODULAR GREEN INSTALLATIONS, *JOURNAL OF GREEN BUILDING*, Volume: 14, Issue: 4, Pages: 197–221, ISSN: 1552-6100, eISSN: 1943-4618, 2019;
4. Berezky, F., Silea, I. New Nature-Inspired Cycloidal Propeller for Low-Reynolds-Number Hovering Flight, *AIAA JOURNAL*, Volume: 57, Issue: 9, Pages: 3791–3800, ISSN: 0001-1452, eISSN: 1533-385X, 2019;
5. Cioca, L.I., Ivascu, L., Turi, A., Artene, A., Gaman, G.A. Sustainable Development Model for the Automotive Industry, *SUSTAINABILITY*, Volume: 11, Issue: 22, Article Number: 6447, eISSN: 2071-1050, 2019;
6. Cismas, E.C., Lupa, N. A Nash-Moser approach for the Euler-Arnold equations, *MONATSHEFTE FÜR MATHEMATIK*, Volume: 192, Issue: 2, Pages: 333–353, ISSN: 0026-9255, eISSN: 1436-5081, 2019;
7. Cristea, M., Baul, B., Ledeti, I., Ledeti, A., Vlase, G., Vlase, T., Karolewicz, B., Stefanescu, O., Dragomirescu, A.O., Muresan, C., Cipu, D.S., Velimirovici, D., Stefanescu, M. Preformulation studies for atorvastatin calcium An instrumental approach, *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, Volume: 138, Issue: 4, Pages: 2799–2806, ISSN: 1388-6150, eISSN: 1588-2926, 2019;
8. David, I., Orboi, M.D., Simandi, M.D., Chirila, C.A., Megyesi, C.I., Radulescu, L., Draghia, L.P., Lukinich-Gruia, A.T., Muntean, C., Hadaruga, D.I., Hadaruga, N.G. Fatty acid profile of Romanian's common bean (*Phaseolus vulgaris* L.) lipid fractions and their complexation ability by beta-cyclodextrin, *PLOS ONE*, Volume: 14, Issue: 11, Article Number: e0225474, PubMed ID: 31756198, ISSN: 1932-6203, 2019;
9. Fagadar-Cosma, E., Vlascici, D., Birdeanu, M., Fagadar-Cosma, G. Novel fluorescent pH sensor based on 5-(4-carboxy-phenyl)-10,15,20-tris(phenyl)-porphyrin, *ARABIAN JOURNAL OF CHEMISTRY*, Volume: 12, Issue: 7, Pages: 1587–1594, ISSN: 1878-5352, eISSN: 1878-5379, 2019;
10. Frigura-Iliasa, F.M., Musuroi, S., Sorandaru, C., Vatau, D. New Technical Parameters and Operational Improvements of the Metal Oxide Varistors Manufacturing Process, *PROCESSES*, Volume: 7, Issue: 1, Article Number: 18, ISSN: 2227-9717, 2019;
11. Golban, A., Lupa, L., Cocheci, L., Pode, R. Synthesis of MgFe Layered Double Hydroxide from Iron-Containing Acidic Residual Solution and Its Adsorption Performance, *CRYSTALS*, Volume: 9, Issue: 10, Article Number: 514, ISSN: 2073-4352, 2019;
12. Groza, B., Murvay, P.S. Identity-Based Key Exchange on In-Vehicle Networks: CAN-FD & FlexRay, *SENSORS*, Volume: 19, Issue: 22, Article Number: 4919, PubMed ID: 31718110, eISSN: 1424-8220, 2019;
13. Istrate, R., Stoia, M., Pacurariu, C., Locovei, C. Single and simultaneous adsorption of methyl orange and phenol onto magnetic iron oxide/carbon nanocomposites, *ARABIAN JOURNAL OF CHEMISTRY*, Volume: 12, Issue: 8, Pages: 3704–3722, ISSN: 1878-5352, eISSN: 1878-5379, 2019;

No.

UEFISCDI Awards

14. Kang, S.H., Tiwari, A.K., Albulescu, C.T., Yoon, S.M. Exploring the time-frequency connectedness and network among crude oil and agriculture commodities V1, *ENERGY ECONOMICS*, Volume: 84, Article Number: UNSP 104543, ISSN: 0140-9883, eISSN: 1873-6181, 2019;
15. Miclau, M., Kumar, S., Ursu, D., Orha, C., Miclau, N., Rueff, J.M., Malo, S., Martin, C. Ag₂CrO₄ for photocatalytic applications: High performance of crystals designed by autogenous pressure, *MATERIALS CHARACTERIZATION*, Volume: 158, Article Number: 109970, ISSN: 1044-5803, eISSN: 1873-4189, 2019;
16. Mosoarca, M., Onescu, I., Onescu, E., Azap, B., Chieffo, N., Szitar-Sirbu, M. Seismic vulnerability assessment for the historical areas of the Timisoara city, Romania, *ENGINEERING FAILURE ANALYSIS*, Volume: 101, Pages: 86-112, ISSN: 1350-6307, eISSN: 1873-1961, 2019;
17. Motoc, S., Cretu, C., Costisor, O., Baci, A., Manea, F., Szerb, E.I. Cu(I) Coordination Complex Precursor for Randomized CuOx Microarray Loaded on Carbon Nanofiber with Excellent Electrocatalytic Performance for Electrochemical Glucose Detection, *SENSORS*, Volume: 19, Issue: 24, Article Number: 5353, PubMed ID: 31817245, eISSN: 1424-8220, 2019;
18. Motoc, S., Manea, F., Orha, C., Pop, A. Enhanced Electrochemical Response of Diclofenac at a Fullerene-Carbon Nanofiber Paste Electrode, *SENSORS*, Volume: 19, Issue: 6, Article Number: 1332, PubMed ID: 30884875, ISSN: 1424-8220, 2019;
19. Nicola, R., Costisor, O., Muntean, S.G., Nistor, M.A., Putz, A.M., Ianasi, C., Lazau, R., Almasy, L., Sacarescu, L. Mesoporous magnetic nanocomposites: a promising adsorbent for the removal of dyes from aqueous solutions, *JOURNAL OF POROUS MATERIALS*, Volume: 27, Issue: 2, Pages: 413-428, ISSN: 1380-2224, eISSN: 1573-4854, 2019;
20. Sarbu, I., Mirza, M., Crasmareanu, E. A review of modelling and optimisation techniques for district heating systems, *INTERNATIONAL JOURNAL OF ENERGY RESEARCH*, Volume: 43, Issue: 13, Pages: 6572-6598, ISSN: 0363-907X, eISSN: 1099-114X, 2019;
21. Scorza, D., Marsavina, L., Carpinteri, A., Ronchei, C., Vantadori, S. Size-effect independence of particleboard fracture toughness, *COMPOSITE STRUCTURES*, Volume: 229, Article Number: UNSP 111374, ISSN: 0263-8223, eISSN: 1879-1085, 2019;
22. Sorandaru, C., Musuroi, S., Friguta-Iliasa, F.M., Vatau, D., Dordescu, M. Analysis of the Wind System Operation in the Optimal Energetic Area at Variable Wind Speed over Time, *SUSTAINABILITY*, Volume: 11, Issue: 5, Article Number: 1249, ISSN: 2071-1050, 2019;
23. Stoia, D.I., Marsavina, L., Linul, E. Correlations between Process Parameters and Outcome Properties of Laser-Sintered Polyamide, *POLYMERS*, Volume: 11, Issue: 11, Article Number: 1850, PubMed ID: 31717539, eISSN: 2073-4360, 2019;
24. Tanasa, C., Bosioc, A., Muntean, S., Susan-Resiga, R. A Novel Passive Method to Control the Swirling Flow with Vortex Rope from the Conical Diffuser of Hydraulic Turbines with Fixed Blades, *APPLIED SCIENCES-BASEL*, Volume: 9, Issue: 22, Article Number: 4910, eISSN: 2076-3417, 2019;
25. Voda, M., Codrean, C., Chicot, D., Serban, V.A., Utu, D., Linul, E., Buzdugan, D. Characterization of brazed joints by electrical resistance spot brazing with Ni-based amorphous self-flux alloys, *JOURNAL OF MANUFACTURING PROCESSES*, Volume: 37, Pages: 617-627, ISSN: 1526-6125, 2019;
26. Ahmed, S.E., San, O., Bistrieanu, D.A., Navon, I.M. Sampling and resolution characteristics in reduced order models of shallow water equations: Intrusive vs nonintrusive, *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*, Volume: 92, Issue: 8, Pages: 992-1036, ISSN: 0271-2091, eISSN: 1097-0363, 2020;
27. Albulescu, C.T., Artene, A.E., Luminosu, C.T., Tamasila, M. CO₂ emissions, renewable energy, and environmental regulations in the EU countries, *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*, Volume: 27, Issue: 27, Pages: 33615-33635, PubMed ID: 31473925, ISSN: 0944-1344, eISSN: 1614-7499, 2020;
28. Albulescu, C.T., Tiwari, A.K., Ji, Q. Copula-based local dependence among energy, agriculture and metal commodities markets, *ENERGY*, Volume: 202, Article Number: 117762, ISSN: 0360-5442, eISSN: 1873-6785, 2020;
29. Ancuti, C., Ancuti, C.O., De Vleeschouwer, C., Bovik, A.C. Day and Night-Time Dehazing by Local Airlight Estimation, *IEEE TRANSACTIONS ON IMAGE PROCESSING*, Volume: 29, Pages: 6264-6275, PubMed ID: 32340946, ISSN: 1057-7149, eISSN: 1941-0042, 2020;

No.

UEFISCDI Awards

30. Ancuti, C.O., Ancuti, C., De Vleeschouwer, C., Sbert, M. Color Channel Compensation (3C): A Fundamental Pre-Processing Step for Image Enhancement, IEEE TRANSACTIONS ON IMAGE PROCESSING, Volume: 29, Pages: 2653-2665, PubMed ID: 31751271, ISSN: 1057-7149, eISSN: 1941-0042, 2020;
31. Ancuti, M.C., Musuroi, S., Sorandaru, C., Dordescu, M., Erdodi, G.M. Wind Turbines Optimal Operation at Time Variable Wind Speeds, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 12, Article Number: 4232, eISSN: 2076-3417, 2020;
32. Apopei, P., Orha, C., Popescu, M.I., Lazau, C., Manea, F., Catrinescu, C., Teodosiu, C. Diclofenac removal from water by photocatalysis- assisted filtration using activated carbon modified with N-doped TiO₂, PROCESS SAFETY AND ENVIRONMENTAL PROTECTION, Volume: 138, Pages: 324-336, ISSN: 0957-5820, eISSN: 1744-3598, 2020;
33. Artene, A., Bunget, O.C., Dumitrescu, A.C., Domil, A.E., Bogdan, O. Non-Financial Information Disclosures and Environmental Protection- Evidence from Romania and Greece, FORESTS, Volume: 11, Issue: 8, Article Number: 814, eISSN: 1999-4907, 2020;
34. Arvinti, B., Isar, A., Stolz, R., Costache, M. REMOVAL OF REPETITIVE MAGNETIC INTERFERENCES UPON UNSHIELDED FETAL MAGNETOCARDIOGRAMS, ROMANIAN REPORTS IN PHYSICS, Volume: 72, Issue: 3, Article Number: 607, ISSN: 1221-1451, eISSN: 1841-8759, 2020;
35. Bauer, M., Bruveris, M., Cismas, E., Escher, J., Kolev, B. Well-posedness of the EPDiff equation with a pseudo-differential inertia operator, JOURNAL OF DIFFERENTIAL EQUATIONS, Volume: 269, Issue: 1, Pages: 288-325, ISSN: 0022-0396, eISSN: 1090-2732, 2020;
36. Biba, D.R., Ancuti, M.C., Ianovici, A., Sorandaru, C., Musuroi, S. Power Supply Platform and Functional Safety Concept Proposals for a Powertrain Transmission Electronic Control Unit, ELECTRONICS, Volume: 9, Issue: 10, Article Number: 1580, eISSN: 2079-9292, 2020;
37. Boncalo, O., Amaricai, A., Lendek, Z. Fault Tolerant Digital Data-Path Design via Control Feedback Loops, ELECTRONICS, Volume: 9, Issue: 10, Article Number: 1721, eISSN: 2079-9292, 2020;
38. Borlea, A., Borcan, F., Sporea, I., Dehelean, C.A., Negrea, R., Cotoi, L., Stoian, D. TI-RADS Diagnostic Performance: Which Algorithm is Superior and How Elastography and 4D Vascularity Improve the Malignancy Risk Assessment, DIAGNOSTICS, Volume: 10, Issue: 4, Article Number: 180, PubMed ID: 32225078, eISSN: 2075-4418, 2020;
39. Bosioc, A.I., Tanasa, C. Experimental study of swirling flow from conical diffusers using the water jet control method, RENEWABLE ENERGY, Volume: 152, Pages: 385-398, ISSN: 0960-1481, 2020;
40. Bota, C., Caruntu, B., Tucu, D., Lapadat, M., Pasca, M.S. A Least Squares Differential Quadrature Method for a Class of Nonlinear Partial Differential Equations of Fractional Order, MATHEMATICS, Volume: 8, Issue: 8, Article Number: 1336, eISSN: 2227-7390, 2020;
41. Bucur, A.I., Linul, E., Taranu, B.O. Hydroxyapatite coatings on Ti substrates by simultaneous precipitation and electrodeposition, APPLIED SURFACE SCIENCE, Volume: 527, Article Number: 146820, ISSN: 0169-4332, eISSN: 1873-5584, 2020;
42. Buda, V., Baul, B., Andor, M., Man, D.E., Ledeti, A., Vlase, G., Vlase, T., Danciu, C., Matusz, P., Peter, F., Ledeti, I. Solid State Stability and Kinetics of Degradation for Candestartan-Pure Compound and Pharmaceutical Formulation, PHARMACEUTICS, Volume: 12, Issue: 2, Article Number: 86, PubMed ID: 31972960, eISSN: 1999-4923, 2020;
43. Buncianu, D., Tessier-Doyen, N., Absi, J., Negru, R., Serban, D.A., Marsavina, L. Multi-Scale Mechanical Behaviour of a Highly Porous Alumina Based Foam, METALS AND MATERIALS INTERNATIONAL, Volume: 26, Issue: 10, Pages: 1524-1532, ISSN: 1598-9623, eISSN: 2005-4149, 2020;
44. Buriac, O., Ciopec, M., Duteanu, N., Negrea, A., Negrea, P., Grozav, I. Platinum (IV) Recovery from Waste Solutions by Adsorption onto Dibenzo-30-crown-10 Ether Immobilized on Amberlite XAD7 Resin-Factorial Design Analysis, MOLECULES, Volume: 25, Issue: 16, Article Number: 3692, PubMed ID: 32823592, eISSN: 1420-3049, 2020;
45. Busoni, L., Varna, V.S., Loheac, J., Codrean, A., Stefan, O., Morarescu, I.C., Lasaulce, S. Learning control for transmission and navigation with a mobile robot under unknown communication rates, CONTROL ENGINEERING PRACTICE, Volume: 100, Article Number: 104460, ISSN: 0967-0661, eISSN: 1873-6939, 2020;

No.

UEFISCDI Awards

46. Cadariu, L., Popa, D., Rasa, I. Ulam Stability of a Second Linear Differential Operator with Nonconstant Coefficients, SYMMETRY-BASEL, Volume: 12, Issue: 9, Article Number: 1451, eISSN: 2073-8994, 2020;
47. Capota, E.A., Stangaciu, C.S., Micea, M.V., Curiac, D.I. Towards Fully Jitterless Applications: Periodic Scheduling in Multiprocessor MCSs Using a Table-Driven Approach, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 19, Article Number: 6702, eISSN: 2076-3417, 2020;
48. Chirita-Emandi, A., Andreescu, N., Zimbru, C.G., Tutac, P., Arghirescu, S., Serban, M., Puiu, M. Challenges in reporting pathogenic/potentially pathogenic variants in 94 cancer predisposing genes - in pediatric patients screened with NGS panels, SCIENTIFIC REPORTS, Volume: 10, Issue: 1, Article Number: 223, PubMed ID: 31937788, ISSN: 2045-2322, 2020;
49. Ciopec, M., Gabor, A., Davidescu, C.M., Negrea, A., Negrea, P., Duteanu, N. Eu(III) removal by tetrabutylammonium di-hydrogen phosphate (TBAH2P) functionalized polymers, ARABIAN JOURNAL OF CHEMISTRY, Volume: 13, Issue: 1, Pages: 3534-3545, ISSN: 1878-5352, eISSN: 1878-5379, 2020;
50. Cividino, S., Halbac-Cotoara-Zamfir, R., Salvati, L. Revisiting the "City Life Cycle": Global Urbanization and Implications for Regional Development, SUSTAINABILITY, Volume: 12, Issue: 3, Article Number: 1151, eISSN: 2071-1050, 2020;
51. Cochechi, L., Lupa, L., Tolea, N.S., Muntean, C., Negrea, P. Sequential use of ionic liquid functionalized Zn-Al layered double hydroxide as adsorbent and photocatalyst, SEPARATION AND PURIFICATION TECHNOLOGY, Volume: 250, Article Number: 117104, ISSN: 1383-5866, eISSN: 1873-3794, 2020;
52. Cornea, O., Hulea, D., Muntean, N., Andreescu, G.D. Step-Down Switched-Inductor Hybrid DC-DC Converter for Small Power Wind Energy Conversion Systems With Hybrid Storage, IEEE ACCESS, Volume: 8, Pages: 136092-136107, ISSN: 2169-3536, 2020;
53. Covaci, C., Gontean, A. Piezoelectric Energy Harvesting Solutions: A Review, SENSORS, Volume: 20, Issue: 12, Article Number: 3512, PubMed ID: 32575888, eISSN: 1424-8220, 2020;
54. Craciunescu, C.M., Kohl, M., Ercuta, A. Micro-actuation design in VO₂-based bimorph cantilevers, SMART MATERIALS AND STRUCTURES, Volume: 29, Issue: 11, Article Number: 115035, ISSN: 0964-1726, eISSN: 1361-665X, 2020;
55. Croitoru, C., Pop, M.A., Bedo, T., Cosnita, M., Roata, I.C., Hulka, I. Physically Crosslinked Poly (Vinyl Alcohol)/Kappa-Carrageenan Hydrogels: Structure and Applications, POLYMERS, Volume: 12, Issue: 3, Article Number: 560, PubMed ID: 32138357, eISSN: 2073-4360, 2020;
56. Croitoru, C., Roata, I.C., Pascu, A., Stanciu, E.M., Hulka, I., Stoian, G., Lupu, N. Photocatalytic surfaces obtained through one-step thermal spraying of titanium, APPLIED SURFACE SCIENCE, Volume: 504, Article Number: 144173, ISSN: 0169-4332, eISSN: 1873-5584, 2020;
57. Don, R., Ciutina, A., Vulcu, C., Stratan, A. Seismic-resistant slim-floor beam-to-column joints: experimental and numerical investigations, STEEL AND COMPOSITE STRUCTURES, Volume: 37, Issue: 3, Pages: 307-321, ISSN: 1229-9367, eISSN: 1598-6233, 2020;
58. Dragicevic, D., Pecek, N.J., Lupa, N. Admissibility and general dichotomies for evolution families, ELECTRONIC JOURNAL OF QUALITATIVE THEORY OF DIFFERENTIAL EQUATIONS, Issue: 58, Pages: 1-19, ISSN: 1417-3875, 2020;
59. Dragomir, G.M., Cernicova-Buca, M., Gherhes, V., Cismariu, L. Engineering Students' Human Values as Rhizomatic Lines of Sustainability, SUSTAINABILITY, Volume: 12, Issue: 18, Article Number: 7417, eISSN: 2071-1050, 2020;
60. Dumitru, R., Negrea, S., Ianculescu, A., Pacurariu, C., Vasile, B., Surdu, A., Manea, F. Lanthanum Ferrite Ceramic Powders: Synthesis, Characterization and Electrochemical Detection Application, MATERIALS, Volume: 13, Issue: 9, Article Number: 2061, PubMed ID: 32365678, eISSN: 1996-1944, 2020;
61. Egidi, G., Halbac-Cotoara-Zamfir, R., Cividino, S., Quaranta, G., Salvati, L., Colantoni, A. Rural in Town: Traditional Agriculture, Population Trends, and Long-Term Urban Expansion in Metropolitan Rome, LAND, Volume: 9, Issue: 2, Article Number: 53, eISSN: 2073-445X, 2020;
62. Ene, R.D., Pop, C., Petrisor, C. Systematic Review of Geometrical Approaches and Analytical Integration for Chen's System, MATHEMATICS, Volume: 8, Issue: 9, Article Number: 1530, eISSN: 2227-7390, SEP 2020;

No.

UEFISCDI Awards

63. Epasto, G., Distefano, F., Gu, L.X., Mozafari, H., Linul, E. Design and optimization of Metallic Foam Shell protective device against flying ballast impact damage in railway axles, *MATERIALS & DESIGN*, Volume: 196, Article Number: 109120, ISSN: 0264-1275, eISSN: 1873-4197, 2020;
64. Fagadar-Cosma, E., Plesu, N., Lascu, A., Anghel, D., Cazacu, M., Ianasi, C., Fagadar-Cosma, G., Fratilescu, I., Epuran, C. Novel Platinum-Porphyrin as Sensing Compound for Efficient Fluorescent and Electrochemical Detection of H₂O₂, *CHEMOSENSORS*, Volume: 8, Issue: 2, Article Number: 29, eISSN: 2227-9040, 2020;
65. Fiedler, T., Al-Sahlani, K., Linul, P.A., Linul, E. Mechanical properties of A356 and ZA27 metallic syntactic foams at cryogenic temperature, *JOURNAL OF ALLOYS AND COMPOUNDS*, Volume: 813, Article Number: 152181, ISSN: 0925-8388, eISSN: 1873-4669, 2020;
66. Frigura-Iliasa, M., Baloi, F.I., Frigura-Iliasa, F.M., Simo, A., Musuroi, S., Andea, P. Health-Related Electromagnetic Field Assessment in the Proximity of High Voltage Power Equipment, *APPLIED SCIENCES-BASEL*, Volume: 10, Issue: 1, Article Number: 260, eISSN: 2076-3417, 2020;
67. Gherhes, V., Dragomir, G.M., Cernicova-Buca, M. Migration Intentions of Romanian Engineering Students, *SUSTAINABILITY*, Volume: 12, Issue: 12, Article Number: 4846, eISSN: 2071-1050, 2020;
68. Groza, B., Andreica, T., Berdich, A., Murvay, P.S., Gurban, E.H. PREStvO: PRivacy Enabled Smartphone Based Access to Vehicle On-Board Units, *IEEE ACCESS*, Volume: 8, Pages: 119105-119122, ISSN: 2169-3536, 2020;
69. Groza, B., Berdich, A., Jichici, C., Mayrhofer, R. Secure Accelerometer-Based Pairing of Mobile Devices in Multi-Modal Transport, *IEEE ACCESS*, Volume: 8, Pages: 9246-9259, ISSN: 2169-3536, 2020;
70. Groza, B., Popa, L., Murvay, P.S. Highly Efficient Authentication for CAN by Identifier Reallocation With Ordered CMACs, *IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY*, Volume: 69, Issue: 6, Pages: 6129-6140, ISSN: 0018-9545, eISSN: 1939-9359, 2020;
71. Gurban, D. Radial non-potential Dirichlet systems with mean curvature operator in Minkowski space, *POSITIVITY*, Volume: 25, Issue: 1, ISSN: 1385-1292, eISSN: 1572-9281, 2020;
72. Hadaruga, N.G., Szakal, R.N., Chirila, C.A., Lukinich-Gruia, A.T., Paunescu, V., Muntean, C., Rusu, G., Bujanca, G., Hadaruga, D.I. Complexation of Danube common nase (*Chondrostoma nasus* L.) oil by beta-cyclodextrin and 2-hydroxypropyl-beta-cyclodextrin, *FOOD CHEMISTRY*, Volume: 303, Article Number: 125419, PubMed ID: 31470276, ISSN: 0308-8146, eISSN: 1873-7072, 2020;
73. Halbac-Cotoara-Zamfir, R., Cividino, S., Egidi, G., Salvia, R., Salvati, L. Rapidity of Change in Population Age Structures: A Local Approach Based on Multiway Factor Analysis, *SUSTAINABILITY*, Volume: 12, Issue: 7, Article Number: 2828, eISSN: 2071-1050, 2020;
74. Halbac-Cotoara-Zamfir, R., Egidi, G., Mosconi, E.M., Poponi, S., Alhuseen, A., Salvati, L. Uncovering Demographic Trends and Recent Urban Expansion in Metropolitan Regions: A Paradigmatic Case Study, *SUSTAINABILITY*, Volume: 12, Issue: 9, Article Number: 3937, eISSN: 2071-1050, 2020;
75. Hegyi, A., Sarris, A., Curta, F., Floca, C., Fortiu, S., Urdea, P., Onaca, A., Timofte, F., Pisz, M., Timut, S., Nica, M., Maciulschi, D., Stavila, A. Deserted Medieval Village Reconstruction Using Applied Geosciences, *REMOTE SENSING*, Volume: 12, Issue: 12, Article Number: 1975, eISSN: 2072-4292, 2020;
76. Heinosaari, T., Jivulescu, M.A., Nechita, I. Random positive operator valued measures, *JOURNAL OF MATHEMATICAL PHYSICS*, Volume: 61, Issue: 4, ISSN: 0022-2488, eISSN: 1089-7658, 2020;
77. Hulka, I., Utu, D., Serban, V.A., Negrea, P., Lukac, F., Chraska, T. Effect of Ti addition on microstructure and corrosion properties of laser clad WC-Co/NiCrBSi(Ti) coatings, *APPLIED SURFACE SCIENCE*, Volume: 504, Article Number: 144349, ISSN: 0169-4332, eISSN: 1873-5584, 2020;
78. Ioana, A., Korodi, A. Improving OPC UA Publish-Subscribe Mechanism over UDP with Synchronization Algorithm and Multithreading Broker Application, *SENSORS*, Volume: 20, Issue: 19, Article Number: 5591, PubMed ID: 33003549, eISSN: 1424-8220, 2020;
79. Ioana, A., Korodi, A. OPC UA Publish-Subscribe and VSOME/IP Notify-Subscribe Based Gateway Application in the Context of Car to Infrastructure Communication, *SENSORS*, Volume: 20, Issue: 16, Article Number: 4624, PubMed ID: 32824493, eISSN: 1424-8220, 2020;

No.

UEFISCDI Awards

80. Ivascu, L. Measuring the Implications of Sustainable Manufacturing in the Context of Industry 4.0, *PROCESSES*, Volume: 8, Issue: 5, Article Number: 585, eISSN: 2227-9717, 2020;
81. Khezrzadeh, O., Mirzaee, O., Emadoddin, E., Linul, E. Anisotropic Compressive Behavior of Metallic Foams under Extreme Temperature Conditions, *MATERIALS*, Volume: 13, Issue: 10, Article Number: 2329, PubMed ID: 32438755, eISSN: 1996-1944, 2020;
82. Kiss, G., Rusu, G., Peter, F., Tanase, I., Bandur, G. Recovery of Flexible Polyurethane Foam Waste for Efficient Reuse in Industrial Formulations, *POLYMERS*, Volume: 12, Issue: 7, Article Number: 1533, PubMed ID: 32664336, eISSN: 2073-4360, 2020;
83. Kolumban-Antal, G., Lasak, V., Bogdan, R., Groza, B. A Secure and Portable Multi-Sensor Module for Distributed Air Pollution Monitoring, *SENSORS*, Volume: 20, Issue: 2, Article Number: 403, PubMed ID: 31936847, eISSN: 1424-8220, 2020;
84. Korodi, A., Anitei, D., Boitor, A., Silea, I. Image-Processing-Based Low-Cost Fault Detection Solution for End-of-Line ECUs in Automotive Manufacturing, *SENSORS*, Volume: 20, Issue: 12, Article Number: 3520, PubMed ID: 32580271, eISSN: 1424-8220, 2020;
85. Korodi, A., Crisan, R., Nicolae, A., Silea, I. Industrial Internet of Things and Fog Computing to Reduce Energy Consumption in Drinking Water Facilities, *PROCESSES*, Volume: 8, Issue: 3, Article Number: 282, eISSN: 2227-9717, 2020;
86. Lascu, C., Andreescu, G.D. PLL Position and Speed Observer With Integrated Current Observer for Sensorless PMSM Drives, *IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS*, Volume: 67, Issue: 7, Pages: 5990-5999, ISSN: 0278-0046, eISSN: 1557-9948, 2020;
87. Lascu, C., Argeseanu, A., Blaabjerg, F. Supertwisting Sliding-Mode Direct Torque and Flux Control of Induction Machine Drives, *IEEE TRANSACTIONS ON POWER ELECTRONICS*, Volume: 35, Issue: 5, Pages: 5057-5065, ISSN: 0885-8993, eISSN: 1941-0107, 2020;
88. Ledeti, I., Bengescu, C., Circioban, D., Vlase, G., Vlase, T., Tomoroga, C., Buda, V., Ledeti, A., Dragomirescu, A., Murariu, M. Solid-state stability and kinetic study of three glucocorticoid hormones: prednisolone, prednisone and cortisone, *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, Volume: 141, Issue: 3, Pages: 1053-1065, ISSN: 1388-6150, eISSN: 1588-2926, 2020;
89. Linul, E., Marsavina, L., Valean, C., Banica, R. Static and dynamic mode I fracture toughness of rigid PUR foams under room and cryogenic temperatures, *ENGINEERING FRACTURE MECHANICS*, Volume: 225, Article Number: 106274, ISSN: 0013-7944, eISSN: 1873-7315, 2020;
90. Lupa, N. A New Approach on Datko-Zabczyk Method for Nonuniform Exponential Stability, *MATHEMATICS*, Volume: 8, Issue: 7, Article Number: 1095, eISSN: 2227-7390, 2020;
91. Lupa, N., Popescu, L.H. Admissible Banach Function Spaces and Nonuniform Stabilities, *MEDITERRANEAN JOURNAL OF MATHEMATICS*, Volume: 17, Issue: 4, Article Number: 105, ISSN: 1660-5446, eISSN: 1660-5454, 2020;
92. Marian, E., Duteanu, N., Vicas, L., Rusu, G., Jurca, T., Muresan, M., Micle, O., Hangan, A.C., Stan, R.L., Ionescu, C., Sevastre, B., Pall, E. Synthesis, characterization of inclusion compounds of amygdalin with beta-cyclodextrin and sod-like activity and cytotoxicity on hela tumor cells, *ARABIAN JOURNAL OF CHEMISTRY*, Volume: 13, Issue: 8, Pages: 6828-6837, ISSN: 1878-5352, eISSN: 1878-5379, 2020;
93. Marsavina, L., Linul, E. Fracture toughness of rigid polymeric foams: A review, *FATIGUE & FRACTURE OF ENGINEERING MATERIALS & STRUCTURES*, Volume: 43, Issue: 11, Pages: 2483-2514, ISSN: 8756-758X, eISSN: 1460-2695, 2020;
94. Mirsu, R., Simion, G., Căleanu, C.D., Pop-Călimanu, I.M. A PointNet-Based Solution for 3D Hand Gesture Recognition, *SENSORS*, Volume: 20, Issue: 11, Article Number: 3226, PubMed ID: 32517141, eISSN: 1424-8220, 2020;
95. Mosoarca, G., Vancea, C., Popa, S., Boran, S., Tanasie, C. A green approach for treatment of wastewater with manganese using wood ash, *JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY*, Volume: 95, Issue: 6, Pages: 1781-1789, ISSN: 0268-2575, eISSN: 1097-4660, 2020;
96. Mosoarca, M., Onescu, I., Onescu, E., Anastasiadis, A. Seismic vulnerability assessment methodology for historic masonry buildings in the near-field areas, *ENGINEERING FAILURE ANALYSIS*, Volume: 115, Article Number: 104662, ISSN: 1350-6307, eISSN: 1873-1961, 2020;
97. Murvay, P.S., Groza, B. Efficient Physical Layer Key Agreement for FlexRay Networks, *IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY*, Volume: 69, Issue: 9, Pages: 9767-9780, ISSN: 0018-9545, eISSN: 1939-9359, 2020;

No.	UEFISCDI Awards
98.	Murvey, P.S., Groza, B. TIDAL-CAN: Differential Timing Based Intrusion Detection and Localization for Controller Area Network, IEEE ACCESS, Volume: 8, Pages: 68895-68912, ISSN: 2169-3536, 2020;
99.	Negrea, A., Mihailescu, M., Mosoarca, G., Ciopec, M., Duteanu, N., Negrea, P., Minzatu, V. Estimation on Fixed-Bed Column Parameters of Breakthrough Behaviors for Gold Recovery by Adsorption onto Modified/Functionalized Amberlite XAD7, INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH, Volume: 17, Issue: 18, Article Number: 6868, PubMed ID: 32962235, eISSN: 1660-4601, 2020;
100.	Negrea, P., Gabor, A., Davidescu, C.M., Ciopec, M., Negrea, A., Duteanu, N. Kinetics and thermodynamics modeling of Nd(III) removal from aqueous solution using modified Amberlite XAD7, JOURNAL OF RARE EARTHS, Volume: 38, Issue: 3, Pages: 306-314, ISSN: 1002-0721, 2020;
101.	Nicola, R., Costisor, O., Ciopec, M., Negrea, A., Lazau, R., Ianasi, C., Piciorus, E.M., Len, A., Almasy, L., Szerb, E.I., Putz, A.M. Silica-Coated Magnetic Nanocomposites for Pb ²⁺ Removal from Aqueous Solution, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 8, Article Number: 2726, eISSN: 2076-3417, 2020;
102.	Nicolae, A., Korodi, A., Silea, I. Weather-Based Prediction Strategy inside the Proactive Historian with Application in Wastewater Treatment Plants, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 9, Article Number: 3015, eISSN: 2076-3417, 2020;
103.	Onchis, D.M., Istin, C., Tudoran, C., Tudoran, M., Real, P. Timely-Automatic Procedure for Estimating the Endocardial Limits of the Left Ventricle Assessed Echocardiographically in Clinical Practice, DIAGNOSTICS, Volume: 10, Issue: 1, Article Number: 40, PubMed ID: 31941079, eISSN: 2075-4418, 2020;
104.	Osaci, M., Cacciola, M. Influence of the magnetic nanoparticle coating on the magnetic relaxation time, BEILSTEIN JOURNAL OF NANOTECHNOLOGY, Volume: 11, Pages: 1207-1216, PubMed ID: 32832316, ISSN: 2190-4286, 2020;
105.	Pana, A., Baloi, A., Molnar-Matei, F. New method for calculating the susceptances of a balancing capacitive compensator for a three-phase four-wire distribution network, INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, Volume: 115, Article Number: 105414, ISSN: 0142-0615, eISSN: 1879-3517, 2020;
106.	Pana, A.M., Ordodi, V., Rusu, G., Gherman, V., Bandur, G., Rusnac, L.M., Dumitrel, G.A. Biodegradation Pattern of Glycopolymer Based on D-Mannose Oligomer and Hydroxypropyl Acrylate, POLYMERS, Volume: 12, Issue: 3, Article Number: 704, PubMed ID: 32235772, eISSN: 2073-4360, 2020;
107.	Pascu, B., Ardean, C., Davidescu, C.M., Negrea, A., Ciopec, M., Duteanu, N., Negrea, P., Rusu, G. Modified Chitosan for Silver Recovery-Kinetics, Thermodynamic, and Equilibrium Studies, MATERIALS, Volume: 13, Issue: 3, Article Number: 657, PubMed ID: 32024185, eISSN: 1996-1944, 2020;
108.	Pascu, B., Negrea, A., Ciopec, M., Davidescu, C.M., Negrea, P., Gherman, V., Duteanu, N. New Generation of Antibacterial Products Based on Colloidal Silver, MATERIALS, Volume: 13, Issue: 7, Article Number: 1578, PubMed ID: 32235381, eISSN: 1996-1944, 2020;
109.	Pietras, D., Linul, E., Sadowski, T., Rusinek, A. Out-of-plane crushing response of aluminum honeycombs in-situ filled with graphene-reinforced polyurethane foam, COMPOSITE STRUCTURES, Volume: 249, Article Number: 112548, ISSN: 0263-8223, eISSN: 1879-1085, 2020;
110.	Pohoryles, D.A., Maduta, C., Bournas, D.A., Kouris, L.A. Energy performance of existing residential buildings in Europe: A novel approach combining energy with seismic retrofitting, ENERGY AND BUILDINGS, Volume: 223, Article Number: 110024, ISSN: 0378-7788, eISSN: 1872-6178, 2020;
111.	Pop, M.D., Prosteian, O., David, T.M., Prosteian, G. Hybrid Solution Combining Kalman Filtering with Takagi-Sugeno Fuzzy Inference System for Online Car-Following Model Calibration, SENSORS, Volume: 20, Issue: 19, Article Number: 5539, PubMed ID: 32992622, eISSN: 1424-8220, 2020;
112.	Popa, C.A. Dissipativity of impulsive matrix-valued neural networks with leakage delay and mixed delays, NEUROCOMPUTING, Volume: 405, Pages: 85-95, ISSN: 0925-2312, eISSN: 1872-8286, 2020;

No.	UEFISCDI Awards
113.	Popa, C.A. Global mu-stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays, <i>NEUROCOMPUTING</i> , Volume: 376, Pages: 73-94, ISSN: 0925-2312, eISSN: 1872-8286, 2020;
114.	Popa, C.A., Kaslik, E. Finite-Time Mittag-Leffler Synchronization of Neutral-Type Fractional-Order Neural Networks with Leakage Delay and Time-Varying Delays, <i>MATHEMATICS</i> , Volume: 8, Issue: 7, Article Number: 1146, eISSN: 2227-7390, 2020;
115.	Popa, S., Milea, M.S., Boran, S., Nitu, S.V., Mosoarca, G.E., Vancea, C., Lazau, R.I. Rapid adulteration detection of cold pressed oils with their refined versions by UV-Vis spectroscopy, <i>SCIENTIFIC REPORTS</i> , Volume: 10, Issue: 1, Article Number: 16100, PubMed ID: 32999344, ISSN: 2045-2322, 2020;
116.	Popescu, G., Radulov, I., Iordanescu, O.A., Orboi, M.D., Radulescu, L., Druga, M., Bujanca, G.S., David, I., Hadaruga, D.I., Lucan, C.A., Hadaruga, N.G., Rivis, M. Karl Fischer Water Titration-Principal Component Analysis Approach on Bread Products, <i>APPLIED SCIENCES-BASEL</i> , Volume: 10, Issue: 18, Article Number: 6518, eISSN: 2076-3417, 2020;
117.	Roata, I.C., Croitoru, C., Pascu, A., Stanciu, E.M., Hulka, I., Petre, I., Gabor, C., Patroi, D., Sbarcea, B.G. Surface engineering of Ni-Al coatings through concentrated solar heat treatment, <i>APPLIED SURFACE SCIENCE</i> , Volume: 506, Article Number: 144185, ISSN: 0169-4332, eISSN: 1873-5584, 2020;
118.	Salvia, R., Halbac-Cotoara-Zamfir, R., Cividino, S., Salvati, L., Quaranta, G. From Rural Spaces to Peri-Urban Districts: Metropolitan Growth, Sparse Settlements and Demographic Dynamics in a Mediterranean Region, <i>LAND</i> , Volume: 9, Issue: 6, Article Number: 200, eISSN: 2073-445X, 2020;
119.	Shah, S.G.M., Sarfarz, M., Ivascu, L. Assessing the interrelationship corporate environmental responsibility, innovative strategies, cognitive and hierarchical CEO: A stakeholder theory perspective, <i>CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT</i> , Volume: 28, Issue: 1, Pages: 457-473, ISSN: 1535-3958, eISSN: 1535-3966, 2020;
120.	Simon, S., Stoian, C.E., Gherhes, V. The Concept of Sustainability in the Romanian Top Universities' Strategic Plans, <i>SUSTAINABILITY</i> , Volume: 12, Issue: 7, Article Number: 2757, eISSN: 2071-1050, 2020;
121.	Smuleac, A., Smuleac, L., Man, T.E., Popescu, C.A., Imbrea, F., Radulov, I., Adamov, T., Pascalau, R. Use of Modern Technologies for the Conservation of Historical Heritage in Water Management, <i>WATER</i> , Volume: 12, Issue: 10, Article Number: 2895, eISSN: 2073-4441, 2020;
122.	Stavi, I., Siad, S.M., Kyriazopoulos, A.P., Halbac-Cotoara-Zamfir, R. Water runoff harvesting systems for restoration of degraded rangelands: A review of challenges and opportunities, <i>JOURNAL OF ENVIRONMENTAL MANAGEMENT</i> , Volume: 255, Article Number: 109823, PubMed ID: 31785458, ISSN: 0301-4797, eISSN: 1095-8630, 2020;
123.	Stoia, D.L., Marsavina, L., Linul, E. Mode I Fracture Toughness of Polyamide and Alumide Samples obtained by Selective Laser Sintering Additive Process, <i>POLYMERS</i> , Volume: 12, Issue: 3, Article Number: 640, PubMed ID: 32168974, eISSN: 2073-4360, 2020;
124.	Stratan, A., Zub, C.I., Dubina, D. Prequalification of a set of buckling restrained braces: Part I - experimental tests, <i>STEEL AND COMPOSITE STRUCTURES</i> , Volume: 34, Issue: 4, Pages: 547-559, ISSN: 1229-9367, eISSN: 1598-6233, 2020;
125.	Tanase, I.M., Sbarcea, L., Ledeti, A., Vlase, G., Barvinschi, P., Varut, R.M., Dragomirescu, A., Axente, C., Ledeti, I. Physicochemical characterization and molecular modeling study of host-guest systems of aripiprazole and functionalized cyclodextrins, <i>JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY</i> , Volume: 141, Issue: 3, Pages: 1027-1039, ISSN: 1388-6150, eISSN: 1588-2926, 2020;
126.	Tekle-Roettering, A., Lim, S., Reisz, E., Lutze, H.V., Abdighahroudi, M.S., Willach, S., Schmidt, W., Tentscher, P.R., Rentsch, D., McArdell, C.S., Schmidt, T.C., von Gunten, U. Reactions of pyrrole, imidazole, and pyrazole with ozone: kinetics and mechanisms, <i>ENVIRONMENTAL SCIENCE-WATER RESEARCH & TECHNOLOGY</i> , Volume: 6, Issue: 4, Pages: 976-992, ISSN: 2053-1400, eISSN: 2053-1419, 2020;
127.	Tigan, G., Lazureanu, C., Munteanu, F., Sterbeti, C., Florea, A. Bifurcation diagrams in a class of Kolmogorov systems, <i>NONLINEAR ANALYSIS-REAL WORLD APPLICATIONS</i> , Volume: 56, Article Number: 103154, ISSN: 1468-1218, 2020;

No.

UEFISCDI Awards

128. Tiwari, A.K., Adewuyi, A.O., Albulescu, C.T., Wohar, M.E. Empirical evidence of extreme dependence and contagion risk between main cryptocurrencies, *NORTH AMERICAN JOURNAL OF ECONOMICS AND FINANCE*, Volume: 51, Article Number: 101083, ISSN: 1062-9408, eISSN: 1879-0860, 2020;
129. Todea, A., Aparaschivei, D., Bitcan, I., Ledeti, I.V., Bandur, G., Peter, F., Nagy, L., Keki, S., Biro, E. Thermal behavior of oligo[(epsilon-caprolactone)-co-delta-gluconolactone] enzymatically synthesized in reaction conditions optimized by experimental design, *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, Volume: 141, Issue: 3, Pages: 1017-1026, ISSN: 1388-6150, eISSN: 1588-2926, 2020;
130. Tudoran, R.M., Girban, A. On the rattleback dynamics, *JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS*, Volume: 488, Issue: 1, Article Number: 124066, ISSN: 0022-247X, eISSN: 1096-0813, 2020;
131. Tulcan, A., Vasilescu, M.D., Tulcan, L. Study of the Influence of Technological Parameters on Generating Flat Part with Cylindrical Features in 3D Printing with Resin Cured by Optical Processing, *POLYMERS*, Volume: 12, Issue: 9, Article Number: 1941, PubMed ID: 32867332, eISSN: 2073-4360, 2020;
132. Udrescu, L., Bogdan, P., Chis, A., Sirbu, I.O., Topirceanu, A., Varut, R.M., Udrescu, M. Uncovering New Drug Properties in Target-Based Drug-Drug Similarity Networks, *PHARMACEUTICS*, Volume: 12, Issue: 9, Article Number: 879, PubMed ID: 32947845, eISSN: 1999-4923, 2020;
133. Ungurean, L., Micea, M.V., Carstoiu, G. Online state of health prediction method for lithium-ion batteries, based on gated recurrent unit neural networks, *INTERNATIONAL JOURNAL OF ENERGY RESEARCH*, Volume: 44, Issue: 8, Pages: 6767-6777, ISSN: 0363-907X, eISSN: 1099-114X, 2020;
134. Ungureanu, V.I., Miclea, R.C., Korodi, A., Silea, I. A Novel Approach against Sun Glare to Enhance Driver Safety, *APPLIED SCIENCES-BASEL*, Volume: 10, Issue: 9, Article Number: 3032, eISSN: 2076-3417, 2020;
135. Vajda, M., Ursu, D., Duteanu, N., Miclău, M. Low lying valence band edge materials based on copper oxide for tandem dye -sensitized solar cells, *MATERIALS LETTERS*, Volume: 275, Article Number: 128151, ISSN: 0167-577X, eISSN: 1873-4979, 2020;
136. Vajda, M., Ursu, D., Mosoarca, C., Duteanu, N., Miclău, M. Experimental investigation of hydrogen insertion in copper oxide on photovoltaic performance of p-type dye-sensitized solar cell, *INTERNATIONAL JOURNAL OF ENERGY RESEARCH*, ISSN: 0363-907X, eISSN: 1099-114X, 2020;
137. Vasiliu, R.D., Porojan, S.D., Birdeanu, M.I., Utu, I.D., Porojan, L. The Effect of Thermocycling and Surface Treatments on the Surface Roughness and Microhardness of Three Heat-Pressed Ceramics Systems, *CRYSTALS*, Volume: 10, Issue: 3, Article Number: 160, ISSN: 2073-4352, 2020;
138. Visa, A., Maranescu, B., Lupa, L., Crisan, L., Borota, A. New Efficient Adsorbent Materials for the Removal of Cd(II) from Aqueous Solutions, *NANOMATERIALS*, Volume: 10, Issue: 5, Article Number: 899, PubMed ID: 32397122, eISSN: 2079-4991, 2020;
139. Vlase, D., Mosoiu, C., Vlase, G., Lazau, R., Vlase, T. Comparative analyses of Roman mortars belonging to different ancient periods from Drobeta-Turnu Severin region, *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, Volume: 141, Issue: 3, Pages: 991-998, ISSN: 1388-6150, eISSN: 1588-2926, 2020;
140. Voicu, A., Duteanu, N., Voicu, M., Vlad, D., Dumitrascu, V. The rcdk and cluster R packages applied to drug candidate selection, *JOURNAL OF CHEMINFORMATICS*, Volume: 12, Issue: 1, Article Number: 3, PubMed ID: 33430987, ISSN: 1758-2946, 2020;
141. Zub, C.I., Stratan, A., Dubina, D. Prequalification of a set of buckling restrained braces: Part II - numerical simulations, *STEEL AND COMPOSITE STRUCTURES*, Volume: 34, Issue: 4, Pages: 561-580, ISSN: 1229-9367, eISSN: 1598-6233, 2020.

EXECUTIVE UNIT FOR FINANCING HIGHER EDUCATION, RESEARCH, DEVELOPMENT AND INNOVATION - UEFISCDI AWARDS - GRANTED PATENTS

1. Savin, V., Boncalo, O., Declercq, D. Stopping criterion for decoding Quasi-Cyclic LDPC codes, EPO, EU 3373488 B1, 06.05.2020;
2. Savin, V., Boncalo, O., Declercq, D. Stopping criterion for decoding Quasi-Cyclic LDPC codes, USP, Patent no. US 10651872 B2, 12.05.2020
3. Craciunescu, C.M., Budau, V., Mitelea, I. Actuator with thermo-magnetic control of position, OSIM, RO 128675 B1, 28.02.2020;
4. Gontean, A.S., Cernaianu, M.O., Intelligent Control Device for Light Switches, OSIM, RO 129498 B1, 28.02.2020;
5. Bănică, R.N., Kellenberger, A.R., Ursu, D.H., Cseh, L., Linul, P., Vaszilcsin, N. Process for the synthesis of silver nanowires coated with low melting point metal nanoparticles, selected from indium and tin, OSIM, RO 132480 B1, 30.04.2020;
6. Pană, A. Control method for an automatic capacitive compensator meant to improve the power factor and to balancing the load in three-phase four-wire electrical networks, OSIM, RO 131297 B1, 30.09.2020;
7. Poșta D.S., Hădăruță N.G., Peț E., Poșta G.M., Peț I., Camen D.D., Hădăruță D.I. Manufacturing process of rooting product based on willow (genus Salix L.) extract, OSIM, RO 131178 B1, 30.01.2019.