

ISI Papers in highlight





Selected from the most recent 10 years of data, Highly Cited Papers reflect the top 1% of papers by field and publication year. Highly Cited Papers help identify breakthrough research within a research field and are used within Web of Science to identify and refine the most influential research papers.

Boldea, I., Tutelea, L.N., Parsa, L., Dorrell, D. Automotive Electric Propulsion Systems With Reduced or No Permanent Magnets: An Overview, IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, Volume: 61, Issue: 10, Pages: 5696–5711, ISSN: 0278–0046, eISSN: 1557–9948, 2014; Times Cited in Web of Science Core Collection: 365	Y Highly Cited Paper
Precup, R.E., Hellendoorn, H. A survey on industrial applications of fuzzy control, COMPUTERS IN INDUSTRY, Volume: 62, Issue: 3, Pages: 213-226, ISSN: 0166-3615, eISSN: 1872-6194, 2011; Times Cited in Web of Science Core Collection: 311	Y Highly Cited Paper
Sarbu, I., Sebarchievici, C. General review of ground-source heat pump systems for heating and cooling of buildings, ENERGY AND BUILDINGS, Volume: 70, Pages: 441–454, ISSN: 0378–7788, eISSN: 1872–6178, 2014; Times Cited in Web of Science Core Collection: 257	Y Highly Cited Paper
Gheju, M., Balcu, I. Removal of chromium from Cr(VI) polluted wastewaters by reduction with scrap iron and subsequent precipitation of resulted cations, JOURNAL OF HAZARDOUS MATERIALS, Volume: 196, Pages: 131-138, PubMed ID: 21955659, ISSN: 0304-3894, 2011; Times Cited in Web of Science Core Collection: 174	Y Highly Cited Paper
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Highly Cited Papers received enough citations as of January/December 2020 to place them in the top 1% of their academic fields based on a highly cited threshold for the field and publication year.

* The data was obtained from Web of Science - Clarivate Analytics in 30 March 2021



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Gavruta, L. Frames for operators, APPLIED AND COMPUTATIONAL HARMONIC ANALYSIS, Volume: 32, Issue: 1, Pages: 139–144, ISSN: 1063–5203, 2012; Times Cited in Web of Science Core Collection: 100	Y Highly Cited Paper
Rajak, D.K., Pagar, D.D., Menezes, P.L., Linul, E. Fiber-Reinforced Polymer Composites: Manufacturing, Proper- ties, and Applications, POLYMERS, Volume: 11, Issue: 10, Article Number: 1667, PubMed ID: 31614875, eISSN: 2073-4360, 2019; Times Cited in Web of Science Core Collection: 75	Y Highly Cited Paper
Sarbu, I., Dorca, A. Review on heat transfer analysis in thermal energy storage using latent heat storage systems and phase change materials, INTERNATIONAL JOURNAL OF ENERGY RESEARCH, Volume: 43, Issue: 1, Pages: 29-64, ISSN: 0363-907X, eISSN: 1099-114X, 2019; Times Cited in Web of Science Core Collection: 48	Y Highly Cited Paper

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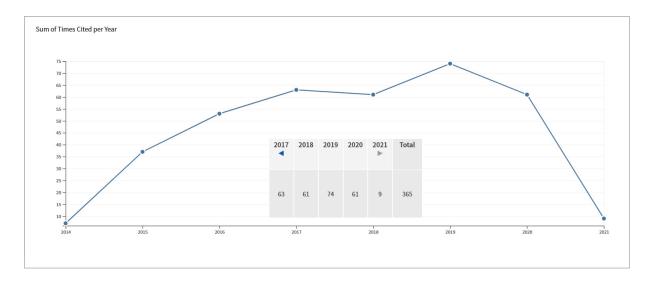
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at cryogenic temper 0925–8388, elSSN: ⁻	i, K., Linul, P.A., Linul, E. Mechanical properties of A356 and ZA27 metallic syn ature, JOURNAL OF ALLOYS AND COMPOUNDS, Volume: 813, Article Number: 1 873-4669, 2020; of Science Core Collection: 23	150101 ICCNI-	ighly Cited Paper
Meszaros, J., Zhuang Practices in UAS-ba 1001, eISSN: 2072-4	a, S., Aasen, H., James, M.R., Goncalves, G., Ben-Dor, E., Brook, A., Polinova, M ŋ, R.D., Johansen, K., Malbeteau, Y., de Lima, I.P., Davids, C., Herban, S., McCabe sed Environmental Monitoring, REMOTE SENSING, Volume: 12, Issue: 6, Art 1292, 2020; of Science Core Collection: 18	, M.F. Current	ighly Cited Paper
Hand Myoelectric-B Issue: 7, Pages: 462	A., Albu, A., Borlea, A.B., Zamfirache, I.A., Petriu, E.M. Evolving Fuzzy Models ased Control, IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT 5-4636, ISSN: 0018–9456, eISSN: 1557–9662, 2020; of Science Core Collection: 16		ighly Cited Paper
under room and cry 106274, ISSN: 0013	L., Valean, C., Banica, R. Static and dynamic mode I fracture toughness of rigi ogenic temperatures, ENGINEERING FRACTURE MECHANICS, Volume: 225, Art -7944, eISSN: 1873–7315, 2020; of Science Core Collection: 14	ticle Number	ighly Cited Paper

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Web of Science - Clarivate Analytics Highly Cited Paper

As of January/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Engineering** based on a highly cited threshold for the field and publication year.



Boldea, I., Tutelea, L.N., Parsa, L., Dorrell, D. Automotive Electric Propulsion Systems With Reduced or No Permanent Magnets: An Overview, IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, Volume: 61, Issue: 10, Pages: 5696–5711, ISSN: 0278–0046, eISSN: 1557–9948, 2014; Times Cited in Web of Science Core Collection: 365

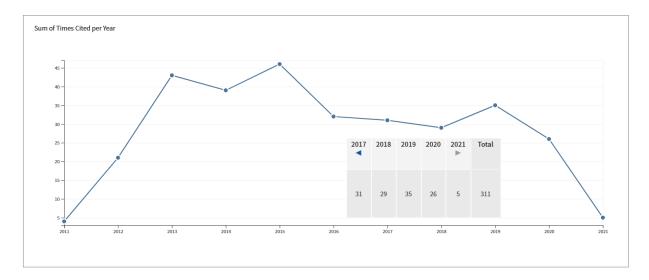
Abstract: Hybrid and electric vehicle technology has seen rapid development in recent years. The motor and the generator are at the heart of the vehicle drive and energy system and often utilize expensive rare-earth permanent magnet (PM) material. This paper reviews and addresses the research work that has been carried out to reduce the amount of rare-earth material that is used while maintaining the high efficiency and performance that rare-earth PM machines offer. These new machines can use either less rare-earth PM material,

weaker ferrite magnets, or no magnets; and they need to meet the high performance that the more usual interior PM synchronous motor with sintered neodymium-iron-boron magnets provides. These machines can take the form of PM-assisted synchronous reluctance machines, induction machines, switched reluctance machines, wound rotor synchronous machines (claw pole or biaxially excited), doublesaliency machines with ac or dc stator current control, or brushless dc multiple-phase reluctance machines.





As of January/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Computer Science** based on a highly cited threshold for the field and publication year.



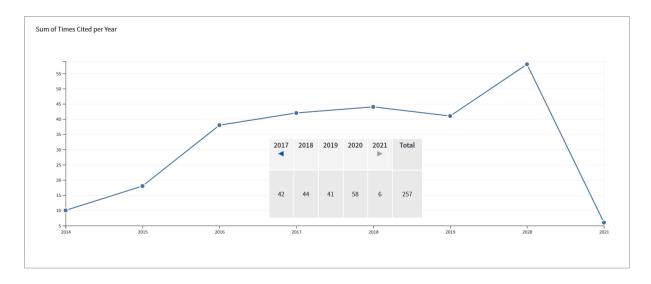
Precup, R.E., Hellendoorn, H. A survey on industrial applications of fuzzy control, COMPUTERS IN INDUSTRY, Volume: 62, Issue: 3, Pages: 213–226, ISSN: 0166-3615, eISSN: 1872-6194, 2011; Times Cited in Web of Science Core Collection: 311

Abstract: Fuzzy control has long been applied to industry with several important theoretical results and successful results. Originally introduced as model-free control design approach, model-based fuzzy control has gained widespread significance in the past decade.

This paper presents a survey on recent developments of analysis and design of fuzzy control systems focused on industrial applications reported after 2000.

Web of Science - Clarivate Analytics Highly Cited Paper

As of January/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Engineering** based on a highly cited threshold for the field and publication year.



Sarbu, I., Sebarchievici, C. General review of ground-source heat pump systems for heating and cooling of buildings, ENERGY AND BUILDINGS, Volume: 70, Pages: 441-454, ISSN: 0378-7788, eISSN: 1872-6178, 2014; Times Cited in Web of Science Core Collection: 257

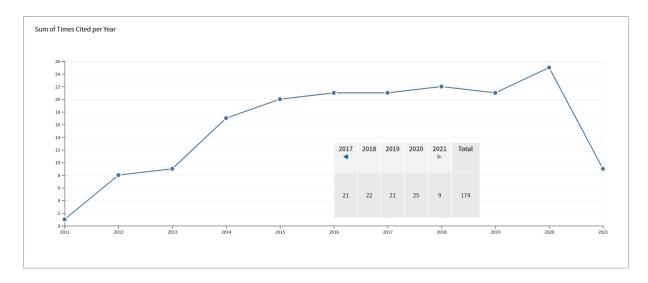
Abstract: A large number of ground-source heat pumps (GSHP) systems have been used in residential and commercial buildings throughout the world due to the attractive advantages of high energy and environmental performances. The GSHPs are proven renewable energy technology for space heating and cooling. This paper provides a detailed literature review of the GSHP systems, and their recent advances. The operation principle and energy efficiency of a heat pump are defined first. Then, a general introduction on the GSHPs and its development, and a detailed description of the surface water (SWHP), ground-water (GWHP), and ground-couplet (GCHP) heat pumps are performed. The most typical simulation and ground thermal response

test models for the vertical ground heat exchangers currently available are summarized including the heat transfer processes outside and inside the boreholes. Also, some information about a new GWHP using a heat exchanger with special construction, and the possibility to obtain the better energy efficiency with combined heating and cooling by GCHP are presented. The various hybrid GCHP systems for cooling or heating-dominated buildings are well described. Finally, the energy, economic and environmental performance of a closedloop GCHP system is also briefly reviewed. It is found that the GSHP technology can be used both in cold and hot weather areas and the energy saving potential is significant.





As of January/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Engineering** based on a highly cited threshold for the field and publication year.



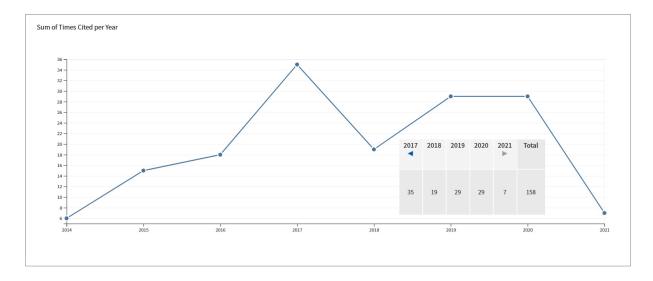
Gheju, M., Balcu, I. Removal of chromium from Cr(VI) polluted wastewaters by reduction with scrap iron and subsequent precipitation of resulted cations, JOURNAL OF HAZARDOUS MATERIALS, Volume: 196, Pages: 131–138, PubMed ID: 21955659, ISSN: 0304–3894, 2011; Times Cited in Web of Science Core Collection: 174

Abstract: This work presents investigations on the total removal of chromium from Cr(VI) aqueous solutions by reduction with scrap iron and subsequent precipitation of the resulted cations with NaOH. The process was detrimentally affected by a compactly passivation film occurred at scrap iron surface, mainly composed of Cr(III) and Fe(III). Maximum removal efficiency of the Cr(total) and Fe(total) achieved in the clarifier under circumneutral and alkaline (pH 9.1) conditions was 98.5% and 100%, respectively. The optimum precipitation pH range which resulted from this study is 7.6-8.0. Fe(total) and Cr(total) were

almost entirely removed in the clarifier as Fe(III) and Cr(III) species: however, after Cr(VI) breakthrough in column effluent, chromium was partially removed in the clarifier also as Cr(VI), by coprecipitation with cationic species. As long the column effluent was free of Cr(VI), the average Cr(total) removal efficiency of the packed column and clarifier was 10.8% and 78.8%, respectively. Our results clearly indicated that Cr(VI) contaminated wastewater can be successfully treated by combining reduction with scrap iron and chemical precipitation with NaOH.

Web of Science - Clarivate Analytics Highly Cited Paper

As of May/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Engineering** based on a highly cited threshold for the field and publication year.



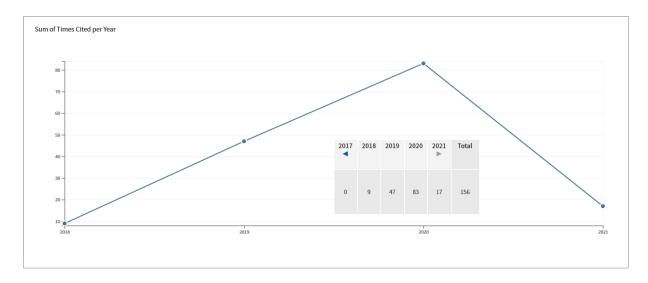
Sarbu, I., Sebarchievici, C. Review of solar refrigeration and cooling systems, ENERGY AND BUILDINGS, Volume: 67, Pages: 286–297, ISSN: 0378–7788, eISSN: 1872–6178, 2013; Times Cited in Web of Science Core Collection: 158

Abstract: Providing cooling by utilizing renewable energy such as solar energy is a key solution to the energy and environmental issues. This paper provides a detailed review of different solar refrigeration and cooling methods. There are presented theoretical basis and practical applications for cooling systems within various working fluids assisted by solar energy and their recent advances. Thermally powered refrigeration technologies are classified into two categories: sorption technology (open systems or closed systems) and thermomechanical technology (ejector system). Solid and liquid desiccant cycles represent the open system. The liquid desiccant system has a higher thermal coefficient of performance (COP) than the solid desiccant system. Absorption and adsorption technologies represent the closed system. The adsorption cooling typically needs lower heat source temperatures than the absorption cooling. Based on COP, the absorption systems are preferred to the adsorption systems, the higher temperature issues can be easily handled with solar adsorption systems. The ejector system represents the thermo-mechanical cooling, and has a higher thermal COP but require a higher heat source temperature than other systems. The study also refers to solar hybrid cooling systems with heterogeneous composite pairs, to a comparison of various solar cooling systems, and to some use suggestions of these systems.





As of January/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Environment/ Ecology** based on a highly cited threshold for the field and publication year.



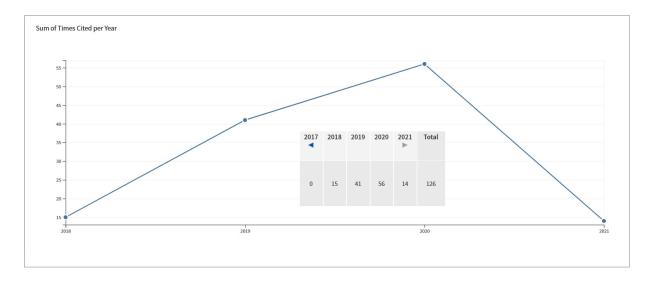
Sarbu, I., Sebarchievici, C. A Comprehensive Review of Thermal Energy Storage, SUSTAINABILITY, Volume: 10, Issue: 1, Article Number: 191, ISSN: 2071–1050, 2018;

Times Cited in Web of Science Core Collection: 156

Abstract: Thermal energy storage (TES) is a technology that stocks thermal energy by heating or cooling a storage medium so that the stored energy can be used at a later time for heating and cooling applications and power generation. TES systems are used particularly in buildings and in industrial processes. This paper is focused on TES technologies that provide a way of valorizing solar heat and reducing the energy demand of buildings. The principles of several energy storage methods and calculation of storage capacities are described. Sensible heat storage technologies, including water tank, underground, and packed-bed storage methods, are briefly reviewed. Additionally, latent-heat storage systems associated with phasechange materials for use in solar heating/cooling of buildings, solar water heating, heat-pump systems, and concentrating solar power plants as well as thermo-chemical storage are discussed. Finally, cool thermal energy storage is also briefly reviewed and outstanding information on the performance and costs of TES systems are included.

Web of Science - Clarivate Analytics Highly Cited Paper

As of January/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Engineering** based on a highly cited threshold for the field and publication year.



Ancuti, C.O., Ancuti, C., De Vleeschouwer, C., Bekaert, P. Color Balance and Fusion for Underwater Image Enhancement, IEEE TRANSACTIONS ON IMAGE PROCESSING, Volume: 27, Issue: 1, Pages: 379-393, PubMed ID: 28981416, ISSN: 1057–7149, eISSN: 1941–0042, 2018; Times Cited in Web of Science Core Collection: 126

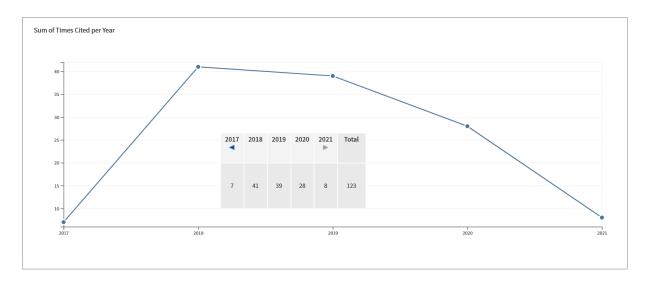
Abstract: We introduce an effective technique to enhance the images captured underwater and degraded due to the medium scattering and absorption. Our method is a single image approach that does not require specialized hardware or knowledge about the underwater conditions or scene structure. It builds on the blending of two images that are directly derived from a color-compensated and white-balanced version of the original degraded image. The two images to fusion, as well as their associated weight maps, are defined to promote the transfer of edges and color contrast to the output

image. To avoid that the sharp weight map transitions create artifacts in the low frequency components of the reconstructed image, we also adapt a multiscale fusion strategy. Our extensive qualitative and quantitative evaluation reveals that our enhanced images and videos are characterized by better exposedness of the dark regions, improved global contrast, and edges sharpness. Our validation also proves that our algorithm is reasonably independent of the camera settings, and improves the accuracy of several image processing applications, such as image segmentation and keypoint matching.





As of January/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Engineering** based on a highly cited threshold for the field and publication year.



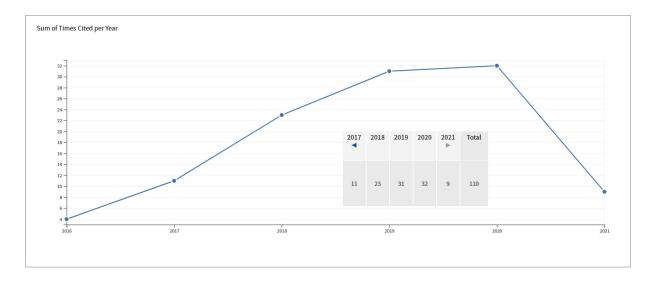
Precup, R.E., David, R.C., Petriu, E.M. Grey Wolf Optimizer Algorithm-Based Tuning of Fuzzy Control Systems With Reduced Parametric Sensitivity, IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, Volume: 64, Issue: 1, Pages: 527–534, ISSN: 0278–0046, eISSN: 1557–9948, 2017; Times Cited in Web of Science Core Collection: 123

Abstract: This paper proposes an innovative tuning approach for fuzzy control systems (CSs) with a reduced parametric sensitivity using the Grey Wolf Optimizer (GWO) algorithm. The CSs consist of servo system processes controlled by Takagi-Sugeno-Kang proportional-integral fuzzy controllers (TSK PI-FCs). The process models have second-order dynamics with an integral component, variable parameters, a saturation, and dead-zone static nonlinearity. The sensitivity analysis employs output sensitivity functions of the sensitivity models defined

with respect to the parametric variations of the processes. The GWO algorithm is used in solving the optimization problems, where the objective functions include the output sensitivity functions. GWO's motivation is based on its low-computational cost. The tuning approach is validated in an experimental case study of a position control for a laboratory nonlinear servo system, and TSK PI-FCs with a reduced process small time constant sensitivity are offered.

Web of Science - Clarivate Analytics Highly Cited Paper

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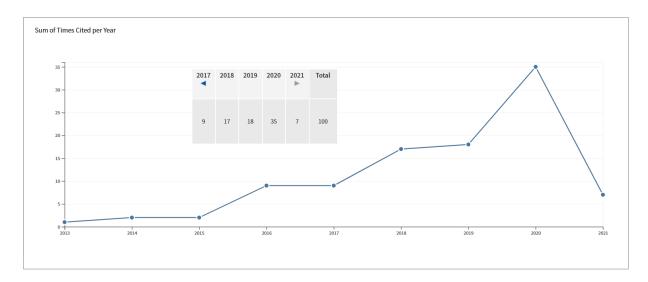
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Abstract: Adsorption of Cr(VI) on MnO2 was investigated with respect to effect of pH, temperature, ionic strength, initial Cr(VI) concentration, co-presence of different anions (HCO3-, SO42-, H2PO4-, NO3- and Cl-) and of low molecular weight natural organic materials (LMWNOM) (acetate, oxalate and citrate). The process was rapid during the first 3-5 min, reaching equilibrium after one hour. Adsorption decreased with increasing pH, temperature and Cr(VI) initial concentration, and increased with increasing ionic strength. Co-presence of phosphate, sulfate, bicarbonate, citrate and oxalate hindered Cr(VI) adsorption, whereas nitrate, chloride and acetate did not exert any notable influence. The overall order of Cr(VI) adsorption suppression due to co-presence of anions and LMWNOM was H2PO4 > HCO3- > SO42-, and oxalate > citrate, respectively. Highest experimental equilibrium sorption capacity (0.83 mg g(-1)) was obtained at 20 degrees C and pH 5.9, while lowest (0.18 mg g(-1)) was noticed in the co-presence of H2PO4-, at 20 degrees C and pH 6.9. Adsorption kinetics was successfully fitted by pseudo-second-order model. Mechanisms for both specific and non-specific adsorption are likely to be involved, while rate-controlling step involved both intra-particle and film diffusion processes. Cr(VI) was strongly bound to MnO2, which makes risks of its subsequent liberation into the environment to be low.





As of May/June and September/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Mathematics** based on a highly cited threshold for the field and publication year.



Gavruta, L. Frames for operators, APPLIED AND COMPUTATIONAL HARMONIC ANALYSIS, Volume: 32, Issue: 1, Pages: 139-144, ISSN: 1063-5203, 2012;

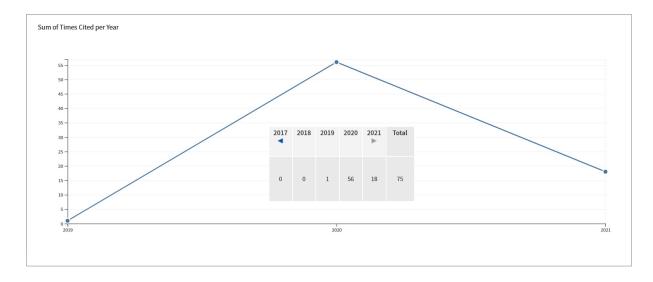
Times Cited in Web of Science Core Collection: 100

Abstract: Frames in Hilbert spaces are a redundant set of vectors which yield a representation for each vector in the space. In the present paper, we give a generalization of frames, which allows, in a stable

way, to reconstruct elements from the range of a linear and bounded operator in a Hilbert space.

Web of Science – Clarivate Analytics Highly Cited Paper

As of September/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Chemistry** based on a highly cited threshold for the field and publication year.



Rajak, D.K., Pagar, D.D., Menezes, P.L., Linul, E. Fiber-Reinforced Polymer Composites: Manufacturing, Properties, and Applications, POLYMERS, Volume: 11, Issue: 10, Article Number: 1667, PubMed ID: 31614875, eISSN: 2073-4360, 2019; Times Cited in Web of Science Core Collection: 75

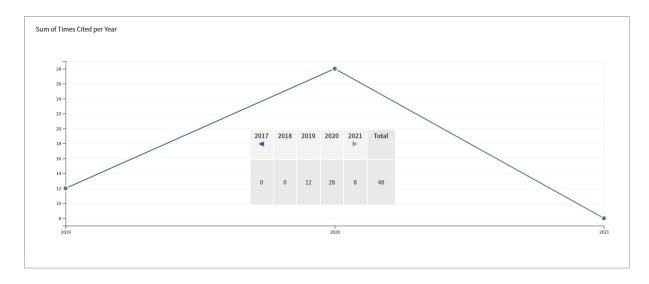
Abstract: Composites have been found to be the most promising and discerning material available in this century. Presently, composites reinforced with fibers of synthetic or natural materials are gaining more importance as demands for lightweight materials with high strength for specific applications are growing in the market. Fiber-reinforced polymer composite offers not only high strength to weight ratio, but also reveals exceptional properties such as high durability; stiffness; damping property; flexural strength; and resistance to corrosion, wear, impact, and fire. These wide ranges of diverse features have led composite materials to find applications in mechanical, construction, aerospace, automobile, biomedical, marine, and many other manufacturing industries. Performance of composite

materials predominantly depends on their constituent elements and manufacturing techniques, therefore, functional properties of various fibers available worldwide, their classifications, and the manufacturing techniques used to fabricate the composite materials need to be studied in order to figure out the optimized characteristic of the material for the desired application. An overview of a diverse range of fibers, their properties, functionality, classification, and various fiber composite manufacturing techniques is presented to discover the optimized fiber-reinforced composite material for significant applications. Their exceptional performance in the numerous fields of applications have made fiber-reinforced composite materials a promising alternative over solitary metals or alloys.





As of January/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Engineering** based on a highly cited threshold for the field and publication year.

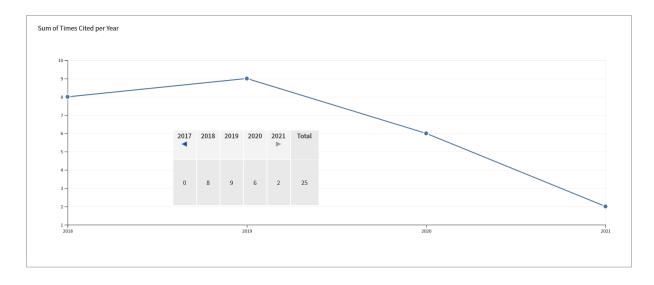


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Abstract: Thermal energy storage (TES) is a technology that stocks thermal energy by heating or cooling a storage medium so that the stored energy can be used later for heating and cooling applications and for power generation. TES has recently attracted increasing interest to thermal applications such as space and water heating, waste heat utilisation, cooling, and air conditioning. Phase change materials (PCMs) used for the storage of thermal energy as latent heat are special types of advanced materials that substantially contribute to the efficient use and conservation of waste heat and solar energy. This paper provides a comprehensive review on the development of latent heat storage (LHS) systems focused on heat transfer and enhancement techniques employed in PCMs to effectively charge and discharge latent heat energy, and the formulation of the phase change problem. The main categories of PCMs are classified and briefly described, and heat transfer enhancement technologies, namely dispersion of low-density materials, use of porous materials, metal matrices and encapsulation, incorporation of extended surfaces and fins, utilisation of heat pipes, cascaded storage, and direct heat transfer techniques, are also discussed in detail. Additionally, a two-dimensional heat transfer simulation model of an LHS system is developed using the control volume technique to solve the phase change problem. Furthermore, a three-dimensional numerical simulation model of an LHS is built to investigate the quasi-steady state and transient heat transfer in PCMs. Finally, several future research directions are provided.

Web of Science – Clarivate Analytics Highly Cited Paper

As of January/February 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Chemistry** based on a highly cited threshold for the field and publication year.



Istratie, 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; Times Cited in Web of Science Core Collection: 25

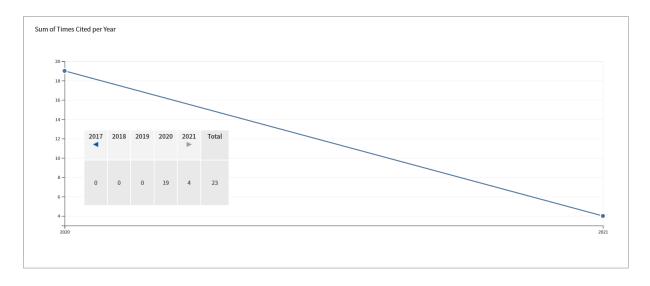
Abstract: Magnetic iron oxide/carbon nanocomposites were synthesized by a facile, one-step solvothermal method. The magnetic nanopowders were characterized by X-ray diffraction (XRD), Fourier transform infrared (FTIR) spectroscopy, thermal analysis (DSC-TG), scanning electron microscopy (SEM), specific surface area and particle size measurements, pore size distributions and magnetic properties. The magnetic nanopowders were tested as adsorbents for the removal of methyl orange (MO) and phenol (Ph) from aqueous solutions. The effects of solution pH, contact time, adsorbent dose and initial pollutants concentration on the adsorption of MO and phenol onto the investigated adsorbents were studied. A significant increase in the removal efficiency, both for MO and phenol, with the increase in the carbon content of the magnetic nanopowder was evidenced.

New experimental data were provided regarding the bicomponent adsorption of MO and phenol. Pseudo-second order equation was fitted to the kinetic data and four isotherm models, namely Langmuir, Freundlich, Redlich-Peterson and Sips were used to analyze the equilibrium data in both single and binary-component solutions. The investigated adsorbents showed a higher adsorption capacity toward MO than phenol. The simultaneous adsorption of the two pollutants in bicomponent solutions indicated that the MO adsorption is practically not affected by the presence of phenol while the adsorption of phenol is significantly reduced in the presence of MO. The benefits of obtaining low-cost nanocomposites with adsorption capacity and magnetic separation tailored, effective in single and bicomponent adsorption of MO and phenol, represent strong arguments regarding their great potential for practical applications.





As of May/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Materials Science** based on a highly cited threshold for the field and publication year.



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; Times Cited in Web of Science Core Collection: 23

Abstract: This work presents compressions tests of metallic foams at cryogenic temperature. The investigated syntactic foams were manufactured by combining a packed bed of expanded glass particles with either an aluminium or a zinc matrix using infiltration casting. Uni-axial compressions tests were performed after submerging samples in a bath of liquid nitrogen with an equilibrium temperature of -196 degrees C. Both the solid matrix material and syntactic foam

samples were tested. For comparison, room temperature reference data from the literature was obtained. In addition, the effect of thermal treatment on the mechanical behaviour of both alloys and their foams at cryogenic temperature was addressed. The results indicate significant embrittlement at cryogenic temperature; however, aluminium and its foams are less susceptible to this effect.

Web of Science - Clarivate Analytics Highly Cited Paper

As of July/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Geosciences** based on a highly cited threshold for the field and publication year.



Tmusic, G., Manfreda, S., Aasen, H., James, M.R., Goncalves, G., Ben-Dor, E., Brook, A., Polinova, M., Arranz, J.J., Meszaros, J., Zhuang, R.D., Johansen, K., Malbeteau, Y., de Lima, I.P., Davids, C., Herban, S., McCabe, M.F. Current Practices in UAS-based Environmental Monitoring, REMOTE SENSING, Volume: 12, Issue: 6, Article Number: 1001, eISSN: 2072-4292, 2020; Times Cited in Web of Science Core Collection: 18

Abstract: With the increasing role that unmanned aerial systems (UAS) are playing in data collection for environmental studies, two key challenges relate to harmonizing and providing standardized guidance for data collection, and also establishing protocols that are applicable across a broad range of environments and conditions. In this context, a network of scientists are cooperating within the framework of the Harmonious Project to develop and promote harmonized mapping strategies and disseminate operational guidance to ensure best practice for data collection and interpretation. The culmination of these efforts is summarized in the present manuscript. Through

this synthesis study, we identify the many interdependencies of each step in the collection and processing chain, and outline approaches to formalize and ensure a successful workflow and product development. Given the number of environmental conditions, constraints, and variables that could possibly be explored from UAS platforms, it is impractical to provide protocols that can be applied universally under all scenarios. However, it is possible to collate and systematically order the fragmented knowledge on UAS collection and analysis to identify the best practices that can best ensure the streamlined and rigorous development of scientific products.





As of November/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Engineering** based on a highly cited threshold for the field and publication year.



Precup, R.E., Teban, T.A., Albu, A., Borlea, A.B., Zamfirache, I.A., Petriu, E.M. Evolving Fuzzy Models for Prosthetic Hand Myoelectric-Based Control, IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, Volume: 69, Issue: 7, Pages: 4625–4636, ISSN: 0018–9456, eISSN: 1557–9662, 2020;

Times Cited in Web of Science Core Collection: 16

Abstract: This article applies an incremental online identification algorithm to develop a set of evolving fuzzy models (FMs) that characterize the nonlinear finger dynamics of the human hand for the myoelectric (ME)-based control of a prosthetic hand. The FM inputs are the ME signals obtained from eight ME sensors and past inputs and/or outputs. The FM outputs are the finger angles, considered here as the midcarpal joint angles, to ensure their control. The best evolving FMs that characterize each of the five fingers are described with the results validated on real data. Simple second-order linear models are

next given to enable the cost-effective controller design. Five separate control loops are proposed, with proportional-integral (PI) controllers separately tuned by a frequency-domain approach. Simple PI-fuzzy controllers are designed starting with the linear PI controllers to ensure the control system performance improvement. The evolving FMs are used to simulate accurately the behavior of the human hand. Digital simulation results are included to show the effectiveness of the PI-fuzzy controllers and the performance improvement in comparison to the initial PI ones.

Web of Science - Clarivate Analytics Highly Cited Paper

As of January/December 2020, this highly cited paper received enough citations to place it in the top 1% of the academic field of **Engineering** based on a highly cited threshold for the field and publication year.



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; Times Cited in Web of Science Core Collection: 14

Abstract: The research presented in this paper is an effort to better understand the fracture toughness of closed-cell rigid polyurethane (PUR) foams under different loading and temperature conditions. The effect of density (100, 145 and 300 kg/m(3)) and anisotropy (in-plane and out-of-plane loading directions) on both quasi-static and dynamic fracture behavior was also experimentally investigated. The three-point bending (3PB) tests were performed on Single Edge Notched Bend (SENB) samples, at room (25 degrees C) and cryogenic (-196 degrees C) temperatures, and the mode I fracture toughness (K-IC) was calculated from their load-displacement curves. It was

observed that all PUR foam samples, regardless of foam density and loading direction, showed a significant increase in K-IC at the cryogenic temperature. The out-of-plane obtained samples showed a slight improvement in fracture toughness (highlighting an anisotropic behavior), both under quasi-static and dynamic 3PB loads. The dynamic K-IC values were found higher than quasi-static ones, and irrespective of foam density and test condition, a brittle deformation mechanism without plastic deformation was observed for all samples. Finally, empirical formulations for cryogenic and dynamic K-IC based on room temperature mode I fracture toughness were proposed.

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No.	Article	2019 Impact Factor / Quartile in Category
1.	Afzal, M.U., Matekovits, L., Esselle, K.P., Lalbakhsh, A. Beam–Scanning Antenna Based on Near–Electric Field Phase Transformation and Refraction of Electromagnetic Wave Through Dielectric Structures, IEEE ACCESS, Volume: 8, Pages: 199242–199253, ISSN: 2169–3536, 2020;	3.745 / Q1
2.	Ahmed, S.E., San, O., Bistrian, 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;	1.808 / Q2
3.	Albulescu, C.T., Artene, A.E., Luminosu, C.T., Tamasila, M. CO(2) 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;	3.056 / Q2
4.	Albulescu, C.T., Tiwari, A.K., Ji, Q. Copula-based local dependence among energy, agriculture and metal com- modities markets, ENERGY, Volume: 202, Article Number: 117762, ISSN: 0360-5442, eISSN: 1873-6785, 2020;	6.082 / Q1
5.	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;	9.34 / Q1
6.	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;	9.34 / Q1
7.	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;	2.474 / Q2
8.	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;	4.966 / Q1
9.	Ardean, C., Ciopec, M., Davidescu, C.M., Negrea, P., Voda, R. Kinetics and Thermodynamics Studies for Cadmium (II) Adsorption onto Functionalized Chitosan with Hexa-Decyl-Trimethyl-Ammonium Chloride, MATERIALS, Volume: 13, Issue: 23, Article Number: 5552, PubMed ID: 33291450, eISSN: 1996-1944, 2020;	3.057 / Q2
10.	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;	2.221/Q1
11.	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;	2.147 / Q2
12.	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;	2.192/Q1
13.	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;	2.412 / Q2
14.	Binzar, T., Pater, F., Nadaban, S. Fuzzy bounded operators with application to Radon transform, CHAOS SOLITONS & FRACTALS, Volume: 141, Article Number: 110359, ISSN: 0960-0779, eISSN: 1873-2887, 2020;	3.764/Q1

No.	Article	2019 Impact Factor / Quartile in Category	
15.	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;	2.412 / Q2	
16.	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;	3.11/Q1	
17.	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;	6.274 / Q1	
18.	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;	1.747 / Q1	
19.	Brighenti, R., Cosma, M.P., Marsavina, L., Spagnoli, A., Terzano, M. Laser-based additively manufactured polymers: a review on processes and mechanical models, JOURNAL OF MATERIALS SCIENCE, Volume: 56, Issue: 2, Pages: 961-998, ISSN: 0022-2461, eISSN: 1573-4803, 2020;	3.553 / Q2	
20.	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;	6.182 / Q1	
21.	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 Candesartan-Pure Compound and Pharmaceutical Formulation, PHARMACEUTICS, Volume: 12, Issue: 2, Article Number: 86, PubMed ID: 31972960, eISSN: 1999-4923, 2020;	4.421 / Q1	
22.	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;	1.99 / Q2	
23.	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;	3.267 / Q2	
24.	Buse, C., Lupulescu, V., O'Regan, D. Hyers–Ulam stability for equations with differences and differential equations with time-dependent and periodic coefficients, PROCEEDINGS OF THE ROYAL SOCIETY OF EDINBURGH SECTION A-MATHEMATICS, Volume: 150, Issue: 5, Pages: 2175–2188, ISSN: 0308–2105, eISSN: 1473–7124, 2020;	1.009 / Q2	
25.	Buse, C., O'Regan, D. Discrete integral conditions for weak trajectories and asymptotic stability for operators in Banach spaces, BULLETIN DES SCIENCES MATHEMATIQUES, Volume: 158, Article Number: 102805, ISSN: 0007-4497, eISSN: 1952-4773, 2020;	1.241 / Q2	
26.	Busoniu, L., Varma, 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;	3.193 / Q2	
27.	Buzatu, A.R., Frissen, A.E., van den Broek, L.A.M., Todea, A., Motoc, M., Boeriu, C.G. Chemoenzymatic Synthesis of New Aromatic Esters of Mono- and Oligosaccharides, PROCESSES, Volume: 8, Issue: 12, Article Number: 1638, eISSN: 2227-9717, 2020;	2.753 / Q2	
28.	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;	2.645 / Q2	

Research Report S



No.	Article	2019 Impact Factor / Quartile in Category
29.	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;	2.474 / Q2
30.	Carstoiu, G., Micea, M.V., Ungurean, L., Marcu, M. Novel battery wear leveling method for large-scale reconfigurable battery packs, INTERNATIONAL JOURNAL OF ENERGY RESEARCH, Volume: 45, Issue: 2, Pages: 1932-1947, ISSN: 0363-907X, eISSN: 1099-114X, 2020;	3.741/Q1
31.	Cebrucean, D., Cebrucean, V., Ionel, I. Modeling and performance analysis of subcritical and supercritical coal-fired power plants with biomass co-firing and CO2 capture, CLEAN TECHNOLOGIES AND ENVIRONMENTAL POLICY, Volume: 22, Issue: 1, Pages: 153-169, ISSN: 1618-954X, eISSN: 1618-9558, 2020;	2.429 / Q2
32.	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;	3.998 / Q1
33.	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;	4.762 / Q2
34.	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;	2.576 / Q2
35.	Cocheci, 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;	5.774 / Q1
36.	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;	3.745 / Q1
37.	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;	3.275 / Q1
38.	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;	3.613 / Q1
39.	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;	3.426 / Q1
40.	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;	6.182 / Q1
41.	Cveticanin, D., Herisanu, N., Biro, I., Zukovic, M., Cveticanin, L. Vibration of the Biomass Boiler Tube Excited with Impact of the Cleaning Device, MATHEMATICS, Volume: 8, Issue: 9, Article Number: 1519, eISSN: 2227-7390, 2020;	1.747 / Q1

No.	Article	2019 Impact Factor / Quartile in Category
42.	Daianu, D.M., Mindruta, C. Sections in functional equations, AEQUATIONES MATHEMATICAE, Volume: 94, Issue: 5, Pages: 931-943, ISSN: 0001-9054, eISSN: 1420-8903, 2020;	0.851/Q2
43.	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;	4.394 / Q1
44.	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;	1.827 / Q1
45.	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;	2.576 / Q2
46.	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;	3.057 / Q2
47.	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;	2.429 / Q2
48.	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;	1.747 / Q1
49.	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;	6.289 / Q1
50.	Erdelyi, R.A., Duma, V.F., Sinescu, C., Dobre, G.M., Bradu, A., Podoleanu, A. Dental Diagnosis and Treatment Assessments: Between X-rays Radiography and Optical Coherence Tomography, MATERIALS, Volume: 13, Issue: 21, Article Number: 4825, PubMed ID: 33126714, eISSN: 1996–1944, 2020;	3.057 / Q2
51.	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 H202, CHEMOSENSORS, Volume: 8, Issue: 2, Article Number: 29, eISSN: 2227-9040, 2020;	3.108 / Q1
52.	Farcas, C.G., Dehelean, C., Pinzaru, I.A., Mioc, M., Socoliuc, V., Moaca, E.A., Avram, S., Ghiulai, R., Coricovac, D., Pavel, I., Alla, P.K., Cretu, O.M., Soica, C., Loghin, F. Thermosensitive Betulinic Acid-Loaded Magnetoliposomes: A Promising Antitumor Potential for Highly Aggressive Human Breast Adenocarcinoma Cells Under Hyperther- mic Conditions, INTERNATIONAL JOURNAL OF NANOMEDICINE, Volume: 15, Pages: 8175-8200, PubMed ID: 33122905, ISSN: 1178-2013, 2020;	5.115 / Q1
53.	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;	4.65 / Q1
54.	Filip, I., Dragan, F., Szeidert, I., Albu, A. Minimum-Variance Control System with Variable Control Penalty Factor, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 7, Article Number: 2274, eISSN: 2076-3417, 2020;	2.474 / Q2
55.	Forton, A., Mangiafico, S., Sauzeat, C., Di Benedetto, H., Marc, P. Properties of blends of fresh and RAP binders with rejuvenator: Experimental and estimated results, CONSTRUCTION AND BUILDING MATERIALS, Volume: 236, Article Number: 117555, ISSN: 0950-0618, eISSN: 1879-0526, 2020;	4.419 / Q1

Research Report S



No.	Article	2019 Impact Factor / Quartile in Category
56.	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;	2.474 / Q2
57.	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;	2.576 / Q2
58.	Glevitzky, M., Aleya, L., Vica, M.L., Dumitrel, G.A., Avram, M., Tit, D.M., Popa, M., Popa, V.C., Behl, T., Bungau, S. Assessing the microbiological contamination along with environmental factors of old books in the 1490-founded Bistrita Monastery, Romania, ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, Volume: 28, Issue: 7, Pages: 8743-8757, PubMed ID: 33070291, ISSN: 0944-1344, eISSN: 1614-7499, 2020;	3.056 / Q2
59.	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;	5.379 / Q1
60.	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;	3.745 / Q1
61.	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;	3.745 / Q1
62.	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;	1.005 / Q2
63.	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;	6.306 / Q1
64.	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;	2.576 / Q2
65.	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;	2.576 / Q2
66.	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;	4.509 / Q2
67.	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;	1.317 / Q2
68.	Herisanu, N., Marinca, V. An effective analytical approach to nonlinear free vibration of elastically actuated microtubes, MECCANICA, ISSN: 0025-6455, eISSN: 1572-9648, 2020;	2.153 / Q2
69.	Herisanu, N., Marinca, V. An Efficient Analytical Approach to Investigate the Dynamics of a Misaligned Multirotor System, MATHEMATICS, Volume: 8, Issue: 7, Article Number: 1083, eISSN: 2227–7390, 2020;	1.747 / Q1
70.	Hulka, I., Utu, D., Serban, V.A., Negrea, P., Lukac, F., Chraska, T. Effect of Ti addition on microstructure and corrosion properties of laser cladded WC-Co/NiCrBSi(Ti) coatings, APPLIED SURFACE SCIENCE, Volume: 504, Article Number: 144349, ISSN: 0169-4332, eISSN: 1873-5584, 2020;	6.182 / Q1

No.	Article	2019 Impact Factor / Quartile in Category
71.	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;	3.275 / Q1
72.	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;	3.275 / Q1
73.	Ionitescu, M., Vermesan, D., Haragus, H., Suciu, O., Todor, A., Dumitrascu, C.V., Negrea, R., Hoinoiu, T., Radu, D., Fruja, D. Association of Neutrophil to Lymphocyte Ratio with Patient Reported Outcomes in Knee Osteoarthritis, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 22, Article Number: 8173, eISSN: 2076-3417, 2020;	2.474 / Q2
74.	Isfanuti, A.S., Tutelea, L.N., Boldea, I., Staudt, T., da Silva, P.E. Outer Ferrite-PM-Rotor BLAC Motor Characterization: FEM-Assisted Optimal Design and Preliminary Experiments, IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, Volume: 56, Issue: 3, Pages: 2580-2589, ISSN: 0093-9994, eISSN: 1939-9367, 2020;	3.488 / Q1
75.	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;	2.753 / Q2
76.	Karagiorgis, S., Tsamis, A., Voutouri, C., Turcu, R., Porav, S.A., Socoliuc, V., Vekas, L., Louca, M., Stylianopoulos, T., Vavourakis, V., Krasia–Christoforou, T. Engineered magnetoactive collagen hydrogels with tunable and predictable mechanical response, MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, Volume: 114, Article Number: 111089, PubMed ID: 32994019, ISSN: 0928-4931, eISSN: 1873-0191, 2020;	5.88 / Q1
77.	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;	3.057 / Q2
78.	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;	3.426 / Q1
79.	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;	3.275 / Q1
80.	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;	3.275 / Q1
81.	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;	2.753 / Q2
82.	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;	7.515 / Q1
83.	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;	6.373 / Q1



No.	Article	2019 Impact Factor / Quartile in Category
84.	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, elSSN: 1588-2926, 2020;	2.731/Q2
85.	Linul, E., Marsavina, L., Stoia, D.I. Mode I and II fracture toughness investigation of Laser-Sintered Polyamide, THEORETICAL AND APPLIED FRACTURE MECHANICS, Volume: 106, Article Number: 102497, ISSN: 0167-8442, eISSN: 1872-7638, 2020;	3.021/Q1
86.	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;	3.426 / Q1
87.	Luca, R.E., Giuliani, A., Manescu, A., Heredea, R., Hoinoiu, B., Constantin, G.D., Duma, V.F., Todea, C.D. Osteogenic Potential of Bovine Bone Graft in Combination with Laser Photobiomodulation: An Ex Vivo Demonstrative Study in Wistar Rats by Cross-Linked Studies Based on Synchrotron Microtomography and Histology, INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, Volume: 21, Issue: 3, Article Number: 778, PubMed ID: 31991756, eISSN: 1422-0067, 2020;	4.556 / Q1
88.	Lupa, L., Cocheci, L., Trica, B., Coroaba, A., Popa, A. Photodegradation of Phenolic Compounds from Water in the Presence of a Pd-Containing Exhausted Adsorbent, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 23, Article Number: 8440, eISSN: 2076-3417, 2020;	2.474 / Q2
89.	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;	1.747 / Q1
90.	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;	1.216 / Q1
91.	Manolescu, L. Ulam's Type Stability and Generalized Norms, SYMMETRY-BASEL, Volume: 12, Issue: 4, Article Number: 502, eISSN: 2073-8994, 2020;	2.645 / Q2
92.	Marian, E., Tita, B., Duteanu, N., Vicas, L., Ciocan, S., Jurca, T., Antal, L., Tica, O., Muresan, M., Pallag, A., Micle, O. Antimicrobial activity of fusidic acid inclusion complexes, INTERNATIONAL JOURNAL OF INFECTIOUS DISEASES, Volume: 101, Pages: 65–73, PubMed ID: 33011279, ISSN: 1201–9712, eISSN: 1878–3511, 2020;	3.202 / Q2
93.	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;	4.762 / Q2
94.	Marinca, V., Herisanu, N. Optimal Auxiliary Functions Method for a Pendulum Wrapping on Two Cylinders, MATH-EMATICS, Volume: 8, Issue: 8, Article Number: 1364, eISSN: 2227-7390, 2020;	1.747 / Q1
95.	Marinca, V., Herisanu, N. Construction of Analytic Solution to Axisymmetric Flow and Heat Transfer on a Moving Cylinder, SYMMETRY-BASEL, Volume: 12, Issue: 8, Article Number: 1335, eISSN: 2073-8994, 2020;	2.645 / Q2
96.	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;	3.031 / Q1

No.	Article	2019 Impact Factor / Quartile in Category	
97.	Miclea, R.C., Dughir, C., Alexa, F., Sandru, F., Silea, I. Laser and LIDAR in a System for Visibility Distance Estimation in Fog Conditions, SENSORS, Volume: 20, Issue: 21, Article Number: 6322, PubMed ID: 33167586, eISSN: 1424-8220, 2020;	3.275 / Q1	
98.	Milici, C., Machado, J.T., Draganescu, G. Application of the Euler and Runge-Kutta Generalized Methods for FDE and Symbolic Packages in the Analysis of Some Fractional Attractors, INTERNATIONAL JOURNAL OF NONLINEAR SCIENCES AND NUMERICAL SIMULATION, Volume: 21, Issue: 2, Pages: 159–170, ISSN: 1565–1339, eISSN: 2191–0294, 2020;	1.467 / Q2	
99.	Militaru, B.A., Pode, R., Lupa, L., Schmidt, W., Tekle-Roettering, A., Kazamer, N. Using Sewage Sludge Ash as an Efficient Adsorbent for Pb (II) and Cu (II) in Single and Binary Systems, MOLECULES, Volume: 25, Issue: 11, Article Number: 2559, PubMed ID: 32486401, eISSN: 1420–3049, 2020;	3.267 / Q2	
100.	Mirsu, R., Simion, G., Caleanu, C.D., Pop-Calimanu, 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;	3.275 / Q1	
101.	Mosoarca, G., Vancea, C., Popa, S., Gheju, M., Boran, S. Syringa vulgaris leaves powder a novel low-cost adsorbent for methylene blue removal: isotherms, kinetics, thermodynamic and optimization by Taguchi method, SCIENTIFIC REPORTS, Volume: 10, Issue: 1, Article Number: 17676, PubMed ID: 33077788, ISSN: 2045-2322, 2020;	3.998 / Q1	
102.	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;	2.75 / Q2	
103.	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;	2.897 / Q1	
104.	Muntean, R., Pascal, D.T., Rost, U., Marginean, G., Brodmann, M., Vaszilcsin, N. Synthesis and characterisation of platinum-cobalt-manganese ternary alloy catalysts supported on carbon nanofibers: An alternative catalyst for hydrogen evolution reaction, INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, Volume: 45, Issue: 49, Special Issue: SI, Pages: 26217-26225, ISSN: 0360-3199, eISSN: 1879-3487, 2020;	4.939 / Q2	
105.	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;	5.379 / Q1	
106.	Murvay, 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;	3.745 / Q1	
107.	Nagornyi, A.V., Socoliuc, V., Petrenko, V.I., Almasy, L., Ivankov, O.I., Avdeev, M.V., Bulavin, L.A., Vekas, L. Structural characterization of concentrated aqueous ferrofluids, JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, Volume: 501, Article Number: 166445, ISSN: 0304-8853, eISSN: 1873-4766, 2020;	2.717 / Q2	
108.	Negirla, P., Druta, R., Silea, I. Availability Improvements through Data Slicing in PLC Smart Grid Networks, SENSORS, Volume: 20, Issue: 24, Article Number: 7256, PubMed ID: 33348872, eISSN: 1424-8220, 2020;	3.275 / Q1	
109.	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;	2.849 / Q1	



No.	Article	2019 Impact Factor / Quartile in Category
110.	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;	3.104 / Q2
111.	Negrea, R. On a class of nonlinear stochastic integral equations, NONLINEAR ANALYSIS-REAL WORLD APPLICATIONS, Volume: 54, Article Number: 103104, ISSN: 1468-1218, 2020;	2.072 / Q1
112.	Negrea, R. On the functional equation $f(x \text{ plus } y) = f(x) \text{ plus } f(y)$, MONATSHEFTE FUR MATHEMATIK, Volume: 191, Issue: 3, Pages: 635-637, ISSN: 0026-9255, eISSN: 1436-5081, 2020;	0.933 / Q2
113.	Negrea, R. On a nonlinear stochastic integral equation, MONATSHEFTE FUR MATHEMATIK, Volume: 192, Issue: 4, Pages: 905–914, ISSN: 0026–9255, eISSN: 1436–5081, 2020;	0.933 / Q2
114.	Nichita, I., Lupa, L., Visa, A., Popa, A. One-pot synthesis, characterization and in vitro antibacterial evaluation of bioactive "aminophosphinic acid" groups grafted onto polymeric-support, POLYMER BULLETIN, ISSN: 0170-0839, eISSN: 1436-2449, 2020;	2.014 / Q2
115.	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 Pb2+ Removal from Aqueous Solution, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 8, Article Number: 2726, eISSN: 2076-3417, 2020;	2.474 / Q2
116.	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;	2.474 / Q2
117.	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;	3.11/Q1
118.	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;	2.612 / Q2
119.	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;	3.588 / Q1
120.	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;	3.426 / Q1
121.	Papaparaskeva, G., Dinev, M.M., Krasia-Christoforou, T., Turcu, R., Porav, S.A., Balanean, F., Socoliuc, V. White Magnetic Paper with Zero Remanence Based on Electrospun Cellulose Microfibers Doped with Iron Oxide Nanoparticles, NANOMATERIALS, Volume: 10, Issue: 3, Article Number: 517, PubMed ID: 32178410, eISSN: 2079-4991, 2020;	4.324 / Q2
122.	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;	3.057 / Q2
123.	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;	3.057 / Q2

No.	Article	2019 Impact Factor / Quartile in Category
124.	Perju-Mitran, A., Zirra, D., Carutasu, G., Pirjan, A., Stanica, J.L. Applying the Technology Acceptance Model to Assess the Intention to Use an Aftermarket eCall Based on 112 Device for Passenger Vehicles to Ensure Sustainable Rescue Operations on European Roads, SUSTAINABILITY, Volume: 12, Issue: 22, Article Number: 9488, eISSN: 2071-1050, 2020;	2.576 / Q2
125.	Pevnaya, M.V., Drozdova, A.A., Cernicova-Buca, M. Making Room for Volunteer Participation in Managing Public Affairs: A Russian Experience, SUSTAINABILITY, Volume: 12, Issue: 24, Article Number: 10229, eISSN: 2071-1050, 2020;	2.576 / Q2
126.	Philippou, K., Christou, C.N., Socoliuc, V., Vekas, L., Tanasa, E., Miclau, M., Pashalidis, I., Krasia-Christoforou, T. Superparamagnetic polyvinylpyrrolidone/chitosan/Fe3O4 electrospun nanofibers as effective U(VI) adsorbents, JOURNAL OF APPLIED POLYMER SCIENCE, Volume: 138, Issue: 15, Article Number: e50212, ISSN: 0021-8995, eISSN: 1097-4628, 2020;	2.52 / Q2
127.	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;	5.138 / Q1
128.	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;	4.867 / Q1
129.	Pop, M.D., Prostean, O., David, T.M., Prostean, 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;	3.275 / Q1
130.	Pop-Calimanu, I.M., Balint, M., Lascu, D. A New Hybrid Cuk DC-DC Converter with Coupled Inductors, ELECTRONICS, Volume: 9, Issue: 12, Article Number: 2188, eISSN: 2079-9292, 2020;	2.412 / Q2
131.	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;	4.438 / Q1
132.	Popa, C.A., Kaslik, E. Finite-Time Mittag-Leffler Synchronization of Neutral-Type Fractional-Order Neural Networks with Leakage Delay and Time-Varying Delays, MATHEMATICS, Volume: 8, Issue: 7, Article Number: 1146, eISSN: 2227-7390, 2020;	1.747 / Q1
133.	Popa, C.A. Global mu-stability of neutral-type impulsive complex-valued BAM neural networks with leakage delay and unbounded time-varying delays, NEUROCOMPUTING, Volume: 376, Pages: 73-94, ISSN: 0925-2312, eISSN: 1872-8286, 2020;	4.438 / Q1
134.	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, SCIENTIFIC REPORTS, Volume: 10, Issue: 1, Article Number: 16100, PubMed ID: 32999344, ISSN: 2045-2322, 2020;	3.998 / Q1
135.	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, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 18, Article Number: 6518, eISSN: 2076-3417, 2020;	2.474 / Q2
136.	Precup, R.E., Roman, R.C., Teban, T.A., Albu, A., Petriu, E.M., Pozna, C. Model-Free Control of Finger Dynamics in Prosthetic Hand Myoelectric-based Control Systems, STUDIES IN INFORMATICS AND CONTROL, Volume: 29, Issue: 4, Pages: 399–410, ISSN: 1220–1766, 2020;	2.102 / Q2

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Article	2019 Impact Factor / Quartile in Category
Precup, R.E., Teban, T.A., Albu, A., Borlea, A.B., Zamfirache, I.A., Petriu, E.M. Evolving Fuzzy Models for Prosthetic Hand Myoelectric-Based Control, IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, Volume: 69, Issue: 7, Pages: 4625-4636, ISSN: 0018-9456, eISSN: 1557-9662, 2020;	3.658 / Q1
Pugna, A., Negrea, R., Linul, E., Marsavina, L. Is Fracture Toughness of PUR Foams a Material Property? A Statistical Approach, MATERIALS, Volume: 13, Issue: 21, Article Number: 4868, PubMed ID: 33143072, eISSN: 1996–1944, 2020;	3.057/ Q2
Pugna, A.P., Potra, S.A., Negrea, R. A strategic decision making tool for new product and service design, MANAGEMENT DECISION, Volume: 59, Issue: 2, Pages: 406–425, ISSN: 0025–1747, eISSN: 1758–6070, 2020;	2.723 / Q2
Radac, M.B., Lala, T. Robust Control of Unknown Observable Nonlinear Systems Solved as a Zero-Sum Game, IEEE ACCESS, Volume: 8, Pages: 214153-214165, ISSN: 2169-3536, 2020;	3.745 / Q1
Remes, A., Manea, F., Motoc, S., Baciu, A., Szerb, E.I., Gascon, J., Gug, G. Highly Sensitive Non-Enzymatic Detection of Glucose at MWCNT-CuBTC Composite Electrode, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 23, Article Number: 8419, eISSN: 2076-3417, 2020;	2.474 / Q2
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, APPLIED SURFACE SCIENCE, Volume: 506, Article Number: 144185, ISSN: 0169-4332, eISSN: 1873-5584, 2020;	6.182 / Q1
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, LAND, Volume: 9, Issue: 6, Article Number: 200, eISSN: 2073-445X, 2020;	2.429 / Q2
Sbarcea, L., Tanase, I.M., Ledeti, A., Circioban, D., Vlase, G., Barvinschi, P., Miclau, M., Varut, R.M., Trandafirescu, C., Ledeti, I. Encapsulation of Risperidone by Methylated beta-Cyclodextrins: Physicochemical and Molecular Modeling Studies, MOLECULES, Volume: 25, Issue: 23, Article Number: 5694, PubMed ID: 33287127, eISSN: 1420-3049, 2020;	3.267 / Q2
Serban, D.A., Furtos, G., Marsavina, L., Sosdean, C., Negru, R. Numerical modelling of the mechanical behaviour of wood fibre-reinforced geopolymers, CONTINUUM MECHANICS AND THERMODYNAMICS, ISSN: 0935-1175, eISSN: 1432-0959, 2020;	2.139 / Q2
Serban, D.A., Negru, R., Filipescu, H., Marsavina, L. Investigations on the influence of the triaxial state of stress on the failure of polyurethane rigid foams, CONTINUUM MECHANICS AND THERMODYNAMICS, ISSN: 0935-1175, eISSN: 1432-0959, 2020;	2.139 / Q2
Shah, S.G.M., Sarfraz, M., Ivascu, L. Assessing the interrelationship corporate environmental responsibility, innovative strategies, cognitive and hierarchicalCEO: A stakeholder theory perspective, CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT, Volume: 28, Issue: 1, Pages: 457-473, ISSN: 1535-3958, eISSN: 1535-3966, 2020;	4.542 / Q1
Simon, S., Stoian, C.E., Gherhes, V. The Concept of Sustainability in the Romanian Top Universities' Strategic Plans, SUSTAINABILITY, Volume: 12, Issue: 7, Article Number: 2757, eISSN: 2071-1050, 2020;	2.576 / Q2
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, WATER, Volume: 12, Issue: 10, Article Number: 2895, eISSN: 2073-4441, 2020;	2.544 / Q2
	 Precup, R.E., Teban, T.A., Albu, A., Borlea, A.B., Zamfirache, I.A., Petriu, E.M. Evolving Fuzzy Models for Prosthetic Hand Myoelectric-Based Control, IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, Volume: 69, Issue: 7, Pages: 4625-4636, ISSN: 0018-9456, eISSN: 1557-9662, 2020; Pugna, A., Negrea, R., Linul, E., Marsavina, L. Is Fracture Toughness of PUR Foams a Material Property? A Statistical Approach, MATERIALS, Volume: 13, Issue: 21, Article Number: 4868, PubMed ID: 331143072, eISSN: 1996-1944, 2020; Pugna, A.P., Potra, S.A., Negrea, R. A strategic decision making tool for new product and service design, MAINAGEMENT DECISION, Valume: 59, Issue: 2, Pages: 406-425, ISSN: 0025-1747, eISSN: 1758-6070, 2020; Radac, M.B., Lala, T. Robust Control of Unknown Observable Nonlinear Systems Solved as a Zero-Sum Game, IEEE ACCESS, Volume: 8, Pages: 214153-214165, ISSN: 2169-3536, 2020; Remes, A., Manea, F., Motoc, S., Baciu, A., Szerb, E.I., Gascon, J., Gug, G. Highly Sensitive Non-Enzymatic Detection of Glucose at MWCNT-CuBTC Composite Electrode, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 23, Article Number: 8419, eISSN: 2076-3417, 2020; 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, APPLIED SURFACE SCIENCE, Volume: 506, Article Number: 144185, ISSN: 0169-4332, eISSN: 2073-445X, 2020; Salvia, R., Halbac-Cotoara-Zamfir, R., Cividino, S., Salvati, L., Quaranta, G. Form Rural Spaces to Peri-Urban Districts: Metropolitan Growth, Sparse Settlements and Demographic Dynamics in a Mediterranean Region, LAND, Volume: 9, Issue: 6, Article Number: 200, eISSN: 2073-445X, 2020; Sbarcea, L., Tanase, I.M., Ledeti, A., Griodban, D., Viase, G., Barvinschi, P, Miclau, M., Varut, R.M., Trandafirescu, C., Ledeti, I. Encapsulation of Risperidone by Methylated beta-Cyclodextrins: Physicoch

No.	Article	2019 Impact Factor / Quartile in Category
150.	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, JOURNAL OF ENVIRONMENTAL MANAGEMENT, Volume: 255, Article Number: 109823, PubMed ID: 31785458, ISSN: 0301-4797, eISSN: 1095-8630, 2020;	5.647 / Q1
151.	Stefanovic, N., Blagojevic, M., Pokrajac, I., Greconici, M., Cen, Y.G., Mladenovic, V. A Symbolic Encapsulation Point as Tool for 5G Wideband Channel Cross-Layer Modeling, ENTROPY, Volume: 22, Issue: 10, Article Number: 1151, PubMed ID: 33286920, eISSN: 1099-4300, 2020;	2.494 / Q2
152.	Stoia, D.L., Marsavina, L., Linul, E. Mode I Fracture Toughness of Polyamide and Alumide Samples obtained by Selective Laser Sintering Additive Process, POLYMERS, Volume: 12, Issue: 3, Article Number: 640, PubMed ID: 32168974, eISSN: 2073-4360, 2020;	3.426 / Q1
153.	Stratan, A., Zub, C.I., Dubina, D. Prequalification of a set of buckling restrained braces: Part I - experimental tests, STEEL AND COMPOSITE STRUCTURES, Volume: 34, Issue: 4, Pages: 547-559, ISSN: 1229-9367, eISSN: 1598-6233, 2020;	4.394 / Q1
154.	Szabo, R.Z., Herceg, I.V., Hanak, R., Hortovanyi, L., Romanova, A., Mocan, M., Djuricin, D. Industry 4.0 Implementation in B2B Companies: Cross-Country Empirical Evidence on Digital Transformation in the CEE Region, SUSTAINABILITY, Volume: 12, Issue: 22, Article Number: 9538, eISSN: 2071-1050, 2020;	2.576 / Q2
155.	Tamas, A., Cozma, I., Cocheci, L., Lupa, L., Rusu, G. Adsorption of Orange II Onto Zn2AI-Layered Double Hydroxide Prepared From Zinc Ash, FRONTIERS IN CHEMISTRY, Volume: 8, Article Number: 573535, PubMed ID: 33425845, ISSN: 2296–2646, 2020;	3.693 / Q2
156.	Tanasa, C., Dan, D., Becchio, C., Corgnati, S.P., Stoian, V. Cost-optimal and indoor environmental quality assessment for residential buildings towards EU long-term climate targets, ENERGY FOR SUSTAINABLE DEVELOPMENT, Volume: 59, Pages: 49-61, ISSN: 0973-0826, eISSN: 2352-4669, 2020;	3.61 / Q2
157.	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, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Volume: 141, Issue: 3, Pages: 1027-1039, ISSN: 1388-6150, eISSN: 1588-2926, 2020;	2.731/Q2
158.	Tanase, I.M., Sbarcea, L., Ledeti, A., Barvinschi, P., Circioban, D., Vlase, G., Varut, R.M., Ledeti, I. Compatibility studies with pharmaceutical excipients for aripiprazole-heptakis (2,6-di-O-methyl)-beta-cyclodextrin supramolecular adduct, JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, Volume: 142, Issue: 5, Pages: 1963–1976, ISSN: 1388–6150, eISSN: 1588–2926, 2020;	2.731/Q2
159.	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, ENVIRONMENTAL SCIENCE-WATER RESEARCH & TECHNOLOGY, Volume: 6, Issue: 4, Pages: 976-992, ISSN: 2053-1400, eISSN: 2053-1419, 2020;	3.449 / Q1
160.	Tigan, G., Lugojan, S., Ciurdariu, L. Analysis of Degenerate Chenciner Bifurcation, INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS, Volume: 30, Issue: 16, Article Number: 2050245, ISSN: 0218-1274, eISSN: 1793-6551, 2020;	2.469 / Q2
161.	Tigan, G., Lazureanu, C., Munteanu, F., Sterbeti, C., Florea, A. Bifurcation diagrams in a class of Kolmogorov systems, NONLINEAR ANALYSIS-REAL WORLD APPLICATIONS, Volume: 56, Article Number: 103154, ISSN: 1468-1218, 2020;	2.072 / Q1

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No.	Article	2019 Impact Factor / Quartile in Category
162.	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;	1.535 / Q2
163.	Tmusic, G., Manfreda, S., Aasen, H., James, M.R., Goncalves, G., Ben-Dor, E., Brook, A., Polinova, M., Arranz, J.J., Meszaros, J., Zhuang, R.D., Johansen, K., Malbeteau, Y., de Lima, I.P., Davids, C., Herban, S., McCabe, M.F. Current Practices in UAS-based Environmental Monitoring, REMOTE SENSING, Volume: 12, Issue: 6, Article Number: 1001, eISSN: 2072-4292, 2020;	4.509 / Q2
164.	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;	2.731 / Q2
165.	Topirceanu, A., Udrescu, L., Udrescu, M., Mihaicuta, S. Gender Phenotyping of Patients with Obstructive Sleep Apnea Syndrome Using a Network Science Approach, JOURNAL OF CLINICAL MEDICINE, Volume: 9, Issue: 12, Article Number: 4025, PubMed ID: 33322816, eISSN: 2077–0383, 2020;	3.303 / Q1
166.	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;	1.22 / Q1
167.	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;	3.426 / Q1
168.	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;	4.421 / Q1
169.	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;	3.741 / Q1
170.	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;	2.474 / Q2
171.	Vajda, M., Ursu, D., Mosoarca, C., Duteanu, N., Miclau, M. Experimental investigation of hydrogen insertion in copper oxide on photovoltaic performance of p-type dye-sensitized solar cell, INTERNATIONAL JOURNAL OF ENERGY RESEARCH, Volume: 45, Issue: 4, Pages: 5309-5317, ISSN: 0363-907X, eISSN: 1099-114X, 2020;	3.741 / Q1
172.	Vajda, M., Ursu, D., Duteanu, N., Miclau, 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;	3.204 / Q2
173.	Vamvatsikos, D., Bakalis, K., Kohrangi, M., Pyrza, S., Castiglioni, C.A., Kanyilmaz, A., Morelli, F., Stratan, A., D'Aniello, M., Calado, L., Proenca, J.M., Degee, H., Hoffmeister, B., Pinkawa, M., Thanopoulos, P., Vayas, I. A risk-consistent approach to determine EN1998 behaviour factors for lateral load resisting systems, SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, Volume: 131, Article Number: 106008, ISSN: 0267-7261, eISSN: 1879-341X, 2020;	2.637 / Q2

No.	Article	2019 Impact Factor / Quartile in Category
174.	Vancea, C., Mihailescu, M., Negrea, A., Mosoarca, G., Ciopec, M., Duteanu, N., Negrea, P., Minzatu, V. Batch and Fixed-Bed Column Studies on Palladium Recovery from Acidic Solution by Modified MgSiO3, INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH, Volume: 17, Issue: 24, Article Number: 9500, PubMed ID: 33352975, eISSN: 1660-4601, 2020;	2.849 / Q1
175.	Vangijzegem, T., Stanicki, D., Panepinto, A., Socoliuc, V., Vekas, L., Muller, R.N., Laurent, S. Influence of Experimental Parameters of a Continuous Flow Process on the Properties of Very Small Iron Oxide Nanoparticles (VSION) Designed for Ti -Weighted Magnetic Resonance Imaging (MRI), NANOMATERIALS, Volume: 10, Issue: 4, Article Number: 757, eISSN: 2079-4991, 2020;	4.324 / Q2
176.	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;	2.404 / Q2
177.	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;	4.324 / Q2
178.	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;	2.731/Q2
179.	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;	5.326 / Q1
180.	Zaharia, C., Duma, V.F., Sinescu, C., Socoliuc, V., Craciunescu, I., Turcu, R.P., Marin, C.N., Tudor, A., Rominu, M., Negrutiu, M.L. Dental Adhesive Interfaces Reinforced with Magnetic Nanoparticles: Evaluation and Modeling with Micro-CT versus Optical Microscopy, MATERIALS, Volume: 13, Issue: 18, Article Number: 3908, PubMed ID: 32899605, eISSN: 1996-1944, 2020;	3.057 / Q2
181.	Zirra, D., Perju-Mitran, A., Carutasu, G., Pirjan, A., Garais, E.G. An Analysis of the Socio-Economic and Human Life Impact of Implementing the eCall In Vehicle System (IVS) in the Purpose of Ensuring Sustainable, Improved Rescue Operations on European Roads, SUSTAINABILITY, Volume: 12, Issue: 13, Article Number: 5341, eISSN: 2071-1050, 2020;	2.576 / Q2
182.	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.	4.394 / Q1

* The data was obtained from Web of Science - Clarivate Analytics in 28 June 2021