

Acoustic analysis of compact silencer solution based on microperforated panel

Villau, Margus; Rämmal, Hans; Lavrentjev, Jüri Modern Materials and Manufacturing 2023 : Tallinn, Estonia, 2–4 May 2023 2024 / art. 030014 <https://doi.org/10.1063/5.0189854> [Article at Scopus](#) [Conference Proceedings at Scopus](#)

Acoustic emission of Estonian clay Arumetsa during firing

Hulan, Tomaš; Štubna, Igor; **Kaljuvee, Tiit** THERMOPHYSICS 2018: 23rd International Meeting of Thermophysics 2018 : Smolenice, Slovakia, 7–9 November 2018 2018 / art. 020016, [6] p <https://doi.org/10.1063/1.5047610> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Application of Haar wavelet based methods for solving wave propagation problems

Ratas, Mart; Jena, S.K.; Chakraverty, S. AIP conference proceedings 2020 <https://doi.org/10.1063/5.0026696> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Application of Haar wavelet method for solving nonlinear evolution equations

Ratas, Mart International Conference of Numerical Analysis and Applied Mathematics, ICNAAM 2018 : 13-18 September 2018, Rhodes, Greece 2019 / art. 330004, p. 1–4 <https://doi.org/10.1063/1.5114342> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Application of HOHWM based function approximation algorithms in engineering design

Mäe, Tiina; Plamus, Tiia; Majak, Jüri; Karunanidhi, Ramachandran; Rahman, Md Toufique International conference of numerical analysis and applied mathematics ICNAAM 2021 : Rhodes, Greece, 20–26 September 2021 2023 / art. 250003 <https://doi.org/10.1063/5.0162255> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Application of HoHWM in the stability analysis of nonlocal Euler-Bernoulli beam

Jena, Subrat Kumar; Chakraverty, Snehashish; **Ratas, Mart; Kirs, Maarjuss** International Conference of Numerical Analysis and Applied Mathematics ICNAAM 2019 : 23–28 September 2019 Rhodes, Greece 2020 / art. 230003 <https://doi.org/10.1063/5.0026439> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Application of Taguchi method for in-situ synthesis of TiC from TiO₂–graphite powders in PTAW hardfacings and characterization thereof

Yöyler, Sibel; Surzhenkov, Andrei; Viljus, Mart; Traksmaa, Rainer; Juhani, Kristjan Modern materials and manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 040007 <https://doi.org/10.1063/5.0189317> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Application of the Adaptive Higher Order Haar Wavelet based methods for solving the sine-Gordon equation

Ratas, Mart AIP conference proceedings 2022 / art. 380006 <https://doi.org/10.1063/5.0081491> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Assessing the frost resistance of illite-based ceramics through the resonant frequency of free vibration and internal damping

Hulan, Tomaš; Knapek, Michal; Minarik, Peter; Csaki, Štefan; **Kaljuvee, Tiit; Uibu, Mai** AIP conference proceedings 2017 / art. 040015, p. 1-7 <https://doi.org/10.1063/1.4994495> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

The band structure of CuInTe₂ studied by optical reflectivity

Yakushev, Michael V.; Mudrov, Andrej; **Kärber, Erki** Applied physics letters 2019 / art. 062103, 4 p. : ill <https://doi.org/10.1063/1.5079971> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The beneficial effect of reusable food boxes on the green transition

Tähemaa, Toivo; Sarkans, Martinš; Sarand, Inga; Pohlak, Meelis; Niidas, Alar Modern Materials and Manufacturing 2023 : Tallinn, Estonia, 2–4 May 2023 2024 / art. 030012 <https://doi.org/10.1063/5.0189325> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Building ceramics with an addition of pulverized combustion fly ash from the thermal power plant Nováky

Hulan, Tomaš; Medved, Igor; Trnik, Anton; Štubna, Igor; **Kaljuvee, Tiit** AIP conference proceedings 2016 / p. 040009-1 - 040009-7 : ill <https://doi.org/10.1063/1.4955240> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Carrier collection losses in interface passivated amorphous silicon thin-film solar cells

Neumüller, A.; **Bereznev, Sergei**; Ewert, M.; **Volobujeva, Olga** Applied physics letters 2016 / p. 043903-1 - 043903-4 : ill <https://doi.org/10.1063/1.4959995> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A case study of printed circuit boards recycling by disintegrator technology

Klauson, Artur; Goljandin, Dmitri; Kulu, Priit; Antonov, Maksim; Gustafsson, Göran; Davoodi, Ali Modern materials and manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 040014 <https://doi.org/10.1063/5.0189208> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Coherent enterprise information modelling for 5G private network feasibility

Jairus, Tanel; Pilvik, Riivo; Kõrbe Kaare, Kati; Sadam, Arvi; Kuhi, Kristjan Modern materials and manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 020012 <https://doi.org/10.1063/5.0196899> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Color center fluorescence and spin manipulation in single crystal, pyramidal diamond tips

Nelz, Richard; Fuchs, Philipp; **Podgurski, Vitali** Applied physics letters 2016 / p. 193105-1 - 193105-4 : ill
<https://doi.org/10.1063/1.4967189> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparing two wavelet approaches for solving fractional differential equations

Majak, Jüri; Kivistik, Lenart; Eerme, Martin; Tungal, Ernst International Conference of Numerical Analysis and Applied Mathematics : ICNAAM2022 : Heraklion, Freece, 19-25 September 2022 2024 / art. 230004 <https://doi.org/10.1063/5.0210415>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Comparison of electrical conductivity of cement composite materials

Birzniece, Inga Melanija; Cizevska, Anna; **Goljandin, Dmitri;** Lusiš, Vitalijs World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium - WMCAUS 2022 : Prague, Czech Republic, 5-9 September 2022 2023 / art. 080011
<https://doi.org/10.1063/5.0170574> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Conceptual design and performance evaluation of COVID-19 vessel for public health service in Indonesia's remote island

Tuswan, Tuswan; Misbahudin, Saefulloh; Widiyanto, Adi; Satriananta, Mahendra Guna; Dwinata, Rayhan Satria; Ismail, Abdi; Hakim, Muhammad Luqman; Rindo, Good; Prabowo, Aditya Rio; **Putranto, Teguh** AIP Conference Proceedings 2023 / art. 030033
<https://doi.org/10.1063/5.0115436> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Copper(II) ions and the Alzheimer's amyloid- β peptide : affinity and stoichiometry of binding

Tõugu, Vello; Friedemann, Merlin; Tiiman, Ann; **Palumaa, Peep** AIP conference proceedings 2014 / p. 109-111

Deep reinforcement learning-based digital twin for droplet microfluidics control

Gyimah, Nafisat; Scheler, Ott; Rang, Toomas; Pardy, Tamas Physics of Fluids 2023 / art. 082020 <https://doi.org/10.1063/5.0159981>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design and application of a fish-shaped lateral line probe for flow measurement

Tuhtan, Jeffrey Andrew; Fuentes-Pérez, Juan Francisco; Strokina, Nataliya; **Toming, Gert;** Musall, Mark; Noack, M.; Kämäräinen, Joni-Kristian; **Kruusmaa, Maarja** Review of scientific instruments 2016 / p. 045110-1 - 045110-8 : ill
<https://doi.org/10.1063/1.4946765> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Detailed photoluminescence study of Cu₂Ge(SSe)₃ microcrystals

Kuusik, Jüri; Kaupmees, Reelika; Li, Xiaofeng; Kauk-Kuusik, Marit; Grossberg, Maarja AIP advances 2021 / art. 085105
<https://doi.org/10.1063/5.0053928> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Development of autonomous food dehydration system based on building integrated photovoltaic thermal technology

Yakobiuk, Dmytro; Jagomägi, Andri; Yakobiuk, Iryna Journal of Renewable and Sustainable Energy 2018 / art. 021002
<https://doi.org/10.1063/1.5000230> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Development of process optimization model for autonomous mobile robot used in production logistics

Majak, Jüri; Karjust, Kristo; Mahmood, Kashif; Hermaste, Aigar; Raamets, Tõnis AIP conference proceedings 2024 / art. 020008 <https://doi.org/10.1063/5.0189299> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Dynamical equivalence between resonant translocation of a polymer chain and diversity-induced resonance

Patriarca, Marco; Scialla, Stefano; Heinsalu, Els; Yamakou, Marius E.; Cartwright, Julian H. E. Chaos : An Interdisciplinary Journal of Nonlinear Science 2025 / art. 073115 <https://doi.org/10.1063/5.0262633>

Dynamics of axially graded nanobeams with follower force effect

Arda, Mustafa; **Mehrpavar, Marmar; Karjust, Kristo** International Conference of Numerical Analysis and Applied Mathematics ICNAAM2022 : Heraklion, Freece, 19-25 September 2022 2024 / art. 230005 <https://pubs.aip.org/aip/acp/article-abstract/3094/1/230005/3297087/Dynamics-of-axially-graded-nanobeams-with-follower> <https://doi.org/10.1063/5.0210131> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Effect of aggregation methods in fuzzy technique for prioritization of criteria of automated vehicle system

Mehrpavar, Marmar; Majak, Jüri; Karjust, Kristo AIP conference proceedings 2024 / art. 020011 <https://doi.org/10.1063/5.0189323>
[Journal metrics at Scopus](#) [Article at Scopus](#)

The effect of niobium on the microstructure evolution of ferritic stainless steel matrix cermets

Kolnes, Märt; Juhani, Kristjan; Kübarsepp, Jakob; Viljus, Mart Modern materials and manufacturing 2023 2024 / art. 040011
<https://doi.org/10.1063/5.0190158> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Effect of solid lubricants on wear of PVD-coated spark plasma-sintered TiB₂/Ti composites

Luszcz, Maciej; Michalczewski, Remigiusz; Kalbarczyk, Marek; Osuch-Slomka, Edyta; **Liu, Le; Antonov, Maksim; Hussainova,**

Irina Modern materials and manufacturing 2023 2024 / art. 040010 <https://doi.org/10.1063/5.0190460> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Effect of surface features stiffness on tribological performance of 3D printed light-weight Ti6Al4V alloy

Antonov, Maksim; Pohlak, Meelis; Ivanov, Roman; Hussainova, Irina Modern materials and manufacturing 2023 2024 / art. 040015 <https://doi.org/10.1063/5.0189279> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Effect of thermal shock treatment parameters on the efficiency of WC-Co cermet recycling

Kariminejad, Arash; Antonov, Maksim; Kumar, Rahul, 1993-; Goljandin, Dmitri; Klimczyk, Piotr; Viljus, Mart AIP conference proceedings 2024 / art. 040013 <https://doi.org/10.1063/5.0189330> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Electrodeposited molybdenum oxide coatings for thin film chalcopyrite solar cells

Ganchev, Maxim; Dimitrov, Dimiter; Stankova, Stanka; **Katerski, Atanas; Gadjev, Iliya; Volobujeva, Olga; Mere, Arvo; Bereznev, Sergei; Krunks, Malle** 10th Jubilee Conference of the Balkan Physical Union 2019 / art. 140002 <https://doi.org/10.1063/1.5091317> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Empennage sizing using tail volume

Karunanidhi, Ramachandran; Scholz, Dieter; **Majak, Jüri; Eerme, Martin** AIP conference proceedings 2022 / art. 380007 <https://doi.org/10.1063/5.0082095> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Energy transfer in ratchets driven by additive trichotomous noise

Sauga, Ako; Martila, Dmitri; Mankin, Romi AIP conference proceedings 2011 / p. 139-146

Enhancing mobility as a service with autonomous last-mile shuttles and data exchange layer for public transport

Kalda, Krister; Sell, Raivo; Kivimäe, Martin Modern materials and manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 020006 <https://doi.org/10.1063/5.0189880> [Article at Scopus](#) [Conference Proceedings at Scopus](#)

Evaluation of Haar wavelet method in engineering applications

Kirs, Maarjus; Tungal, Ernst International Conference on Numerical Analysis and Applied Mathematics (ICNAAM 2018) : Rhodes, Greece, 13-18 September 2018 2019 / art. 330003 <https://doi.org/10.1063/1.5114341> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Experimental determination of the interaction potential between a helium atom and the interior surface of a C60 fullerene molecule

Bacanu, George Razvan; Jafari, Tanzeeha; Aouane, Mohamed; Rantaharju, Jyrki; Walkey, Mark; Hoffman, Gabriela; Shugai, Anna; Nagel, Urmas; Jimenez-Ruiz, Monica; Horsewill, Anthony J.; Rols, Stephane; Rõõm, Toomas; Whitby, Richard J.; Levitt, Malcolm H. The Journal of chemical physics 2021 / art. 144302 <https://doi.org/10.1063/5.0066817>

Experimental study of uni- and bi-directional exchange flows in a large scale rotating trapezoidal channel

De Falco, Maria Chiara; Adduce, Claudia; Cuthbertson, Alan; Negretti, Maria Eletta; **Laanearu, Janek; Malcangio, Daniela; Sommeria, Joel** Physics of Fluids 2021 / art. 036602, 17 p. : ill <https://doi.org/10.1063/5.0039251> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Extended defects in ZnO : efficient sinks for point defects

Azarov, Alexander; **Rauwel, Protima; Hallen, Anders; Monakhov, Edouard; Svensson, Bengt G.** Applied physics letters 2017 / p. 022103-1 - 022103-5 : ill <https://doi.org/10.1063/1.4973463> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A framework for the design and use of virtual labs in digital engineering education

Terkaj, Walter; Pessot, Elena; **Kuts, Vladimir; Bondarenko, Yevhen; Pizzagalli, Simone Luca; Kleine, Kari** Modern Materials and Manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 030003 <https://doi.org/10.1063/5.0189669> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Free vibration analysis of Timoshenko beam by higher-order Haar wavelet method

Mehrparvar, Marmar; Majak, Jüri; Karjust, Kristo AIP conference proceedings 2023 / art. 250007 <https://doi.org/10.1063/5.0162269> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Function approximation using Haar wavelets

Majak, Jüri; Eerme, Martin; Haavajõe, Anti AIP conference proceedings 2020 / art. 230004 <https://doi.org/10.1063/5.0026543> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

GCOS reference upper air network (GRUAN) : steps towards assuring future climate records

Thorne, Peter W.; Vömel, Holger; Bodeker, Gregory E.; Sommer, Michael; Apituley, Arnaud; Berger, Franz H.; Bojinski, Stephan; Braathen, Geir O.; Calpini, Bertrand; Demoz, Belay B.; Diamond, Howard J.; Dykema, John A.; **Rannat, Kalev** Temperature - its measurement and control in science and industry, volume 8 : proceedings of the Ninth International Temperature Symposium; Los Angeles, California, USA, 19 - 23 March 2012 2013 / p. 1042-1047 <https://doi.org/10.1063/1.4821421> [Conference Proceedings at](#)

[Scopus Article at Scopus](#) [Article at WOS](#)

Genetic algorithm vs finite differences in an optimization procedure including FEM with fixed mesh

Auriemma, Fabio International Conference on Numerical Analysis and Applied Mathematics (ICNAAM 2018) : Rhodes, Greece, 13–18 September 2018 2019 / art. 2116, 330006, 4 p <https://doi.org/10.1063/1.5114344> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Higher order Haar wavelet method for vibration analysis of functionally graded beam

Mikola, Madis; Majak, Jüri; Pohlak, Meelis; Shvartsman, Boris AIP Conference Proceedings 2022 / art. 380003
<https://doi.org/10.1063/5.0081476> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Hygrothermal performance of AAC exterior wall after additional insulation with prefabricated elements in Estonia

Pihelo, Peep; Kalamees, Targo 5th Central European Symposium On Building Physics (CESBP) 2023 / p. 020049-1-020049-8
<https://doi.org/10.1063/5.0170884> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Implementation of focused guided waves to locate axial defects in pipes

Fletcher, Sam; Lowe, Michael John Stewart; **Ratassepp, Madis;** Brett, C. Review of progress in quantitative nondestructive evaluation. Volume 29 2010 / p. 223-230 <https://doi.org/10.1063/1.3362398>

Improvement of biomass production by Lactobacillus reuteri using double-carbon source cultivation strategy

Selvamani, Shanmugaprakasham; Malek, Roslinda Abd; Ramli, Solleh; Dailin, Daniel Joe; **Gupta, Vijai Kumar;** Sukmawati, Dalia; El-Adawi, Hala I.; Leng, Ong Mei; El Enshasy, Hesham Ali The 2nd Science and Mathematics International Conference (SMIC 2020) : Transforming Research and Education of Science and Mathematics in the Digital Age 2021 / art. 168153
<https://doi.org/10.1063/5.0041975> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

In vitro fibrillization of Alzheimer's amyloid- β peptide (1-42)

Tiiman, Ann; Krištal, Jekaterina; Palumaa, Peep; Tõugu, Vello AIP advances 2015 / p. 092401-1 - 092401-12 : ill
<https://doi.org/10.1063/1.4921071> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Industrial data analytics in manufacturing shop floor level

Moor, Madis; Pakkanen, Jarkko; **Raamets, Tõnis; Mahmood, Kashif; Riives, Jüri** Modern materials and manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 030006 <https://doi.org/10.1063/5.0189502> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Influence of CLT wetting during the construction phase on the crack formation and air leakages in the CLT

Kalbe, Kristo; Kukk, Villu; Kalamees, Targo AIP conference proceedings 2023 / p. 020028-1-020028-8
<https://doi.org/10.1063/5.0171342> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Insights into TiO₂ thin film photodegradation from Kelvin Probe AFM maps

Olukan, Tuza; **Sydorenko, Jekaterina; Katerski, Atanas;** Al Mahri, Mariam; Lai, Chia-Yun; Al-Hagri, Abdulrahman; Santos, Sergio; **Chiesa, Matteo** Applied physics letters 2022 / art. 031901 <https://doi.org/10.1063/5.0098788> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Investigation of the solar cell materials Cu(In,Ga)Se₂ and Cu₂ZnSnS₄ with muon spin spectroscopy and density-functional calculations

Vilao, Rui C.; Marinopoulos, Apostolos G.; dos Santos, Diego Garcia; Alberto, Helena Vieira; Gil, Joao Campos; Mengyan, Patrick W.; **Kauk-Kuusik, Marit;** Lord, James; Weidinger, Alois Journal of applied physics 2024 / art. 055704
<https://doi.org/10.1063/5.0205837> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

LiDAR-camera fusion based object segmentation in adverse weather conditions for autonomous driving

Gu, Junyi; Lind, Artjom; **Bellone, Mauro** AIP Conference Proceedings 2023

Linearization of moment tensor potentials for multicomponent systems with a preliminary assessment for short-range interaction energy in water dimer and trimer

Lomaka, Andre; Tamm, Toomas The Journal of chemical physics 2020 / art. 164115, 8 p. : ill <https://doi.org/10.1063/5.0007473>
[Journal metrics at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Local strain-induced band gap fluctuations and exciton localization in aged WS₂ monolayers

Krustok, Jüri; Kaupmees, Reelika; Jaaniso, Raivo; Kiisk, Valter; Sildos, Ilmo; Li, B.; Gong, Y. AIP advances 2017 / art. 065005, 12 p. <https://doi.org/10.1063/1.4985299> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Low-frequency non-reciprocal sound propagation features in thermoacoustic waveguide

Auriemma, Fabio The Journal of the Acoustical Society of America 2024 / p. 314-325 <https://doi.org/10.1121/10.0026453> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Machinery risk assessment integration with design and development methods for risk and potential failure reduction

considering safety and efficiency

Sivitski, Alina; Põdra, Priit Modern materials and manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 030013
<https://doi.org/10.1063/5.0189257> [Journal metrics at Scopus](#) [Article at Scopus](#)

Magnetic studies on spinel ferrite nanoparticles and bulk samples synthesized by citrate combustion route

Dimri, Mukesh C.; Khanduri, H.; Agarwal, P.; Garg, V.; **Mere, A.**; Stern R. DAE Solid State Physics symposium 2019, 18–22 December 2019, Jodhpur, India 2020 / art. 030517 <https://doi.org/10.1063/5.0016823> [Journal metrics at Scopus](#) [Article at Scopus](#)
[Article at WOS](#)

Mathematical and physical modelling of atherosclerosis in terms of the alterations of the dynamic electrical impedance of the arteries

Giannoukos, Georgios Numerical analysis and applied mathematics ICNAAM 2012 : international conference of numerical analysis and applied mathematics 2012 / p. 2174-2177 <https://ui.adsabs.harvard.edu/abs/2012AIPC.1479.2174G/abstract>

Mathematical and physical modelling of the dynamic electrical impedance of a tooth

Giannoukos, Georgios; Min, Mart Proceedings of the International Conference on Numerical Analysis and Applied Mathematics 2014 (ICNAAM-2014) : Rhodes, Greece, 22-28 September 2014 2015 / p. 850002-1 - 850002-4 <https://doi.org/10.1063/1.4913057>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Modeling formation range of close binary EHB systems

Pustõnski, Vladislav-Venjamin; Pustõlnik, Izold Mathematics and Astronomy : a joint long journey : Madrid, 23-27 November 2009 2009 / ? p <https://pubs.aip.org/aip/acp/article-abstract/1283/1/309/869565/Modeling-Formation-Range-of-Close-Binary-EHB?redirectedFrom=fulltext>

Modelling process parameters of the PA12-CF60 carbon fiber laminating tape for low cost laminating devices

Haavajõe, Anti; Mikola, Madis; Pohlak, Meelis International Conference of numerical analysis and applied mathematics, ICNAAM 2019, 23–28 September 2019, Rhodes, Greece 2020 / art. 230006 <https://doi.org/10.1063/5.0026715> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Modelling residual stresses in glass structures

Õunapuu, Erko; Anton, Johan; **Klauser, Aleksander** AIP conference proceedings 2019 / art. 330007
<https://doi.org/10.1063/1.5114345> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Molar mass and temperature dependence of the thermodiffusion of polyethylene oxide in water/ethanol mixtures

Wang, Zilin; Afanasenkau, Dzmitry; **Dong, Minjie**; Huang, Danni; Wiegand, Simone Journal of chemical physics 2014 / art. 064904, 8 p. : ill <https://doi.org/10.1063/1.4891720> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Motion imitation of the human pelvic and hip joints

Musalimov, Victor; **Arjassov, Gennadi; Žigailov, Sergei; Rõbak, Dmitri; Penkov, Igor** Mechatronics systems and materials 2018 2018 / art. 020046, 6 p. : ill <https://doi.org/10.1063/1.5066508> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Ne, Ar, and Kr oscillators in the molecular cavity of fullerene C60

Jafari, Tanzeeha; Shugai, Anna; Nagel, Urmas; Bacanu, George Razvan; Aouane, Mohamed; Jimenez-Ruiz, Monica; Rols, Stephane; Bloodworth, Sally; Walkey, Mark; Hoffman, Gabriela; Whitby, Richard J.; Levitt, Malcolm H.; Rõõm, Toomas The Journal of chemical physics 2023 / art. 234305 : ill <https://doi.org/10.1063/5.0152628>

Nonequilibrium transport phenomena in a tilted ratchet model subjected to a multiplicative trichotomous noise

Sauga, Ako; Mankin, Romi Application of Mathematics in Technical and Natural Sciences : 5th International Conference for Promoting the Application of Mathematics in Technical and Natural Sciences - AMiTaNS 13 : Albena, Bulgaria, 24-29 June 2013 2013 / p. 232-239 <https://doi.org/10.1063/1.4827233> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Non-isothermal cup test for liquid and vapour conductivity curve calibration

Klõšeiko, Paul; Margus, Karl; **Kalamees, Targo** AIP conference proceedings 2023 / art. 020030 <https://doi.org/10.1063/5.0171189>
[Conference proceedings at Scopus](#) [Article at Scopus](#)

Non-reciprocal propagation in an acoustic waveguide with a thermally graded metal lattice core

Auriemma, Fabio Modern materials and manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 040004
<https://doi.org/10.1063/5.0189280> [Conference proceedings at Scopus](#) [Article at Scopus](#)

A novel pathway of solution combustion synthesis of silicon carbide and SiC based composite whiskers

Kirakosyan, Hasmik; Nazaretyan, Khachik; Amirkhanyan, Narine; Beglaryan, Hayk; **Aydinyan, Sofiya** Modern materials and manufacturing 2023 2024 / art. 040009 <https://doi.org/10.1063/5.0189204> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Numerical analysis of dynamics of flight of the fragments

Kivistik, Lenart; Eerme, Martin; Majak, Jüri; Kirs, Maarjus AIP conference proceedings 2024 / art. 030016
<https://doi.org/10.1063/5.0189331> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Numerical solution of stiff ODEs using non-uniform Haar wavelets

Aziz, Imran; Yasmeen, Shumaila; **Tsukrejev, Pavel** International Conference of Numerical Analysis and Applied Mathematics, ICNAAM 2018 : 13-18 September 2018, Rhodes, Greece 2019 / art. 330008 <https://doi.org/10.1063/1.5114346> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Numerical study of gas-liquid flow morphology in a vertical flowmeter nozzle

Kartušinski, Aleksander; Balakin, Boris V.; Kutsenko, Kirill V.; Kosinski, Pawel International Conference of Numerical Analysis and Applied Mathematics 2016,(ICNAAM 2016), 19–25 September 2016, Rhodes, Greece 2017 / art. 030003 <https://doi.org/10.1063/1.4992156> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Observation of photoluminescence edge emission in CuSbSe₂ absorber material for photovoltaic applications

Penežko, Aleksei; **Kauk-Kuusik, Marit**; **Volobujeva, Olga**; **Traksmaa, Rainer**; **Grossberg, Maarja** Applied physics letters 2019 / art. 092101, 4 p. : ill <https://doi.org/10.1063/1.5114893> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On numerical simulation of propagation of solitons in microstructured media

Salupere, Andrus; **Ilison, Lauri**; **Tamm, Kert** Applications of Mathematics in Engineering and Economics '34 : proceedings 2008 / p. 155-165 https://www.researchgate.net/publication/258296769_On_Numerical_Simulation_of_Propagation_of_Solitons_in_Microstructured_Media

On the extraordinary strength of Prince Rupert's drops

Aben, Hillar; **Anton, Johan**; **Õis, Marella**; Viswanathan, K.; Chandrasekar, S.; Chaudhri, M. M. Applied physics letters 2016 / p. 231903-1 - 231903-4 : ill <https://doi.org/10.1063/1.4971339> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optical study of local strain related disordering in CVD-grown MoSe₂ monolayers

Krustok, Jüri; **Raadik, Taavi**; Jaaniso, Raivo; Kiisk, Valter Applied physics letters 2016 / p. 253106-1 - 253106-5 : ill <https://doi.org/10.1063/1.4972782> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optical study of valence band splitting and resonant acceptor states in Cu₂GeS₃ microcrystals

Krustok, Jüri; **Kaupmees, Reelika**; **Kokla, Joel**; **Kauk-Kuusik, Marit** Applied physics letters 2024 / art. 242111 <https://doi.org/10.1063/5.0245139>

Pitch glide effect induced by a nonlinear string-barrier interaction

Kartofelev, Dmitri; **Stulov, Anatoli**; Välimäki, Vesa Recent Developments in Nonlinear Acoustics : 20th International Symposium on Nonlinear Acoustics including the 2nd International Sonic Boom Forum, 29 June–3 July 2015, Écully, France 2015 / art. 030004 <https://doi.org/10.1063/1.4934387> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Preface : Computational Mechanics

Majak, Jüri; Sciuva, M. D. AIP conference proceedings 2020 / art. 230001 <https://doi.org/10.1063/5.0026521> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Preface of the “Symposium on Numerical Analysis and Optimal Design of Materials and Structures”

Majak, Jüri; Bassir, David AIP Conference Proceedings 2022 / art. 380001 <https://doi.org/10.1063/5.0081481> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Preface: Computational mechanics. Analysis and design optimization

Majak, Jüri International Conference on Numerical Analysis and Applied Mathematics (ICNAAM 2018), 13–18 September 2018 2019 / art. 330001 <https://doi.org/10.1063/1.5114339> [Conference proceedings at Scopus](#) [Article at Scopus](#)

The preparation of high-entropy refractory alloys by aluminothermic reduction process

Kirakosyan, Hasmik; Nazaretyan, Khachik; Kharatyan, Anahit; **Aydinyan, Sofiya** Modern materials and manufacturing 2023 2024 / art. 040012 <https://doi.org/10.1063/5.0189206> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Resonant behavior of a fractional oscillator with fluctuating mass

Sauga, Ako; Mankin, Romi; Ainsaar, Ain Application of Mathematics in Technical and Natural Sciences : 4th International Conference - AMITaNS'12 : memorial volume devoted to Prof. Christo I. Christov : St. Constantine and Helena, Bulgaria 11–16 June 2012 2012 / p. 224-232 <https://pubs.aip.org/aip/acp/article-abstract/1487/1/224/855288/Resonant-behavior-of-a-fractional-oscillator-with?redirectedFrom=PDF>

Review of - SiC wide-bandgap heterostructure properties as an alternate semiconductor material

Patankar, Udayan Sunil; Rajput Priti, J.; **Koel, Ants**; Nitnaware, V.N. International Conference on Inventive Research in Material Science and Technology, ICIRMCT 2018 : March 23-24, 2018 2018 / art. 020011 <https://doi.org/10.1063/1.5038690> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Reynolds-number effect on vortex ring evolution

Kaplanski, Felix; Fukumoto, Y.; **Rudi, Ülo** Recent Progresses in Fluid Dynamics Research : proceedings of the Sixth International Conference on Fluid Mechanics, 30 June - 3 July, 2011, Guangzhou, China 2011 / p. 57-60 : ill
https://www.researchgate.net/publication/234946883_Reynolds-number_Effect_on_Vortex_Ring_Evolution

Robot bus low-level control system transformation to an open-source solution

Pikner, Heiko; Sell, Raivo; Gu, Junyi Modern Materials and Manufacturing 2023 : Tallinn, Estonia, 2–4 May 2023 2024 / art. 020004 <https://doi.org/10.1063/5.0189277> [Conference proceedings at Scopus](#) [Article at Scopus](#)

SH0 mode interaction with the propagation directional crack in a plate

Ratassepp, Madis; **Lowe, Michael John Stewart** Review of Progress in Quantitative Nondestructive Evaluation. Vols. 28A and 28B 2009 / p. 161-168 : ill

Solution of fractional order differential equation by the Haar wavelet method. Numerical convergence analysis for most commonly used approach

Majak, Jüri; Shvartsman, Boris; **Pohlak, Meelis; Karjust, Kristo; Eerme, Martin; Tungel, Ernst** International Conference of Numerical Analysis and Applied Mathematics 2015 (ICNAAM 2015) : 22-28 September 2015, Rhodes, Greece 2016 / p. 480110-1 - 480110-4 <https://doi.org/10.1063/1.4952346> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Solving ordinary differential equations with higher order Haar wavelet method

Majak, Jüri; Pohlak, Meelis; Eerme, Martin; Shvartsman, Boris AIP conference proceedings 2019 / art. 330002
<https://doi.org/10.1063/1.5114340> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Some alternative methods of convergence acceleration

Aasma, Ants Numerical Analysis and Applied Mathematics ICNAAM 2012 : International Conference of Numerical Analysis and Applied Mathematics 2012 / p. 925-928

Studies of doped LaMnO₃ samples prepared by citrate combustion process

Chandra Dimri, Mukesh; Khanduri, Himani; **Mere, Arvo;** Stern, Raivo AIP conference proceedings 2018 / art. 130015, 4 p. : ill
<https://doi.org/10.1063/1.5029085> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Tailoring of magnetic properties of MnAl thin films by protons irradiation

Khanduri, Himani; Khan, S.A.; Srivastava, S.K.; **Link, Joosep;** Stern, Raivo; Avasthi, D.K. AIP conference proceedings 2018
<https://doi.org/10.1063/1.5029080>

Temperature dependent photorefectance study of Cu₂SnS₃ thin films produced by pulsed laser deposition

Raadik, Taavi; Grossberg, Maarja; Krustok, Jüri; Kauk-Kuusik, Marit Applied physics letters 2017 / p. 261105-1 - 261105-4 : ill
<https://doi.org/10.1063/1.4990657> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Three-dimensional finite element modelling of chemical environment in droplet-based microfluidic systems for drug therapy applications

Szomor, Zsombor; **Gyimah, Nafisat; Pardy, Tamas;** Fürjes, Peter Physics of fluids 2025 / art. 072045
<https://doi.org/10.1063/5.0275809>

3D RANS-RSTM numerical simulation of channel turbulent particulate flow with wall roughness

Kartušinski, Aleksander; Rudi, Ülo; Stock, David; **Hussainov, Medhat;** Štšeglov, Igor; **Tisler, Sergei** 11th International Conference on Numerical Analysis and Applied Mathematics 2013 : ICNAAM-2013 : Rhodes, Greece, 21-27 September 2013 2013
<https://doi.org/10.1063/1.4825690> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Tin dioxide thin films deposited by sol - gel technique

Ganchev, Maxim; **Katerski, Atanas;** Stankova, Stanka; Eensalu, Jako Siim; Terziyska, Penka AIP conference proceedings 2019 / art. 140001, 8 p <https://doi.org/10.1063/1.5091316> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Tunneling-enhanced interface recombination and current loss curves in kesterite solar cells

Krustok, Jüri; Timmo, Kristi; Kauk-Kuusik, Marit; Grossberg-Kuusik, Maarja Applied physics letters 2023 / art. 242102
<https://doi.org/10.1063/5.0175082> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Uncovering the symmetry of the induced ferroelectric phase transformation in polycrystalline barium titanate

Lemos da Silva, Lucas; Lee, Kai-Yang; Petrick, Simon; **Chaves Arroyave, Cesar Giovanni** Journal of applied physics 2021 / art. 234101 <https://doi.org/10.1063/5.0068703> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Use of simplified bowed string model in physics education : a laboratory experiment

Vilipuu, Marek; Kartofelev, Dmitri; Kalda, Jaan Proceedings of Meetings on Acoustics 2022 / art. 025001
<https://doi.org/10.1121/2.0001628> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Using neural networks to model self-immune disease in terms of the alterations of the dynamic electrical impedance

Giannoukos, Georgios; Min, Mart Proceedings of the International Conference on Numerical Analysis and Applied Mathematics

2014 (ICNAAM-2014) : Rhodes, Greece, 22-28 September 2014 2015 / p. 850001-1 - 850001-4 <https://doi.org/10.1063/1.4913056>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Wake waves of a planing boat : an experimental model

Tavakoli, Sasan; Shaghaghi, Poorya; Mancini, Simone; De Luca, Fabio; **Dashtimanesh, Abbas** Physics of Fluids 2022 / Art. nr. 037104 <https://doi.org/10.1063/5.0084074> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wave propagation in axially graded carbon nanotubes

Arda, Mustafa; Karjust, Kristo; Mehrparvar, Marmar AIP conference proceedings 2023 / art. 250006
<https://doi.org/10.1063/5.0162668> [Conference Proceedings at Scopus](#) [Article at Scopus](#)