

Adaptive industrial robots using machine vision

Kuts, Vladimir; Otto, Tauno; Tähemaa, Toivo; Bukhari, Khuldoon; Pataria, Tengiz ASME 2018 International Mechanical Engineering Congress and Exposition, Pittsburgh, Pennsylvania, USA, November 9–15, 2018 2018 / Paper No. IMECE2018-86720, pp. V002T02A093, 8 p. : ill <https://doi.org/10.1115/IMECE2018-86720>

Advanced trailing edge flap design for commercial aircraft

Lauk, Peep; Tähemaa, Toivo; Seegel, Karl-Erik [Aegats2018 proceedings] 2018 / 7 p. : ill
https://www.etis.ee/File/DownloadPublic/abef8259-2fbd-485a-af5e-7900cff280a2?name=36_LAUK%20AEGATS.pdf&type=application%2Fpdf

Air jet massage device

Reedik, Vello; Kristjuhan, Ülo; Tähemaa, Toivo The Fourth Scandinavian International Conference on Fluid Power : proceedings of the conference, Tampere, Finland, September 26-29, 1995. Vol. 1 1995 / p. 569-576: ill

An introduction to mathematical modeling of the aerodynamic processes in air jet massage devices

Tähemaa, Toivo Proceedings of the First National DAAAM Conference in Estonia : Science '95 1996 / p. 29-33: ill

Application issues of additive manufacturing in plaster mold casting of metals

Pohlak, Meelis; Sergejev, Fjodor; Tähemaa, Toivo; Saarna, Mart; Viljus, Mart; Hermaste, Aigar Proceedings of the Estonian Academy of Sciences 2025 / p. 181-185 <https://doi.org/10.3176/proc.2025.2.18>

Assemblage of turbulent jet flows through static particulate media

Lauk, Peep; Rebassa, Josep Hueso; Kartušinski, Aleksander; Tisler, Sergei; Tähemaa, Toivo; Polonsky, Andrei Proceedings of the Estonian Academy of Sciences 2016 / p. 284-296 : ill <https://doi.org/10.3176/proc.2016.3.05>
https://artiklid.elnet.ee/record=b2798402*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Assurance of synergy and competitive dependability at non-safety-critical mechatronic systems design

Tähemaa, Toivo 2002 http://www.ester.ee/record=b1685133*est

Assurance of synergy and competitive reliability at mechatronic systems design

Tähemaa, Toivo; Kaljas, Frid; Reedik, Vello Proceedings of the 2nd IFAC Conference on Mechatronics 2002 / p. 871-876

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](#)

Collaborative work between human and industrial robot in manufacturing by advanced safety monitoring system

Kuts, Vladimir; Sarkans, Martinš; Otto, Tauno; Tähemaa, Toivo Annals of DAAAM for 2017 and proceedings of the 28th International DAAAM Symposium "Intelligent Manufacturing & Automation" : 8-11 November 2017, Zadar, Croatia 2017 / p. 0996-1001 : ill <https://dx.doi.org/10.2507/28th.daaam.proceedings.138>

Design for manufacturability and quality in fibre optic products

Temerbulatova, Anna; Powell, L.; Tähemaa, Toivo Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 405-410 : ill

A device for preventing occupational diseases of lower legs

Kristjuhan, Ülo; Reedik, Vello; Tähemaa, Toivo International journal of occupational safety and ergonomics 1998 / 1, p. 69-74: ill

Digital Twin : concept of hybrid programming for industrial robots - use case

Kuts, Vladimir; Sarkans, Martinš; Otto, Tauno; Tähemaa, Toivo; Bondarenko, Yevhen ASME 2019 International Mechanical Engineering Congress and Exposition : conference proceedings 2019 / Paper No: IMECE2019-10583, V02BT02A005; 8 pages
<https://doi.org/10.1115/IMECE2019-10583>

Digital twin based synchronised control and simulation of the industrial robotic cell using virtual reality

Kuts, Vladimir; Otto, Tauno; Tähemaa, Toivo; Bondarenko, Yevhen Journal of machine engineering 2019 / p. 128–145 : ill
<https://doi.org/10.5604/01.3001.0013.0464> [Journal metrics at Scopus](#) [Article at Scopus](#)

Empirical synergetics

Tähemaa, Toivo; Reedik, Vello Socio-technical synergetics 2024 / p. 32-38 : ill https://www.ester.ee/record=b5651350*est

ERP and PLM resources in Estonian SMEs

Tähemaa, Toivo; Karjust, Kristo; Pohlak, Meelis Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [II] 2010 / p. 386-391

Evaluation of the trends in mechatronic systems design

Reedik, Vello; Kaljas, Frid; Tähemaa, Toivo Proceedings of the Second National DAAAM Conference in Estonia : Science'96 1997 / p. 89-93

Exploiting factory telemetry to support virtual reality simulation in robotics cell

Kuts, Vladimir; Modoni, Gianfranco E.; Terkaj, Walter; Tähemaa, Toivo; Sacco, Marco; Otto, Tauno Augmented Reality, Virtual Reality, and Computer Graphics : 4th International Conference, AVR 2017, Ugento, Italy, June 12–15, 2017 : proceedings. Part I 2017 / p. 212-221 : ill https://doi.org/10.1007/978-3-319-60922-5_16 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Impact of variable geometry miniflaps on sailplane flight characteristics

Lauk, Peep; Seegel, Karl-Erik; Tähemaa, Toivo Aviation 2017 / p. 119-125 <https://doi.org/10.3846/16487788.2017.1415228>

Indispositions at the design of interdisciplinary systems

Tähemaa, Toivo; Kaljas, Frid; Martin, Andres; Reedik, Vello Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 66-69

Jugamassaaži aerodünaamika ja tehnoloogia

Kristjuhan, Ülo; Reedik, Vello; Tähemaa, Toivo Eesti teadlaste kongress, 11.-15. augustini 1996. a. Tallinnas : ettekannete kokkuvõtted 1996 / lk. 254 https://www.ester.ee/record=b1052731*est

Jugamassaažil toimivad aero- ja termodünaamilised protsessid : väitekiri ... tehnika magistrikraadi taotlemiseks

Tähemaa, Toivo 1996 http://www.ester.ee/record=b2681039*est

Kuidas valida jalgratast nagu insener?

Kaiser, Katerina Trialoog 2025 <https://goodnews.ee/kuidas-valida-jalgratast/> <https://trialoog.taltech.ee/kuidas-valida-jalgratast-nagu-insener/>

Lean product development in Estonian SMEs

Tähemaa, Toivo; Temerbulatova, Anna; Karjust, Kristo Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 603-608 : ill

New technological solutions to improve the aerodynamic characteristics of an aircraft wing = Õhusõidukite tiiva aerodünaamiliste omaduste parandamine uute tehnoloogiliste lahenduste abil

Lauk, Peep 2019 <https://digi.lib.ttu.ee/i/?12286> [Doktoritöö pakub lahenduse, mis vähendab lennuki kütusekulu kümnestiku jagu](#)

Novel digital twin development methodology for the robot cell connectivity in a smart industry environment = Uudne digitaalsete kaksikute arendusmeetodika robottootmisrakkude sidustamiseks targa tööstuse keskkonnas

Kuts, Vladimir 2019 <https://digi.lib.ttu.ee/i/?12252> [Tehnikaülikooli doktoritöö tõhustas roboti juhtimist virtuaalkaksikuga](#)

Nüüdistootmine : kõrgkooliõpik

Hermaste, Aigar; Karjust, Kristo; Kiolein, Indrek; Küttner, Rein; Lavin, Jaak; Lõun, Kaia; Mooste, Tarmo; Naams, Invar; Otto, Tauno; Pohlak, Meelis; Riives, Jüri; Sarkons, Martinš; Talkop, Adolf; Tähemaa, Toivo 2023

<https://digikogu.taltech.ee/et/Item/2ec35c39-f345-4ae8-9fb6-395e039cd43a> https://www.ester.ee/record=b5537809*est

On reliability criteria of mechatronic systems

Tähemaa, Toivo OST-97 Symposium on Machine Design, Tallinn, Estonia, May 22-23, 1997 : proceedings 1997 / p. 205-207 https://www.ester.ee/record=b1083704*est

On reliability dimension in product development of mechatronic systems

Tähemaa, Toivo; Reedik, Vello TMCE 2000 : Third International Symposium on Tools and Methods of Competitive Engineering : April 18-21, 2000, Delft, The Netherlands 2000 / p. 197-202 : ill

On synergy deployment in engineering design

Hindreus, Tiit; Kaljas, Frid; Källo, Rommi; Martin, Andres; Tähemaa, Toivo; Reedik, Vello Journal of materials science and engineering. B 2012 / p. 408-413 : ill

On synergy deployment in engineering design

Hindreus, Tiit; Kaljas, Frid; Martin, Andres; Tähemaa, Toivo; Reedik, Vello Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [I] 2010 / p. 84-89

Optimization of aerodynamic processes acting in jet massage devices : research report ME-1996-01

Reedik, Vello; Kristjuhan, Ülo; Tähemaa, Toivo 1996 https://www.ester.ee/record=b1059183*est

Ozone-assisted degradation of 2-methoxyethanol in a prototype plug flow photocatalytic reactor

Altof, Kristen; Krichevskaya, Marina; Preis, Sergei; Tähemaa, Toivo; Bolobajev, Juri Chemical engineering journal 2024 / art. 148488 <https://doi.org/10.1016/j.cej.2023.148488> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Pneumatic devices for lower limbs massage

Reedik, Vello; Kristjuhan, Ülo; Tähemaa, Toivo OST-96 Symposium on Machine Design, [Stockholm], May 13-14, 1996 : program, abstracts 1996 / [1] p

Pneumatic devices for lower limbs massage

Reedik, Vello; Kristjuhan, Ülo; Tähemaa, Toivo OST-96 Symposium on Machine Design, [Stockholm], May 13-14, 1996 : proceedings 1996 / p. 108-112: ill https://www.ester.ee/record=b1033950*est

Positive and negative synergy at mechatronic systems design

Tähemaa, Toivo; Reedik, Vello Proceedings of NordDesign 2000 2000 / p. 35-44 : ill

Prognosis of the competitive dependability of mechatronic products

Tähemaa, Toivo; Reedik, Vello 13th International Conference on Engineering Design - ICED 01 : Design Applications in Industry and Education : 21-23 August 2001, Glasgow, UK 2001 / p. 3-10 : ill

Reliability criteria continuously developing mechatronic systems

Tähemaa, Toivo; Reedik, Vello 2nd International Conference on Machine Automation. Advanced Mechatronics: first-time-right, September 15-18, 1998, Tampere, Finland : proceedings of the ICMA'98. Vol. 2 1998 / p. 831-837: ill

Research of air massage devices

Kristjuhan, Ülo; Martin, Andres; Neve, R.S.; Reedik, Vello; Tähemaa, Toivo Socio-technical synergetics 2024 / p. 29-31 : ill https://www.ester.ee/record=b5651350*est

Robot manipulator usage for measurement in production areas

Kuts, Vladimir; Tähemaa, Toivo; Otto, Tauno; Sarkans, Martinš; Lend, Henri Journal of machine engineering 2016 / p. 57-67 : ill http://www.not.pl/wydawnictwo/2016JOM/V1/6_KUTS.pdf

Synchronizing physical factory and its digital twin through an IIoT middleware : a case study

Kuts, Vladimir; Modoni, Gianfranco E.; Otto, Tauno; Sacco, Marco; Tähemaa, Toivo; Bondarenko, Yevhen; Wang, Ruxin Proceedings of the Estonian Academy of Sciences 2019 / p. 364–370 : ill http://www.kirj.ee/32660/?tpl=1061&c_tpl=1064
<https://doi.org/10.3176/proc.2019.4.03> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Synergy dimension at the design of interdisciplinary systems

Kaljas, Frid; Martin, Andres; Tähemaa, Toivo; Reedik, Vello OST-03 Symposium on Machine Design 2003 / p. 138-147 : ill

TalTech ja Stockmann tutvustasid innovaatilist toidukarpide puhastamise seadet Violetta

Mente et Manu 2021 / lk. 10 : fot [Mente et Manu 1/2021 https://www.ester.ee/record=b1242496*est](https://www.ester.ee/record=b1242496*est)

Ten years of research into human aspects of bad engineering

Hindreus, Tiit; Kaljas, Frid; Källo, R.; Martin, Andres; Tähemaa, Toivo; Reedik, Vello Proceedings of the 5th International Conference of DAAAM Baltic : Industrial Engineering - Adding Innovation Capacity of Labour Force and Entrepreneur : 20-22 April 2006, Tallinn, Estonia 2006 / p. 35-40 : ill

The effect of UV-C radiation on the durability of 3D printed plastic parts in disinfectant devices

Tähemaa, Toivo; Sarkans, Martinš; Sarand, Inga; Pohlak, Meelis; Niidas, Aadu; Saarna, Mart IOP conference series : materials science and engineering 2021 / art. 012046, 6 p. : ill <https://doi.org/10.1088/1757-899X/1140/1/012046>

The influence of variable geometrical modifications of the trailing edge of supercritical airfoil on the characteristics of aerodynamics

Lauk, Peep; Seegel, Karl-Erik; Tähemaa, Toivo World Academy of Science, Engineering and Technology. International journal of aerospace and mechanical engineering 2018 / p. 325-330 : ill <http://dx.doi.org/10.1999/1307-6892/10008796>

Tootearenduse tudengite megaväljakutse Robotexil : tooteid testivad koolilapsed!

Tähemaa, Toivo Robotex erileht 2019 2019 / Lk. 4-5

Trends in positive and negative synergy at mechatronic systems

Tähemaa, Toivo Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 102-105 : ill

Uued inimesed ja positsioonid

Tammet, Tanel; Uska, Riina; Laanearu, Janek; Tabri, Kristjan; Vendelin, Marko; Margus, Madis; Kindsigo, Merit; Talpsepp, Tõnn; Tähemaa, Toivo; Laos, Katrin; Liiv, Innar; Rüütmann, Tiia; Sarapuu, Külli; Kikkas, Kaido; Pachel, Karin Mente et Manu 2022 / lk. 40-49 : fot https://www.ester.ee/record=b1242496*est

Uuenduslik tootmine : käsiraamat

Riives, Jüri; Lumiste, Rünno; Reedik, Vello; Roosimölder, Lembit; Karjust, Kristo; Kers, Jaan; Kiolein, Indrek; Kokla, Margo;

Küttner, Rein; Lavin, Jaak; Lavrentjev, Jüri; Lõun, Kaia; Mötus, Leo; Naams, Invar; Otto, Tauno; Pohlak, Meelis; Raba, Karl; Saks, Alo; Talkop, Adolf; Tähemaa, Toivo; Veinthal, Renno 2011 http://www.ester.ee/record=b2736534*est