

AI haarab tüürist

Vaaks, Eveliis Trialoog 2025 <https://trialog.taltech.ee/ai-haarab-tuurist/>

Air-core sensors operation modes for partial discharge detection and on-line diagnostics in medium voltage networks

Kütt, Lauri; Shafiq, Muhammad; Mölder, Heigo; Järvik, Jaan; Lehtonen, Matti Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 5-12 : ill

Analysis of traditional and alternative methods for solving voltage problems in low voltage grids : an Estonian case study

Rosin, Argo; Drovtar, Imre; Mölder, Heigo; Haabel, Kaija; Astapov, Victor; Vinnal, Toomas; Korõtko, Tarmo Energies 2022 / art. 1104 <https://doi.org/10.3390/en15031104> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Analysis on AC motor losses due to harmonic levels increase caused by switched capacitor passive power factor correction

Mölder, Heigo; Vinnal, Toomas; Beldjajev, Viktor 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 42-46 : ill

Compact fluorescent lamp harmonic disruption effect of transformer losses

Mölder, Heigo; Lellsaar, Mikk; Kütt, Lauri 8th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Pärnu, January 11-16, 2010 : proceedings] 2010 / p. 277-280 : ill

Comparison of operating modes of air-core inductive sensors for partial discharge on-line diagnostics in medium voltage networks

Kütt, Lauri; Shafiq, Muhammad; Lehtonen, Matti; Mölder, Heigo; Järvik, Jaan Digest book and electronic proceedings : 54th International Scientific Conference of Riga Technical University : Section of Power and Electrical Engineering 2013 / p. 29.1-29.6 : ill <https://research.aalto.fi/en/publications/comparison-of-operating-modes-of-air-core-inductive-sensors-for-p>

Current harmonics of EV chargers and effects of diversity to charging load current distortions in distribution networks

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; Mölder, Heigo; Niitsoo, Jaan 2013 International Conference on Connected Vehicles and Expo (ICCVE) : proceedings : Las Vegas, Nevada, USA, 2-6 December 2013 2013 / p. 726-731 : ill <https://ieeexplore.ieee.org/document/6799884>

Design and testing of an universal autonomous surface vehicle

Roasto, Indrek; Jalakas, Tanel; Mölder, Heigo; Möller, Taavi; Tabri, Kristjan; Enok, Mart 2021 IEEE 19th International Power Electronics and Motion Control Conference, The Silesian University of Technology Gliwice, Poland, 25 - 29 April, 2021 (PEMC) : proceedings 2021 / p. 705-710 : ill <https://doi.org/10.1109/PEMC48073.2021.9432567>

Eesti esimene mehitamata teaduslaev oskab iseseisvalt navigeerida

err.ee 2023 [Hundiäpea sadamas lasti vette Eesti esimene isejuhtiv laev](#) [Eesti esimene mehitamata teaduslaev oskab iseseisvalt navigeerida](#) [Hundiäpea sadamast väljus Eesti esimene isejuhtiv tehisintellektiga teaduslaev Heli](#)

Eksperdid: päikesetormide mõju pärast tänapäeval enam muretsema ei pea

Piir, Rait novaator.err.ee 2024 [Eksperdid: päikesetormide mõju pärast tänapäeval enam muretsema ei pea](#)

Electric vehicle charger load current harmonics variations due to supply voltage level differences - case examples

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; Mölder, Heigo; Niitsoo, Jaan 2014 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM) : 18-20 June, 2014, Ischia, Italy : proceedings 2014 / p. 917-922 : ill

Elektromagnetiline ühilduvus

Mölder, Heigo; Järvik, Jaan 2008 https://www.ester.ee/record=b2509847*est

Estimating the harmonic distortions in a distribution network supplying EV charging load using practical source data - case example

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; Mölder, Heigo; Niitsoo, Jaan 2014 IEEE Power and Energy Society General Meeting : National Harbor, MD, USA, 27-31 July 2014 2014 / [5] p. : ill

Estonia Plans to Deploy Armed Robot Ships to Patrol Eastern Waters Along Russian Border

balticsentinel.eu 2025 <https://balticsentinel.eu/8285927/estonia-plans-to-deploy-armed-robot-ships-to-patrol-eastern-waters-along-russian-border>

Experimentally adjusted modelling and simulation technique for a catamaran autonomous surface vessel

Astrov, Igor; Udál, Andres; Mölder, Heigo; Jalakas, Tanel; Möller, Taavi International Conference on Electrical, Computer, and Energy Technologies, ICECET 2022, Prague, Czech Republic, July 20-22, 2022 2022 / 7 p. : ill <https://doi.org/10.1109/ICECET55527.2022.9873069>

Experts: No need to worry about the impact of solar storms today

Piir, Rait news.err.ee 2024 [Experts: No need to worry about the impact of solar storms today](#)

Harmonic load of residential distribution network - case study monitoring results

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo**; **Vinnal, Toomas** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 93-98 : ill

Harmonic losses in induction motors caused by voltage waveform distortions

Mölder, Heigo; **Vinnal, Toomas**; Beldjajev, Viktor PQ2010 : 7th International Conference "2010 Electric Power Quality and Supply Reliability" : June 16-18, 2010, Kuressaare, Estonia 2010 / p. 143-148 : ill

Harmonic voltages and currents in LV industrial power systems, shunt capacitors and additional power losses

Vinnal, Toomas; **Kalda, Heljut**; **Mölder, Heigo** 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 47-52 : ill

High voltage pulse transformer for IOT modulators

Jalakas, Tanel; **Janson, Kuno**; **Mölder, Heigo**; **Roasto, Indrek** IET electric power applications 2020 / p. 2348-2354
<https://doi.org/10.1049/iet-epa.2019.0877> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hundipeal sõitis uus iselaev

Vitismann, Madli Meremees : Eesti merendusajakiri = Estonian maritime magazine 2023 / lk. 20 : fot
<https://issuu.com/ajakirimeremees/docs/meremees322> https://www.ester.ee/record=b4646644*est

Impact of conducting and insulating material to electric field

Järvik, Jaan; **Mölder, Heigo**; **Vaimann, Toomas** 11th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 16-21, 2012 2012 / p. 107-112 : ill

Implementation of snubber circuits in power converters with high-voltage IGBTs

Jalakas, Tanel; **Blinov, Andrei**; **Mölder, Heigo**; **Lehtla, Tõnu** 8th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Pärnu, January 11-16, 2010 : proceedings] 2010 / p. 42-45 : ill

Influence of regenerative braking to power characteristics of a gantry crane

Beldjajev, Viktor; **Lehtla, Tõnu**; **Mölder, Heigo** PQ2010 : 7th International Conference "2010 Electric Power Quality and Supply Reliability" : June 16-18, 2010, Kuressaare, Estonia 2010 / p. 73-77 : ill

Influence of variable energy flow to power characteristics

Beldjajev, Viktor; **Lehtla, Tõnu**; **Mölder, Heigo** 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 29-32 : ill

Investigation of molten metal mixing in a DC electric arc furnace with added AC component on different frequencies

Mölder, Heigo; **Järvik, Jaan**; **Vaimann, Toomas**; **Gordon, Rauno** PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 33-36 : ill
<https://www.semanticscholar.org/paper/Investigation-of-molten-metal-mixing-in-a-DC-arc-AC-M%C3%B5lder-Jarvik/38848bbd53c7d118a0077072daa0ffb86f649657>

Iselaev käis ise mere taga ära

Vill, Ants Director. Inseneria 2019 / lk. 61-67 : fot http://www.ester.ee/record=b2336521*est <https://director.ee/2019/10/02/iselaev-kais-mere-tagav-a57b8491d1d8>

Koostööfestival tõi ettevõtjad ja teadlased üksteisele lähemale : [ka T. Varraku ja H. Mölder'i kommentaarid]

Säde, Merilyn Universitas Tartuensis : UT : Tartu Ülikooli ajakiri 2016 / lk. 8-11 : fot http://www.ester.ee/record=b2459950*est

Kristjan Tabri ja Heigo Mölder: meretaristut võiksid valvata robotid = Kristjan Tabri, Heigo Mölder: Robots could guard marine infrastructure

Tabri, Kristjan; **Mölder, Heigo** err.ee 2023 [Kristjan Tabri ja Heigo Mölder: meretaristut võiksid valvata robotid](#) [Kristjan Tabri, Heigo Mölder: Robots could guard marine infrastructure](#) [Кристьян Табри и Хейго Мольдер: морскую инфраструктуру могли бы охранять роботы](#)

Load shifting in the existing distribution network and perspectives for EV charging - case study

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Rosin, Argo**; **Mölder, Heigo** 2014 5th IEEE PES Innovative Smart Grid Technologies Europe (ISGT Europe) : October 12-15, Istanbul 2014 / p. 1-6 : ill

Magnetic current sensor stray components in high frequency operation and their effects

Kütt, Lauri; **Järvik, Jaan**; **Mölder, Heigo**; **Kilter, Jako**; Shafiq, Muhammad Conference proceedings : 2012 11th International Conference on Environment and Electrical Engineering : Venice, Italy, 18-25 May 2012 2012 / p. 617-620 : ill
<https://ieeexplore.ieee.org/abstract/document/6221451>

Measurements and analyses of supply voltage magnitude and voltage variations in Estonian industrial companies

Vinnal, Toomas; **Kalda, Heljut**; **Mölder, Heigo** 10th International Symposium "Topical Problems in the Field of Electrical and Power

Engineering". Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 10-15, 2011 2011 / p. 46-51 : ill

A method for mixing molten metal and a compatible electric arc furnace

Mölder, Heigo; Järvik, Jaan; Janson, Kuno; Gordon, Rauno; Vaimann, Toomas Estonian journal of engineering 2011 / p. 220-240 : ill

Microwave treatment against the attack of wood boring in timber structures

Mölder, Heigo; Järvik, Jaan; Pilt, Kalle; Märss, Maido; Reiska, Rein Agronomy research 2013 / p. 497–504 : ill

<https://agronomy.emu.ee/wp-content/uploads/2013/10/p11226.pdf#abstract-3069> [Journal metrics at Scopus](#) [Article at Scopus](#)

Miks võib tulevikus laevakapten maale jääda?

Eesti esimene isejuhtiv teaduslaev Heli läks merele

Eesti esimene robotlaev hakkab Läänemere kalavarusid kaardistama

Kool, Kristi postimees 2023 / Lk. 11 [Miks võib tulevikus laevakapten maale jääda? Eesti esimene isejuhtiv teaduslaev Heli läks merele](#) [Eesti esimene robotlaev hakkab Läänemere kalavarusid kaardistama](#)

Modeling the trajectory tracking accuracy of an autonomous catamaran patrol vessel under different positional data disturbance conditions

Udal, Andres; Kaugerand, Jaanus; Mölder, Heigo; Astrov, Igor; Bauk, Sanja MT '24 : 10th International Conference on Maritime Transport : Barcelona, Spain, 5-7 June, 2024 2024 / p. 1-15 : ill <https://doi.org/10.5821/mt.13165> <http://hdl.handle.net/2117/409463>

Multi-electrode arc furnace technology with improved metal processing capability using current driven mixing

Mölder, Heigo; Järvik, Jaan; Vaimann, Toomas; Gordon, Rauno Conference proceedings : 2012 11th International Conference on Environment and Electrical Engineering : Venice, Italy, 18-25 May 2012 2012 / p. 313-316 : ill

New practical approach to input current shaping in AC-DC power converters

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : abstracts 2008 / p. 8

https://www.researchgate.net/publication/241155011_New_Practical_Approach_to_Input_Current_Shaping_in_AC-DC_Power_Converters

New practical approach to input current shaping in AC-DC power converters [Electronic resource]

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : proceedings 2008 / p. 154-158 : ill. [CD-ROM]

https://www.researchgate.net/publication/241155011_New_Practical_Approach_to_Input_Current_Shaping_in_AC-DC_Power_Converters

An optimal control method for an autonomous surface vessel for environment monitoring and cargo transportation applications

Astrov, Igor; Udal, Andres; Mölder, Heigo 2021 25th International Conference Electronics : Proceedings of the 25th International Conference : ELECTRONICS 2021, Kaunas University of Technology, 14th–16th June, 2021, Palanga, Lithuania 2021 / 6 p <https://doi.org/10.1109/IEEECONF52705.2021.9467483>

Passive shaping of line current waveform by converter with alternating of parallel and series resonance in AC-DC switch mode power supplies

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : 31st August to 3rd September 2008, Malta : conference guide 2008 / p. 37

<https://ieeexplore.ieee.org/document/4674795>

Passive shaping of line current waveform by converter with alternating of parallel and series resonance in AC-DC switch mode power supplies [Electronic resource]

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : August 31 - September 3, 2008, Malta : [proceedings] 2008 / p. 77-80 : ill. [CD-ROM]

<https://doi.org/10.1109/ICECS.2008.4674795> <https://ieeexplore.ieee.org/document/4674795>

A review of the effects of electric vehicle charging on distribution network operation and power quality

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; Mölder, Heigo; Niitsoo, Jaan Electrical and Control Technologies : proceedings of the 8th International Conference on Electrical and Control Technologies : ECT-2013 2013 / p. 162-167

A review of the harmonic and unbalance effects in electrical distribution networks due to EV charging

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; Mölder, Heigo; Niitsoo, Jaan 12th International Conference on Environment and Electrical Engineering (EEEIC) : 5-8 May 2013 2013 / [6] p

Riist- ja tarkvara hackathon Tehnohack tuleb taas!

Inseneeria 2016 / lk. [56] http://www.ester.ee/record=b2336521*est

Robotlaeva juhiv tehisaruga kapten

Sensor resonance and its influence on the measurement results of fast transients

Kütt, Lauri; Shafiq, Muhammad; Lehtonen, Matti; **Mölder, Heigo**; **Järvik, Jaan** Proceedings of the International Conference on Power Systems Transients (IPST2013) in Vancouver, Canada July 18-20, 2013 2013 / [7] p.: ill
https://www.ipstconf.org/papers/Proc_IPST2013/13IPST134.pdf

Skeemipesa ideed lendavad Silicon Valleyni välja

Ramler, Gerli Inseneria 2016 / lk. [42-45] : fot https://artiklid.elnet.ee/record=b2766799*est

TalTechi podcast: teadlasest ettevõtjaks ehk viime laboriteadmised päris ellu [Võrguväljaanne]

Mölder, Heigo; Hansen, Kaisa; Esop, Kristiina delfi.ee 2022 [TalTechi podcast: teadlasest ettevõtjaks ehk viime laboriteadmised päris ellu](https://delfi.ee/2022/07/20/taltechi-podcast-teadlasest-ettevotjaks-ehk-viime-laboriteadmised-paris-ellu)

Tarbimise juhtimine : suurtarbijate koormusgraafikute salvestamine ning analüüs juhtimise rakendamise võimaluste tuvastamiseks

Rosin, Argo; Drovtar, Imre; Link, Siim; Hõimoja, Hardi; **Mölder, Heigo**; Möller, Taavi 2014
https://www.ester.ee/record=b4432844*est

Target tracking by neural predictive control of autonomous surface vessel for environment monitoring and cargo transportation applications

Astrov, Igor; Udal, Andres; Roasto, Indrek; **Mölder, Heigo** 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 4 p <https://doi.org/10.1109/BEC49624.2020.9277115>

Tehnikateadlased läbimurde ootel - robotlaev Nymo künnab laineid

Alvela, Ain Tehnikamaailm : TM : sõidukid, elektroonika, teadus, tehnoloogia 2019 / lk. 85-88 : fot
http://www.ester.ee/record=b4481084*est

Tehnohack tuleb taas!

Mölder, Heigo Studioosus 2015 / lk. 20-21 https://www.ester.ee/record=b1558644*est

A trajectory control method for a strongly underactuated spherical underwater surveillance robot

Astrov, Igor; Udal, Andres; **Mölder, Heigo** 2021 IEEE 25th International conference on intelligent engineering systems (INES), 7-9 July 2021 : conference proceedings 2021 / p. 43-48 <https://doi.org/10.1109/INES52918.2021.9512931>

TTÜ teadur: paneme robotid veealust taristut kaitsma

Mölder, Heigo Äripäev 2025 <https://www.aripaev.ee/arvamus/2025/01/07/ttu-teadur-paneme-robotid-veealust-taristut-kaitsma>

Unistuste jalgrattad : [TTÜ elektrotehnika instituudi teaduri Heigo Mölderi üks hobidest on vanade jalgrataste elule aitamine]

Talv, Terje; **Mölder, Heigo** Mente et Manu 2013 / lk. 26-27 : fot https://www.ester.ee/record=b1242496*est

Uurimislaeval HELI pole ei meeskonda ega kaptenit

toostusuudised.ee 2023 [Uurimislaeval HELI pole ei meeskonda ega kaptenit](https://toostusuudised.ee/2023/01/07/urimislaeval-heli-pole-ei-meeskonda-ega-kaptenit)

Vedelmetalli juhitava segamisvõimaluse uurimine alalisvoolu kaarleekahjus = Analysis of liquid metal controlled stirring method in DC electric arc furnace

Mölder, Heigo 2012

Wind force model and adaptive control of catamaran model sailboat

Astrov, Igor; Udal, Andres; **Mölder, Heigo**; Jalakas, Tanel; Möller, Taavi 2022 8th International Conference on Automation, Robotics and Applications, ICARA 2022 2022 / p. 202-208 : ill <https://doi.org/10.1109/ICARA55094.2022.9738524>

корабль-«призрак» отправился в плавание из Таллинна

Stolitsa.ee 2023 [корабль-«призрак» отправился в плавание из Таллинна](https://stolitsa.ee/2023/01/07/korablj-«pripkaz»-otpravilsja-v-plavanie-iz-tallinna)