

ADCS development for student CubeSat satellites - TalTech case study

Rassõlkin, Anton; Vaimann, Toomas; Org, Peeter; Leibak, Alar; Gordon, Rauno; Priidel, Eiko Proceedings of the Estonian Academy of Sciences 2021 / p. 268-285 : ill <https://doi.org/10.3176/proc.2021.3.06> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An explicit construction of initial perfect quadratic forms over some families of totally real number fields

Leibak, Alar Algorithmic number theory : 8th International Symposium : ANTS-VIII " Banff, Canada, May 17-22, 2008 : proceedings 2008 / p. 240-252

Application of volume bounding box decomposition for surgeon's hand gestures recognition

Nõmm, Sven; Leibak, Alar; Vain, Jüri; Miyawaki, Fujio IECON 2010 : 36th Annual Conference on IEEE Industrial Electronics Society : Glendale, Arizona, USA, 07 - 10 November, 2010 : proceedings 2010 / p. 1076-1080 : ill <https://ieeexplore.ieee.org/document/5675518>

Application of volume bounding box decomposition for surgeon's hand gestures recognition

Nõmm, Sven; Leibak, Alar; Vain, Jüri; Miyawaki, Fujio Abstracts IECON 2010 - ICELIE 2010 : 36th Annual Conference of the IEEE Industrial Electronics Society, 4th International Conference on E-Learning in Industrial Electronics, IES Industry Forum 2010 : Arizona, USA, 7-10 November 2010 2010 / p. 102 <https://ieeexplore.ieee.org/document/5675518>

Automatic linguistic inversion of a fuzzy model for fed-batch fermentation control

Riid, Andri; Leibak, Alar; Rüstern, Ennu Proc. 2006 International Conference on Intelligent Engineering Systems : INES, London, 26-28 June 2006 2006 / p. 129-134 https://www.researchgate.net/publication/224646300_Automatic_Linguistic_Inversion_of_a_Fuzzy_Model_for_Fed-Batch_Fermentation_Control

Degree of Dieudonne determinant defines the order of nonlinear system

Kotta, Ülle; Belikov, Juri; Halas, Miroslav; **Leibak, Alar** International journal of control 2019 / p. 518-527 <https://doi.org/10.1080/00207179.2017.1361042> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Evaluation method of coating thickness of coating thickness standard

Laaneots, Rein; Riim, Jürgen; Leibak, Alar Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [J] 2010 / p. 245-250

Farey jadad ja Minkowski ?-funktsioon

Leibak, Alar Aastaraamat 2017 / Eesti Matemaatika Selts 2018 / lk. 31-37 https://www.ester.ee/record=b1226018*est

5th Junior European Meeting on Control & Information Technology : September 20-22, 2006, Tallinn, Estonia : book of abstracts

2006 http://www.ester.ee/record=b2227133*est

Kompleksmuutuja funktsioonid : õpik kõrgkoolidele

Leibak, Alar 2015 https://www.ester.ee/record=b4493592*est

„Kuidas nad on teinud ära riigieksami?“ Aukliku taseme tagamaad

Raudla, Heiki Õpetajate Leht 2025 / lk. 10-11 „Kuidas nad on teinud ära riigieksami?“ Aukliku taseme tagamaad

Michailichenko group of matrices over skew-fields

Leibak, Alar Математи́чки весник = Matematički Vesnik 2019 / p. 155–161 <http://www.vesnik.math.rs/vol/mv191210.pdf> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Non-commutative determinants in nonlinear control theory : preliminary ideas

Kotta, Ülle; Leibak, Alar; Halas, Miroslav ICARCV 2008 : 10th International Conference on Control, Automation, Robotics & Vision : 17-20 December 2008, Hanoi, Vietnam 2008 / p. 815-820 <https://ieeexplore.ieee.org/document/4795622>

On a hierarchical approach to the generation of pareto points for complex systems

Leibak, Alar; Šeletski, Anna; Vaarmann, Otu MCDA-75 : 75th Meeting of the European Working Group on Multiple Criteria Decision Aiding : Tarragona, Catalonia, Spain, April 12th-14th, 2012 : book of abstracts 2012 / p. 43

On a multi-level approach to the generation of Pareto points for complex systems

Leibak, Alar; Šeletski, Anna; Vaarmann, Otu Параллельные Вычисления и Задачи Управления - PACO'2012 : труды шестой Международной Конференции, Москва, 24-26 октября 2012 г.; Том 2 2012 / p. 11-20

On additive generalisation of Voronoi's theory of perfect forms over algebraic number fields

Leibak, Alar 2006 https://www.ester.ee/record=b2208763*est

On additive generalization of Voronoi's theory to algebraic number fields

Leibak, Alar Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2005 / 4, p. 195-211

On decomposition-coordination methods for complex multi-objective optimization problems

Leibak, Alar; Šeletski, Anna; Vaarmann, Otu 17th International conference on "Mathematical Modelling and Analysis" : June 6-9, 2012, Tallinn, Estonia : abstracts 2012 / p. 133

On decomposition-coordination methods for multi-objective optimization

Leibak, Alar; Vaarmann, Otu M.C.D.A.'71' Meeting of the Euro. Working Group 'Multiple Criteria Decision Aiding' : Turin, 25-27.III.2010 2010 / [12] p

On determinability of idempotent medial commutative quasigroups by their endomorphism semigroups

Leibak, Alar; Puusemp, Peeter Proceedings of the Estonian Academy of Sciences 2011 / 2, p. 81-87

On determinability of some classes of medial quasigroups by their endomorphisms

Leibak, Alar; Puusemp, Peeter 3Quantum : Algebra Geometry Information (QQQ Conference 2012) : 10-13 July 2012, Tallinn, Estonia : dedicated to memory of Professor Jean-Louis Loday (1936-2012) 2014 / p. 1-9 <https://doi.org/10.1088/1742-6596/532/1/012014> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

On endomorphisms of groups of order 36

Leibak, Alar; Puusemp, Peeter Proceedings of the Estonian Academy of Sciences 2016 / p. 237-254

<https://doi.org/10.3176/proc.2016.3.06> https://artiklid.elnet.ee/record=b2798395*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On endomorphisms of groups of orders 37-47

Leibak, Alar; Puusemp, Peeter Proceedings of the Estonian Academy of Sciences 2017 / p. 137-150

<https://doi.org/10.3176/proc.2017.2.04> http://www.ester.ee/record=b2355998*est https://artiklid.elnet.ee/record=b2820926*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On Pisot units and the fundamental domain of Galois extensions of $\mathbb{Q}$

Porter, Christian; **Leibak, Alar** Journal of algebra 2025 / p. 288-306 <https://doi.org/10.1016/j.jalgebra.2024.07.041>

On the number of factorizations of $t \bmod N$ and the probability distribution of Diffie-Hellman secret keys for many users

Leibak, Alar Advances in mathematics of communications 2023 / p. 920-927 <https://doi.org/10.3934/amc.2021029> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Some decomposition - coordination methods for multi-objective optimization

Leibak, Alar; Vaarmann, Otu 23rd European Conference on Operational Research : July 5-8, 2009, Bonn, Universität Siegen : book of abstracts 2009 / p. 263

Some remarks of the lower bound of the additive Hermite constant for number fields

Leibak, Alar International Conference on Operational Research : Simulation and Optimisation in Business and Industry : May 17-20, 2006, Tallinn, Estonia 2006 / p. 105-108

Some remarks on lower bound of the additive Hermite constant for number fields

Leibak, Alar 5th International Conference on Optimal Research "Simulation and Optimization in Business and Industry" : May 17-20, 2006, Tallinn, Estonia : programme and abstracts 2006 / p. 47

Some results on reduction of unary positive quadratic forms over totally real cyclic number fields

Leibak, Alar Analytic and Probabilistic Methods in Number Theory : proceedings of the Third International Conference in Honour of J. Kubilius, Palanga, Lithuania, 24-28 September 2001 2002 / p. 162-168

Subdividing the positive cone $(\mathbb{R}^+)^n$ by Voronoi perfect polyhedras and totally positive algebraic integers

Leibak, Alar 17th International conference on "Mathematical Modelling and Analysis" : June 6-9, 2012, Tallinn, Estonia : abstracts 2012 / p. 78

The coating thickness and its definition

Abiline, Indrek; Laaneots, Rein; Leibak, Alar; Riim, Jürgen Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [1] 2008 / p. 13-18 : ill <http://innomet.ttu.ee/daaam08/online/Design%20Engineering/Abiline.pdf>

The complete enumeration of binary perfect forms over the algebraic number field $\mathbb{Q}(\sqrt[6]{-1})$

Leibak, Alar Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2005 / 4, p. 212-234

5th International Conference on Optimal [i.e. Operational] Research "Simulation and Optimization in Business and Industry" : May 17-20, 2006, Tallinn, Estonia : programme and abstracts

2006 http://www.ester.ee/record=b2146103*est

Towards hierarchical approach for large nonlinear multi-objective optimization problems

Leibak, Alar; Vaarmann, Otu 14th International Conference "Mathematical Modelling and Analysis" : May 27-30, 2009, Daugavpils, Latvia : abstracts 2009 / p. 46 <https://de.du.lv/mma2009/abstracts/VaarO.pdf>

Transfer matrix and its Jacobson form for nonlinear systems on time scales : mathematica implementation

Belikov, Juri; Kotta, Ülle; Leibak, Alar Full Papers : 18th International Conference on Process Control '11 : June 14-17, 2011, Tatransk Lomnica, Slovakia 2011 / p. 141-146

Transformation of the transfer matrix of the nonlinear system into the Jacobson form

Belikov, Juri; Kotta, Ülle; Leibak, Alar Proceedings of the 2010 IRAST International Congress on Computer Applications and Computational Science (CACS 2010) : 4-6 December 2010, Singapore 2010 / p. 495-498

TTÜ aastal 2020 : töögrupi vahearuanne

Ernits, Juhan-Peep; Goi, Anna; Jervan, Gert; Leibak, Alar; Randma-Liiv, Tiina; Otto, Tauno; Rosin, Argo; Sarmiento Guerin, Maria Cecilia Mente et Manu 2009 / 16. veebr., lk. 4 : fot https://www.ester.ee/record=b1242496*est

Unit reducible fields and perfect unary forms

Leibak, Alar; Porter, Christian; Ling, Cong Journal de Theorie des Nombres de Bordeaux 2023 / p. 867-895
<https://doi.org/10.5802/jtnb.1267> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ühissalastuse skeemid

Buldas, Ahto; Leibak, Alar Arvutimaailm 1997 / 2, lk. 30-31