

Application of evolutionary methods for solving optimization problems in engineering

Majak, Jüri; Küttner, Rein; Pohlak, Meelis; Eerme, Martin; Karjust, Kristo Proceedings of NordDesign 2008 : August 21-23, 2008 2008 / p. 39-48 : ill
https://www.researchgate.net/publication/283626005_Application_of_evolutionary_methods_for_solving_optimization_problems_in_engineering

Application of HOHWM for vibration analysis of nanobeams

Kirs, Maarjus; Eerme, Martin; Bassir, David; Tungel, Ernst Modern Materials and Manufacturing 2019 : 12th International DAAAM Baltic Conference and 27th International Baltic Conference BALTMATTRIB 2019. Selected, peer reviewed papers from the conference Modern Materials and Manufacturing 2019 (MMM 2019), April 24-26, 2019, Tallinn, Estonia 2019 / p. 230-235
<https://www.scientific.net/KEM.799.230> https://www.ester.ee/record=b5235278*est <https://doi.org/10.4028/www.scientific.net/KEM.799.230>
[Conference proceeding at Scopus](#) [Article at Scopus](#)

Application of the Haar wavelet based discretization technique to problems of orthotropic plates and shells

Majak, Jüri; Pohlak, Meelis; Eerme, Martin Mechanics of composite materials 2009 / 6, p. 631-642

Application of the Haar waveletbased discretization method

Majak, Jüri; Eerme, Martin; Pohlak, Meelis 5th International Conference Aplimat 2006 / p. 279-286

Application of wavelet based discretization method to elasticity and plasticity problems

Majak, Jüri; Pohlak, Meelis; Eerme, Martin 6th European Solid Mechanics Conference 2006 / ? p

Artificial neural networks and evolutionary algorithms in engineering design

Velsker, Tarmo; Majak, Jüri; Pohlak, Meelis; Eerme, Martin; Karjust, Kristo Journal of achievements in materials and manufacturing engineering 2011 / p. 88-95 : ill

Artificial neural networks and genetic algorithms in engineering design

Majak, Jüri; Pohlak, Meelis; Eerme, Martin; Küttner, Rein; Karjust, Kristo International Conference on Engineering Optimization (EngOpt 2008) : Rio de Janeiro, Brazil, 2008 : conference proceedings 2008 / [11 p] : ill

Arvutipõhise toote ja tootmise arendamiskeskonna loomine masina- ja aparaadiehituse ettevõtetele

Küttner, Rein; Eerme, Martin Teadusmõte Eestis : tehnikateadused 2002 / lk. 53-57 : ill

Chaos control in multi-agent hierarchical teamwork

Källo, Rommi; Eerme, Martin; Reedik, Vello Socio-technical synergetics 2024 / p. 125-159 : ill
https://www.ester.ee/record=b5651350*est

Design and testing of sandwich structures with different core materials

Herranen, Henrik; Pabut, Ott; Eerme, Martin; Majak, Jüri; Pohlak, Meelis; Kers, Jaan; Saarna, Mart; Allikas, Georg; Aruniit, Aare Materials science = Medžiagotyra 2012 / p. 45-50 : ill

Design environment for creation of metal structures of higher safety requirements

Eerme, Martin; Roosimölder, Lembit; Küttner, Rein Proceedings NordDesign 2002 : Visions and Values in Engineering Design : [August 14-16, 2002, NTNU, Trondheim, Norway] 2002 / p. 57-64 : ill

Design for crashworthiness of the vehicle seat frame

Eerme, Martin; Roosimölder, Lembit DAAAM International scientific book 2005 2005 / p. 141-148 : ill., phot

Design highly loaded frames with complicated configuration [Electronic resource]

Roosimölder, Lembit; Eerme, Martin; Tuulemäe, Teet 9th International Conference on Machine Design and Production : UMTIK 2000 : 13-15 September 2000, Ankara, Turkey 2000 / p. 229-235. [CD-ROM]

Design of car frontal protection system using neural networks and genetic algorithm

Majak, Jüri; Pohlak, Meelis; Eerme, Martin; Velsker, Tarmo Mechanika 2012 / p. 453-460 : ill

Design of highly loaded cast iron frames

Roosimölder, Lembit; Eerme, Martin International Symposium on Machine Design OST 2001 : [Tallinn, Estonia, October 4-5, 2001] : abstracts 2001 / [1] p

Design of highly loaded frames

Roosimölder, Lembit; Eerme, Martin OST-01 Symposium on Machine Design : Tallinn, Estonia, October 4-5, 2001 : proceedings 2001 / p. 51-58 : ill

Design of light-weight sandwich panels for trailers

Allikas, Georg; Kers, Jaan; Aruniit, Aare; Herranen, Henrik; Eerme, Martin; Majak, Jüri; Pohlak, Meelis; Pabut, Ott ECCM15 - 15th European Conference on Composite Materials : Venice, Italy, 24-28 June 2012 2012 / 8 p. : ill

Design of sandwich support structures

Eerme, Martin; Enok, Mart; Roosimölder, Lembit; Küttner, Rein Proceedings of the Estonian Academy of Sciences. Engineering 2004 / 4, p. 300-307 : ill

Design optimization of glass canopy panel subjected to snow load

Õunapuu, Erko; Velsker, Tarmo; Eerme, Martin Proceedings of the 10th International Conference of DAAAM Baltic Industrial Engineering, 12-13th May 2015, Tallinn, Estonia 2015 / p. 104-108 : ill

Design optimization of graphene laminates for maximum fundamental frequency

Majak, Jüri; Kirs, Maarjus; Eerme, Martin; Tungal, Ernst; Lepikult, Toomas Proceedings of the Estonian Academy of Sciences 2017 / p. 354-362 : ill <https://doi.org/10.3176/proc.2017.4.08>

Design optimization of multilayer graphene sheets

Majak, Jüri; Eerme, Martin; Arak, Marti; Kirs, Maarjus; Mikola, Madis First International Conference on Mechanics of Composites (MECHCOMP2014) : Stony Brook University, Long Island, New York, June 8-12, 2014 2014 / p. 175

Design optimization of structural components for fatigue loading

Pabut, Ott; Eerme, Martin; Majak, Jüri; Pohlak, Meelis Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [I] 2010 / p. 131-135 : ill

Design space for computer-aided design of metal structures

Eerme, Martin; Küttner, Rein; Pohlak, Meelis; Portjanski, Leonid DAAAM international scientific book 2003 2003 / p. 205-216 : ill

Development of a design space for computer-aided design of metal structures

Eerme, Martin; Portjanski, Leonid; Küttner, Rein Annals of DAAAM for 2002 & proceedings of the 13th International DAAAM Symposium "Intelligent Manufacturing & Automation : Learning from Nature" : Vienna University of Technology, 23-26th October 2002, Vienna, Austria, European Union 2002 / p. 155-156 : ill

Development of new products of given product group

Eerme, Martin CAx Techniques : proceedings of the 4th International Scientific Colloquium : Bielefeld, Germany, September 13-15, 1999 1999 / p. 51-57 : ill

Double-curved surface forming process modeling

Velsker, Tarmo; Majak, Jüri; Eerme, Martin; Pohlak, Meelis Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [I] 2010 / p. 257-262 : ill

Dynamics of flight of the fragments with higher order Haar wavelet method

Kivistik, Lenart; Mehrparvar, Marmar; Eerme, Martin; Majak, J Proceedings of the Estonian Academy of Sciences 2024 / p. 108-115 <https://doi.org/10.3176/proc.2024.2.02>

Embedded electronics influence on the strength of carbon fiber laminate

Herranen, Henrik; Kers, Jaan; Preden, Jürjo-Sören; Talalaev, Robert; Eerme, Martin; Majak, Jüri; Lend, Henri; Allikas, Georg Advances in applied materials and electronics engineering III 2014 / p. 239-243

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](#)

Empowering synergy dynamics in chaos control in hierarchical teamwork

Källo, Rommi; Eerme, Martin; Reedik, Vello Proceedings of the 11th International Conference of DAAAM Baltic Industrial Engineering : 20-22th April 2016, Tallinn, Estonia 2016 / p. 37-42 : ill <http://innomet.ttu.ee/daaam/>

Engineering optimization of a car frontal protection system component

Pohlak, Meelis; Majak, Jüri; Eerme, Martin Estonian journal of engineering 2009 / 1, p. 61-72 : ill

Experimental evaluation and numerical modelling residual stresses in glass panel

Majak, Jüri; Anton, Johan; Õunapuu, Erko; Auriemma, Fabio; Pohlak, Meelis; Eerme, Martin; Klauson, Aleksander 2018 International Conference on Materials Science and Manufacturing Engineering (MSME 2018) MATEC web of conferences 2019 / art. 02003, 7 p. : ill <https://doi.org/10.1051/mateconf/201925302003>

FE modelling for product families

Eerme, Martin; Küttner, Rein Proceedings of NordDesign 2000 2000 / p. 113-118 : ill

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](#)

Haar wavelet based discretization technique for analysis and design of composite plate and shell structures

Majak, Jüri; Pohlak, Meelis; Eerme, Martin; Karjust, Kristo; Kers, Jaan 14th European Conference on Composite Materials : 7-10 June 2010, Budapest, Hungary 2010 / Paper ID: 431-ECCM14, [10] p.: ill

Higher-order Haar wavelet method for vibration analysis of nanobeams

Majak, Jüri; Shvartsman, Boris; Ratas, Mart; Bassir, David; Pohlak, Meelis; Karjust, Kristo; Eerme, Martin Materials today communications 2020 / art. 101290, 6 p. : tab <https://doi.org/10.1016/j.mtcomm.2020.101290> [Journal metrics at Scopus](#) [Article at Scopus](#)
[Journal metrics at WOS](#) [Article at WOS](#)

Inseneriarvutused ja simulatsioon masinaehituses - olukord ja arengud : avalik loeng 6.detsembril 2004 TTÜs

Eerme, Martin Tallinna Tehnikaülikooli aastaraamat 2004 2005 / lk. 340-344

Investigation of dynamic behaviour of orthotropic structures

Eerme, Martin; Vakraõm, Teet; Roosimölder, Lembit Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 15-17 : ill

Komplekssete tehniliste süsteemide optimaalne projekteerimine - toodete konkursivõime tagamise eeltingimus

Küttner, Rein; Eerme, Martin; Karjust, Kristo; Majak, Jüri; Pohlak, Meelis Teadusmõte Eestis. 4, Tehnikateadused. 2 2007 / lk. 71-80 : ill

Masinaehituslike toodete struktuuriomaduste modelleerimise ja arvutipõhise tootearenduskeskkonna realiseerimisvõimaluste uurimine

Eerme, Martin 2001 https://www.ester.ee/record=b1618240*est

Mass reduction of plate frames

Eerme, Martin; Enok, Mart; Roosimölder, Lembit Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 20-22 : ill

Material characterization for laminated glass composite panel

Väer, Kaur; Anton, Johan; Klauson, Aleksander; Eerme, Martin; Õunapuu, Erko; Tšukrejev, Pavel Journal of achievements in materials and manufacturing engineering 2017 / p. 11-17

Mehaaniliste struktuuride modelleerimine tootearenduses

Roosimölder, Lembit; Eerme, Martin Tallinna Tehnikaülikooli aastaraamat 2003 2004 / lk. 23-28

Modeling constitutive relation for woven polymer-based composites

Majak, Jüri; Pohlak, Meelis; Küttner, Rein; Eerme, Martin; Herranen, Henrik NATO Advanced Research Workshop : Textile Composites : May 18-22, 2009, Kiev, Ukraine 2009 / [3] p

Modelling FGM materials. An accurate function approximation algorithms

Majak, Jüri; Mikola, Madis; Pohlak, Meelis; Eerme, Martin; Karunanidhi, Ramachandran IOP conference series : materials science and engineering 2021 / art. 012013, 6 p <https://doi.org/10.1088/1757-899X/1140/1/012013>

More competitive piano

Roosimölder, Lembit; Eerme, Martin; Mägi, Aavo 44. Internationales Wissenschaftliches Kolloquium, 20.-23.09.1999. Band 3, Maschinenbau im Informationszeitalter : Vortragsreihen 1999 / S. 284-287: Ill

Multi-criteria design optimization of ultra large diameter permanent magnet generator

Pabut, Ott; Eerme, Martin; Kallaste, Ants; Vaimann, Toomas Elektronika ir elektrotehnika = Electronics and electrical engineering 2015 / p. 42-48 : ill

Multi-objective topology optimization of weight critical structures

Pohlak, Meelis; Majak, Jüri; Pääsuke, Kaarel; Eerme, Martin; Kõiv, Risto 16th International Conference on Composite Structures (ICCS16) : Porto, 28-30 June 2011 2011

Nanoscale vibration analysis of graphene sheets using nonlocal elasticity theory

Majak, Jüri; Pohlak, Meelis; Eerme, Martin; Kers, Jaan Proceedings of the International Conference on Mechanics of Nano, Micro and Macro Composite Structures : 18 to 20 June 2012 2012 / [1] p

Nanoscale vibration analysis of orthotropic graphene sheets

Majak, Jüri; Eerme, Martin; Lepikult, Toomas; Tungel, Ernst ICCS17 : 17th International Conference on Composite Structures : Portugal 17-21 June 2013 : book of abstracts 2013

New higher order Haar wavelet method : application to FGM structures

Majak, Jüri; Pohlak, Meelis; Karjust, Kristo; Eerne, Martin; Kurnitski, Jarek; Shvartsman, Boris Composite Structures 2018 / p. 72–78 : tab <https://doi.org/10.1016/j.compstruct.2018.06.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Numerical analysis of dynamics of flight of the fragments

Kivistik, Lenart; Eerne, Martin; Majak, Jüri; Kirs, Maarjus AIP conference proceedings 2024 / art. 030016
<https://doi.org/10.1063/5.0189331>

On accuracy of the Haar wavelet method

Majak, Jüri; Shvartsman, Boris; **Pohlak, Meelis; Eerne, Martin; Kirs, Maarjus** Mathematical modelling and analysis 2016 : abstracts 2016 / p. 50 http://www.ester.ee/record=b4573512*est

On chaos control in hierarchical multi-agent systems

Källo, Rommi; Eerne, Martin; Reedik, Vello Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 41-46 : ill

On chaos control in hierarchical multi-agent systems

Källo, Rommi; Eerne, Martin; Reedik, Vello Proceedings of the Estonian Academy of Sciences 2015 / p. 17-21 : ill

Optimal product development and manufacturing engineering

Küttner, Rein; Majak, Jüri; Karjust, Kristo; Pohlak, Meelis; Eerne, Martin Research in Estonia : present and future 2011 / p. 227-248 : ill

Optimization of car frontal protection system

Pohlak, Meelis; Majak, Jüri; Eerne, Martin International journal for simulation and multidisciplinary design optimization 2007 / p. 31-37 https://www.researchgate.net/publication/245491476_Optimization_of_car_frontal_protection_system

Optimization of car frontal protection systems

Pohlak, Meelis; Majak, Jüri; Eerne, Martin Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [1] 2008 / p. 123-128 : ill

Optimization of dynamic behavior of shell structures in the interesting frequency band

Eerne, Martin; Resch, Martin Proceedings : NordDesign '98 : August 26-28, 1998, Royal Institute of Technology, Stockholm, Sweden 1998 / p. 257-262: ill

Optimization of enterprise analysis model for KPI selection

Kaganski, Sergei; Eerne, Martin; Tungal, Ernst Proceedings of the Estonian Academy of Sciences 2019 / p. 371–375 : ill
http://www.kirj.ee/32654/?tpl=1061&c_tpl=1064 <https://doi.org/10.3176/proc.2019.4.04> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimization study of car frontal protection system

Pohlak, Meelis; Majak, Jüri; Eerne, Martin ASMDO : First International Conference on Multidisciplinary Design Optimization and Applications : 17-20 April 2007, Besancon, France 2007 / ? p

Possibilities and limitations of three dimensional printing at digital factory

Sonk, Kaimo; Otto, Tauno; Eerne, Martin Proceedings : 10th International Conference on the Modern Information Technology in the Innovation Processes of the Industrial Enterprises : MITIP 2008 : Prague, Czech Republic, 12-14 November 2008 2008 / p. 187-192 : ill

Product development problems of statically and dynamically loaded sandwich structures

Pohlak, Meelis; Eerne, Martin; Küttner, Rein OST-03 Symposium on Machine Design 2003 / p. 29-37 : ill

Product family concept evaluation

Enok, Mart; Eerne, Martin; Roosimölder, Lembit Proceedings of NordDesign 2006 Conference : [August 16-18, 2006 : Reykjavik, Iceland] 2006 / p. 112-119 : ill

Programming time estimation and production planning steps on welding robot cells in SME-s

Sarkans, Martinš; Eerne, Martin Annals of DAAAM for 2011 & proceedings of the 22nd International DAAAM Symposium "Intelligent Manufacturing & Automation : Power of Knowledge and Creativity" : 23-26 November 2011, Vienna, Austria 2011 / p. 1485-1486 : ill
https://www.researchgate.net/publication/289353214_Programming_time_estimation_and_production_planning_steps_on_welding_robot_cells_in_SME-S

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; Eerne, 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 <http://dx.doi.org/10.1063/1.4952346>

Solving ordinary differential equations with higher order Haar wavelet method

Majak, Jüri; Pohlak, Meelis; Eerne, 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](#)

Structural modelling of engineering products and realisation of computer-based environment for product development

Eerne, Martin 2001 https://www.ester.ee/record=b1437707*est

A symbolic-numerical algorithm for material parameter identification

Majak, Jüri; Pohlak, Meelis; Küttner, Rein; Eerne, Martin; Karjust, Kristo; Kers, Jaan Proceedings of the Tenth International Conference on Computational Structures Technology : Valencia, Spain, 14-17 September 2010 2010 / Paper 133

Synergy deployment in multi-agent modular systems

Sarkans, Martinš; Eerne, Martin; Reedik, Vello; Roosimölder, Lembit Socio-technical synergetics 2024 / p. 102-124 : ill
https://www.ester.ee/record=b5651350*est

The influence of embedded electronics on the structural performance in carbon fiber laminates

Herranen, Henrik; Kers, Jaan; Preden, Jürjo-Sören; Talalaev, Robert; Eerne, Martin; Majak, Jüri; Pohlak, Meelis; Allikas, Georg; Pabut, Ott; Lend, Henri Proceedings of the International Conference on Mechanics of Nano, Micro and Macro Composite Structures : 18 to 20 June 2012 2012 / [2 p.]

Tugevusarvutused CAD programmis

Eerne, Martin Inseneeria 2008 / 3, lk. 32-33 ; 4, lk. 22-24 : ill

Uued õppekavad

Kulu, Priit; Eerne, Martin; Paist, Aadu TTÜ mehaanikateaduskond. Eesti Masinatööstuse Liit 2011 / lk. 79-82 : ill
http://www.ester.ee/record=b2720689*est

Wavelet based discretization technique for analysis and design of composite structures

Majak, Jüri; Kers, Jaan; Pohlak, Meelis; Eerne, Martin; Luiga, K. The 18th International Conference on Composite Materials. Composite materials : key to the future 2011 / [6] p

Wavelet discretization based elasticity solutions to some orthotropic plate and shell problems

Majak, Jüri; Pohlak, Meelis; Eerne, Martin XIV International Conference Mechanics of Composite Materials 2006 / p. 121

Ways of increasing synergy in automated factory design and commissioning teamwork

Källo, Rommi; Eerne, Martin; Reedik, Vello Materials science and engineering : B 2013 / p. 597-604 : ill

Ways of increasing synergy in engineering design teamwork

Källo, Rommi; Eerne, Martin; Reedik, Vello Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 500-505 : ill

Weak formulation based Haar wavelet method for solving differential equations

Majak, Jüri; Pohlak, Meelis; Eerne, Martin; Lepikult, Toomas Applied mathematics and computation 2009 / p. 488-494

Weight reduction of support structures

Eerne, Martin; Enok, Mart; Roosimölder, Lembit; Küttner, Rein Proceedings of the NordDesign Conference 2004 / p. 309-314

Vibration analysis of multifunctional laminated glass panel [Online resource]

Väer, Kaur; Öunapuu, Erko; Eerne, Martin; Auriemma, Fabio; Rämmal, Hans International Conference "Functional Materials and Nanotechnologies 2017" : Tartu, Estonia in April, 24-27, 2017 : book of abstracts 2017 / p. 145
http://www.ester.ee/record=b4668793*est

Visualization of strain distribution around the edges of a rectangular foreign object inside the woven carbon fibre specimen

Herranen, Henrik; Allikas, Georg; Eerne, Martin; Vene, Karl-Kristo; Otto, Tauno; Gregor, Andre; Kirs, Maarjus; Mädamürk, Karl Estonian journal of engineering 2012 / p. 279-287 : ill https://artiklid.elnet.ee/record=b2527774*est