

Application of the indentation method for cracking resistance evaluation of hard coatings on tool steels

Sivitski, Alina; Gregor, Andre; Saarna, Mart; Kulu, Priit; Sergejev, Fjodor Estonian journal of engineering 2009 / 4, p. 309-317 : ill

Assesment of non-metallic inclusions in sheet metals by computer analysis

Peetsalu, Priidu; Saarna, Mart; Mikli, Valdek Proceedings of the Seventh International Conference on Clean Steel, Hungary, 2007 2007 / p. 332-341

Characteristics of rails and rail welds

Saarna, Mart; Laansoo, Andres Engineerings Materials & Tribology 2004 : materials of the XIII-th International Baltic Conference : September 23-24, Riga, Latvia 2004 / p. 41-45

Characterization of coating systems by indentation method

Kulu, Priit; Gregor, Andre; Saarna, Mart; Sivitski, Alina; Sergejev, Fjodor; Surženkov, Andrei Acta metallurgica Slovaca conference 2010 / 1, p. 616-624 : ill

Comparative study of the PVD coatings on the plasma nitrided steel

Surženkov, Andrei; Põdra, Priit; Sergejev, Fjodor; Saarna, Mart; Adoberg, Eron; Mikli, Valdek; Viljus, Mart; Kulu, Priit Materials science = Medžiagotyra 2012 / p. 40-44 : ill <https://matsc.ktu.lt/index.php/MatSc/article/view/1339>

Computer based steel microstructure analysis describing the size and distribution of structure phases

Peetsalu, Priidu; Saarna, Mart; Mikli, Valdek; Juurma, Madis Acta metallurgica Slovaca 2007 / 1, p. 91-95

Cyclic loading of TiCN coating by Vickers indentation

Saarna, Mart; Lind, Liina; Peetsalu, Priidu; Sergejev, Fjodor Engineering materials and tribology XXV 2017 / p. 425-429 <http://dx.doi.org/10.4028/www.scientific.net/KEM.721.425>

Decarburisation effect on hardened strip steel fastening components

Jaason, Karli; Peetsalu, Priidu; Saarna, Mart; Kulu, Priit; Beilmann, Jüri Materials science = Medžiagotyra 2016 / p. 148-152 : ill <http://dx.doi.org/10.5755/j01.ms.22.1.7467>

Decarburization effect on hardened strip steel fastening components

Jaason, Karli; Peetsalu, Priidu; Saarna, Mart; Kulu, Priit; Beilmann, Jüri TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

Design and testing of new composite from recycled GFRP

Kers, Jaan; Majak, Jüri; Goljandin, Dmitri; Saarna, Mart; Gregor, Andre; Siinmaa, A.; Tall, Kaspar 14th European Conference on Composite Materials : 7-10 June 2010, Budapest, Hungary 2010 / [10] p

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

Durability of complex shape punch in thick sheet metal fine-blanking

Veinthal, Renno; Peetsalu, Priidu; Saarna, Mart; Talkop, Adolf European Conference on Heat Treatment and 21st IFHTSE Congress : May, 12th-15th, 2014, Munich, Germany : proceedings 2014 / p. 399-406 : ill

Effect of lattice surface treatment on performance of hardmetal - titanium interpenetrating phase composites

Holovenko, Yaroslav; Kollo, Lauri; Saarna, Mart; Rahmani Ahranjani, Ramin; Soloviova, Tetiana; Antonov, Maksim; Prashanth, Konda Gokuldoss; Cygan, Slawomir; Veinthal, Renno International journal of refractory metals and hard materials 2020 / art. 105087, 10 p. : ill <https://doi.org/10.1016/j.ijrmhm.2019.105087> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of mean stress on fatigue strength of duplex steels in synthetic white water environment

Saarna, Mart; Peetsalu, Priidu Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [2] 2008 / p. 531-536 : ill

Effect of milling time on dual-nanoparticulate-reinforced aluminum alloy matrix composite materials

Kwon, Hansang; Saarna, Mart; Yoon, Songhak; Weidenkaff, Anke; Leparoux, Marc Materials science and engineering : A 2014 / p. 338-345 <https://doi.org/10.1016/j.msea.2013.10.046>

Electrical and mechanical properties of service-aged medium voltage porcelain support insulators

Kiitam, Ivar; Saarna, Mart; Taklaja, Paul; Tealane, Marko; Palu, Ivo 2020 6th IEEE International Energy Conference (ENERGYCon) 2020 / p. 702-706 <https://doi.org/10.1109/ENERGYCon48941.2020.9236596>

Evaluation of punch wear resistance during industrial test

Peetsalu, Priidu; Saarna, Mart; Adoberg, Eron; Kulper, Eha; Lind, Liina; Kulu, Priit Acta metallurgica Slovaca conference 2010 / 1, p. 105-110 : ill

Fatigue characteristics of PM steels = Pulberteraste väsimuskarakteristikud

Saarna, Mart 2008 https://www.ester.ee/record=b2413163*est

Fatigue of duplex steels in corrosive environment

Saarna, Mart 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. 289-293 : ill

Fatigue of duplex steels in synthetic white water environment

Saarna, Mart Powder metallurgy progress : journal of science and technology of particle materials 2006 / 3, p. 142-145

Hardfacings for extreme wear applications

Kulu, Priit; Surženkov, Andrei; Tarbe, Riho; Saarna, Mart; Tarraste, Marek; Viljus, Mart Surface Modification Technologies XXVIII : proceedings of the Twenty Eighth International Conference on Surface Modification Technologies : Tampere University of Technology, Tampere, Finland, June 16-18, 2014 2015 / p. 149-157 : ill

High strength steel behaviour during hot dip galvanizing

Sepper, Sirli; Peetsalu, Priidu; Saarna, Mart; Kirs, V.; Mikli, Valdek Proceedings 20th IFHTSE : International Federation for Heat Treatment and Surface Engineering Congress : Beijing, China, October 23-25, 2012 2012 / p. 525-529

Indentation method application for cracking resistance evaluation of hard coatings on tool steels

Sivitski, Alina; Gregor, Andre; Saarna, Mart; Kulu, Priit; Sergejev, Fjodor 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 51

Impact of alkali and silane treatment on hemp/PLA composites' performance : from micro to macro scale

Alao, Percy Festus; Marrot, Laetitia; Burnard, Michael David; Lavrič, Gregor; Saarna, Mart; Kers, Jaan Polymers 2021 / art. 851, 18 p. : ill <https://doi.org/10.3390/polym13060851> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Influence of steel austenitization to part quality in continuous austempering

Jaason, Karli; Peetsalu, Priidu; Saarna, Mart; Kulu, Priit; Mikli, Valdek; Lind, Liina; Beilmann, Jüri Estonian journal of engineering 2012 / p. 221-231 : ill https://artiklid.elnet.ee/record=b2527735*est

Influence of the SPD processing features on the nanostructure and properties of a pure niobium

Kommel, Lembit; Mikli, Valdek; Traksmäa, Rainer; Saarna, Mart; Pokatilov, Andrei; Pikker, Siim; Kommel, Igor Materials science forum ; 667/669 2011 / p. 785-790 : ill

Internal stresses in diffusion bonded joints

Laansoo, Andres; Kübarsepp, Jakob; Saarna, Mart; Klaasen, Heinrich Materials science = Medžiagotyra 2006 / 2, p. 110-113 : ill <https://matsc.ktu.lt/index.php/MatSc/article/view/26413>

Konstruktioonimaterjalide mehaanika : täienduskursus : jaanuar 2008 - märts 2008 : põhineb projektil "Täiendkoolitus- ja e-õppe süsteemi väljaarendamine materjali-tehnoloogidele ja kvaliteediinseneridele polümeer- ja komposiitmaterjalide valdkonnas Põhjamaade ja Euroopa tehnikaülikoolide kogemustest lähtudes"

Saarna, Mart 2008? https://www.ester.ee/record=b4652774*est

Materjalitehnika seletav sõnaraamat : eesti, inglise, vene

Kübarsepp, Jakob; Kulu, Priit; Laansoo, Andres; Karjust, Kristo; Saarna, Mart 2013 http://www.ester.ee/record=b2931759*est

Materjalitehnika seletav sõnaraamat : eesti-inglise-vene

Kübarsepp, Jakob; Kulu, Priit; Laansoo, Andres; Karjust, Kristo; Saarna, Mart 2014 http://www.ester.ee/record=b4763202*est

Mechanical recycling of electronic wastes for materials recovery

Laurmaa, Viktor; Kers, Jaan; Tall, Kaspar; Mikli, Valdek; Goljandin, Dmitri; Vilsaar, Kristiina; Peetsalu, Priidu; Saarna, Mart; Tarbe, Riho; Zhang, Lifeng Recycling of electronic waste II : proceedings of the second symposium 2011 / p. 3-10

Methods for evaluating the appearance of hot dip galvanized coatings

Sepper, Sirli; Peetsalu, Priidu; Saarna, Mart Agronomy research 2011 / P. 229-236 : ill <https://agronomy.emu.ee/wp-content/uploads/2011/12/p09s128.pdf>

Microstructure, properties and atomic level strain in severely deformed rare metal niobium

Kommel, Lembit; Saarna, Mart; Traksmäa, Rainer; Kommel, Igor Materials science = Medžiagotyra 2012 / p. 330-335 : ill

Modelling and testing of the properties of recovered composite material

Kers, Jaan; Goljandin, Dmitri; Tall, Kaspar; Aruniit, Aare; Adoberg, Eron; Saarna, Mart; Majak, Jüri Proceedings of the Tenth International Conference on Computational Structures Technology : Valencia, Spain, 14-17 September 2010 / Paper 81
https://www.researchgate.net/publication/269140253_Modelling_and_Testing_of_the_Properties_of_Recovered_Composite_Material

Nanostructure and properties study of advanced high purity rare metals

Kommel, Lembit; Saarna, Mart; Laev, Natalja 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATTRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 43

Particulate filled composite plastic materials from recycled GFRP

Kers, Jaan; Goljandin, Dmitri; Saarna, Mart; Aruniit, Aare; Tall, Kaspar; Majak, Jüri Baltic Polymer Symposium 2010 : Palanga, September 8-11, 2010 : programme and abstracts 2010 / p. 15

Particulate filled composite plastic materials from recycled glass fibre reinforced plastics

Aruniit, Aare; Kers, Jaan; Goljandin, Dmitri; Saarna, Mart; Tall, Kaspar; Majak, Jüri; Herranen, Henrik Materials science = Medžiagotyra 2011 / p. 276-281 : ill

Predictive tools for the isothermal hardening of strip steel parts in molten salt

Jaason, Karli; Peetsalu, Priidu; Saarna, Mart; Beilmann, Jüri Proceedings of the Estonian Academy of Sciences 2016 / p. 152-158 : ill

Preliminary investigation into tensile characteristics of long flax fibre reinforced composite material

Kers, Jaan; Peetsalu, Priidu; Saarna, Mart; Viikna, Anti; Krumme, Andres; Menind, Andres Agronomy research 2010 / S1, p. 107-114 : ill

Processing and properties of bulk ultrafine-grained pure niobium

Kommel, Lembit; Kimmari, Eduard; Saarna, Mart; Viljus, Mart Journal of materials science 2013 / p. 4723-4729 : ill

Properties and performance of hard coatings on tool steels under cyclic indentation

Sivitski, Alina; Gregor, Andre; Saarna, Mart; Kulu, Priit; Sergejev, Fjodor Acta mechanica Slovaca 2009 / p. 84-94 : ill

Punch lifetime in fine-blanking with optimum combination of mechanical properties

Veinthal, Renno; Peetsalu, Priidu; Saarna, Mart; Sergejev, Fjodor European Conference on Heat Treatment and 22nd IFHTSE Congress : Heat Treatment and Surface Engineering from tradition to innovation : Venice (Italy), 20-22 May 2015 2015 / [7] p

Quality assurance in mechanical testing laboratory by participating in proficiency test

Päärsoo, Riho; Veinthal, Renno; Peetsalu, Priidu; Saarna, Mart Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 242-244 : ill

Rail and rail weld testing

Saarna, Mart; Laansoo, Andres Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 223-225 : ill

Selection of coating systems and processes for different wear conditions

Kulu, Priit; Saarna, Mart; Sergejev, Fjodor; Gregor, Andre; Surženkov, Andrei Proceedings of 14th Nordic Symposium on Tribology : NORDTRIB 2010 : 08.06-11.06.2010, Storforsen, Sweden 2010 / [8] p. [CD-ROM]

Selection of parameters in adhesive bonding of composite structures

Kers, Jaan; Saarna, Mart; Peetsalu, Priidu; Aruniit, Aare; Majak, Jüri; Pohlak, Meelis; Herranen, Henrik 20th International Baltic Conference Materials Engineering 2011, October 27-28, Kaunas, Lithuania : book of abstracts 2011 / p. 53

Selective laser melted Ti6Al4V split-P TPMS lattices for bone tissue engineering

Rezapourianghahfarokhi, Mansoureh; Jasiuk, Iwona; Saarna, Mart; Hussainova, Irina International journal of mechanical sciences 2023 / art. 108353 <https://doi.org/10.1016/j.ijmecsci.2023.108353>

Stability and damage of nanocrystalline copper at cyclic elastic-plastic deformation

Kommel, Lembit; Hussainova, Irina; Veinthal, Renno; Saarna, Mart Ultrafine Grained Materials - from Basics to Applications : UFG-2006 : September 25-27, 2006, Kloster Irsee, Germany 2006 / p. 3-17 - 3-19

Steels, hardmetals and hardfacings for abrasive wear applications

Kulu, Priit; Tarbe, Riho; Saarna, Mart; Surženkov, Andrei; Peetsalu, Priidu; Viljus, Mart European Conference on Heat Treatment and 21st IFHTSE Congress : May, 12th-15th, 2014, Munich, Germany : proceedings 2014 / p. 449-456 : ill

Structural behavior and damage evolution of nanocrystalline copper at HCV deformation

Kommel, Lembit; Hussainova, Irina; Nisumaa, Reet; Volobujeva, Olga; Saarna, Mart 15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 40-41 : ill

Study of surface fatigue of wear resistant powder materials

Saarna, Mart; Kulu, Priit; Veinthal, Renno; Tarbe, Riho 15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 66-68 : ill

Study of surface fatigue of wear resistant powder metallurgical materials

Saarna, Mart; Kulu, Priit; Veinthal, Renno; Tarbe, Riho Proceedings of the Estonian Academy of Sciences. Engineering 2006 / 4, p. 377-387 : ill

Surface fatigue and wear of PVD coated punches during fine blanking operation

Sergejev, Fjodor; Peetsalu, Priidu; Sivitski, Alina; Saarna, Mart; Adoberg, Eron Engineering failure analysis 2011 / p. 1689-1697 : ill

Surface fatigue and wear resistance of thin and thick hard coatings

Kulu, Priit; Saarna, Mart; Sergejev, Fjodor; Gregor, Andre; Sivitski, Alina; Müller, H. IFHTSE International Federation for Heat Treatment and Surface Engineering 18th Congress : July 26-30, 2010, Rio de Janeiro, Brazil : [CD-ROM] 2010

Surface fatigue of Al-metal matrix composites at impact loading

Saarna, Mart; Sergejev, Fjodor; Gomon, Jaana-Kateriina; Kollo, Lauri; Leparoux, Marc Engineering materials and tribology 2013 / p. 119-124 : ill

Surface fatigue processes at impact wear of powder materials

Kulu, Priit; Veinthal, Renno; Saarna, Mart; Tarbe, Riho Wear 2007 / 1, p. 463-471 : ill

Surface fatigue processes at impact wear of powder materials

Kulu, Priit; Veinthal, Renno; Saarna, Mart; Tarbe, Riho WOM : 16th International Conference on Wear of Materials : Montreal, Quebec, Canada, April 15-19, 2007 : delegate manual 2007 / p. 17D.1
<https://www.sciencedirect.com/science/article/pii/S0043164807003894>

Testing of rail welds

Päärsoo, Riho; Saarna, Mart Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts 2003 / p. 58

The effect of substrate microstructure on morphology of zinc coatings

Sepper, Sirli; Peetsalu, Priidu; Mikli, Valdek; Saarna, Mart Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 717-722 : 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 role of silicon in the hot dip galvanizing process

Sepper, Sirli; Peetsalu, Priidu; Kulu, Priit; Saarna, Mart; Mikli, Valdek Proceedings of the Estonian Academy of Sciences 2016 / p. 159-165 : ill

Wear properties of duplex treated surfaces

Kulu, Priit; Surženkov, Andrei; Saarna, Mart 1st Mediterranean Conference on Heat Treatment and Surface Engineering : Heat Treatment and Surface Engineering in the Manufacturing of Metallic Engineering Components : December 1-3, 2009, Sharm El-Sheikh, Egypt 2009 / p. 56

Wear resistance and mechanisms of composite hardfacings at abrasive impact erosion wear

Surženkov, Andrei; Viljus, Mart; Simson, Taavi; Tarbe, Riho; Saarna, Mart; Casesnoves, Francisco Journal of physics : conference series 2017 / art. 012060, p. 1-10 : ill <https://doi.org/10.1088/1742-6596/843/1/012060>

Wear resistance and selection of steels, hardmetals and hardfacings for abrasive wear conditions

Kulu, Priit; Tarbe, Riho; Saarna, Mart; Surženkov, Andrei; Peetsalu, Priidu; Talviste, Kristofer International journal of microstructure and materials properties 2015 / p. 101-113 <http://dx.doi.org/10.1504/IJMMP.2015.068718>

X-ray diffraction studies of nanocrystalline niobium

Kommel, Lembit; Traksmäa, Rainer; Kommel, Igor; Saarna, Mart Materials engineering & Baltrib 2010 : materials of the XIX-th International Baltic Conference : October 28-29, 2010, Riga, Latvia 2010 / p. 20