

Abrasive impact wear and surface fatigue wear behaviour of Fe-Cr-C PTA overlays

Veinthal, Renno; Sergejev, Fjodor; Zikin, Arkadi; Tarbe, Riho; Hornung, J. 19th International Conference on Wear of Materials : Portland, Oregon, USA, 14-18 April 2013 : conference abstracts 2013 / [p. 98]

Abrasive impact wear and surface fatigue wear behaviour of Fe-Cr-C PTA overlays

Veinthal, Renno; Sergejev, Fjodor; Zikin, Arkadi; Tarbe, Riho; Hornung, Johann Wear 2013 / p. 102-108
<https://www.sciencedirect.com/science/article/pii/S0043164813000999>

Additive manufacturing of CMCs with bimodal microstructure

Maurya, Himanshu Singh; Vikram, R. J.; Kosiba, Konrad; Juhani, Kristjan; Sergejev, Fjodor; Suwas, Satyam; Prashanth, Konda Gokuldoss Journal of alloys and compounds 2023 / art. 168416, 5 p. : ill <https://doi.org/10.1016/j.jallcom.2022.168416>

Additive manufacturing of TiC-based cermet with stainless steel as a binder material

Maurya, Himanshu Singh; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss Materials today: proceedings 2022 / p. 824-828 <https://doi.org/10.1016/j.matpr.2022.02.428> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Additive manufacturing of TiC-based cermets with Fe-based binders using novel laser scan techniques =

Titaankarbiidsete Fe-baasil sideainega kermiste valmistamine uudse laserskaneeriva kihtlisandustehnoloogia teel

Maurya, Himanshu Singh 2023 <https://doi.org/10.23658/taltech.61/2023> <https://digikogu.taltech.ee/et/Item/3dad7b12-4a7a-4c9d-8162-30388c52bf5e> https://www.ester.ee/record=b5645217*est

Adhesive wear of WC- and TiC-based friction stir welding tool materials for aluminium alloy welding [Electronic resource]

Kolnes, Mart; Kübarsepp, Jakob; Sergejev, Fjodor; Kolnes, Märt European Powder Metallurgy Association : proceedings : 14 – 18 October 2018, Bilbao, Spain 2018 / 6 p. : ill. [USB] <https://www.epma.com/publications/euro-pm-proceedings/product/euro-pm2018-proceedings-usb>

Analysis of the reciprocal wear testing of Aluminum AA1050 processed by a novel mechanical nanostructuring technique

Omranpour Shahreza, Babak; Kommel, Lembit; Sergejev, Fjodor; Ivanisenko, Yulia; Antonov, Maksim IOP conference series : materials science and engineering 2021 / art. 012051, 6 p. : ill <https://doi.org/10.1088/1757-899X/1140/1/012051>

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

Application of the Murakami approach for prediction of surface fatigue of cemented carbides

Sergejev, Fjodor; Kübarsepp, Jakob; Preis, Irina Extended abstracts of 2006 Powder Metallurgy World Congress : Busan, Korea, September 24-28. 1 2006 / p. 633-634 <https://koreascience.kr/article/CFKO200617317789652.page>

Assessment of gradient and nanogradient PVD coatings behaviour under erosive, abrasive and impact wear conditions

Antonov, Maksim; Hussainova, Irina; Sergejev, Fjodor; Kulu, Priit; Gregor, Andre Wear 2009 / p. 898-906 : ill

Assessment of residual stresses in steels and carbide composites by load and depth sensing indentation with spherical indenter

Sergejev, Fjodor; Petrov, Mihhail Estonian journal of engineering 2012 / p. 259-269 : ill

Behaviour of carbide composites in different operation conditions

Kübarsepp, Jakob; Klaasen, Heinrich; Viljus, Mart; Traksmaa, Rainer; Sergejev, Fjodor Powder metallurgy progress 2011 / p. 258-264 : ill

Blanking performance and fatigue endurance of carbide composites

Klaasen, Heinrich; Kübarsepp, Jakob; Preis, Irina; Sergejev, Fjodor; Traksmaa, Rainer Proceedings of 10th International Conference and Exhibition of the European Ceramic Society : June 17-21, 2007, Berlin 2007 / [4] p

Cemented carbides surface fatigue prediction using Murakami approach

Sergejev, Fjodor; Preis, Irina; Kübarsepp, Jakob; Klaasen, Heinrich Proceedings of EURO PM 2006 Congress & Exhibition : Ghent, Belgium, 23-26 Oct. 2006. 1 2006 / p. 61-66

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

Circular production, designing, and mechanical testing of polypropylene-based reinforced composite materials : statistical analysis for potential automotive and nuclear applications

Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim; Sergejev, Fjodor; Krasnou, Illia Polymers 2023 / art. 3410, 30 p. : ill <https://doi.org/10.3390/polym15163410>

Cobalt- and nickel-free titanium and chromium carbide-based cermets = Koobalti- ja nikli-vabad titaankarbiid- ja kroomkarbiidkermised

Kolnes, Märt 2018 <https://digi.lib.ttu.ee/i/?9960>

Comparative analysis of residual stresses determined by various methods in brush-plated hard gold and silver coatings
Lille, Harri; Kõo, Jakob; Ryabchikov, Alexander; Reitsnik, Renno; **Sergejev, Fjodor; Mikli, Valdek** Engineering materials & tribology XXII 2014 / p. 8-11

Comparative study of adhesive wear for CoCr, TiC-NiMo, WC-Co as potential FSW tool materials

Kolnes, Mart; Kübarsepp, Jakob; Sergejev, Fjodor; Kolnes, Märt Materials Engineering 2017 : selected, peer reviewed papers from the 26th International Baltic Conference on Materials Engineering 2017, October 26-27, Kaunas, Lithuania 2017 / p. 224-228 : ill <http://dx.doi.org/10.4028/www.scientific.net/SSP.267.224>

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>

Comparative study on indentation fracture toughness measurements of cemented carbides

Sergejev, Fjodor; Antonov, Maksim 15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 50-51 : ill

Comparative study on indentation fracture toughness measurements of cemented carbides

Sergejev, Fjodor; Antonov, Maksim Proceedings of the Estonian Academy of Sciences. Engineering 2006 / 4, p. 388-398 : ill

Comparative study on indentation fracture toughness measurements of cermets and hardmetals

Sergejev, Fjodor Proceedings of EURO PM 2006 Congress & Exhibition : Ghent, Belgium, 23-26 Oct. 2006. 1 2006 / p. 43-48

Comparison of curvature and X-Ray methods for measuring of residual stresses in hard PVD coatings

Lille, Harri; Kõo, Jakob; **Gregor, Andre; Ryabchikov, Alexander; Sergejev, Fjodor; Traksmaa, Rainer; Kulu, Priit** Materials science forum 2011 / p. 455-460

Comparison of some mechanical and physical methods for measurement of residual stresses in brush-plated nickel hardened gold and silver coatings

Lille, Harri; Kõo, Jakob; Ryabchikov, Alexander; Reitsnik, Renno; **Sergejev, Fjodor; Matvejev, Dmitri** Materials science = Medžiagotyra 2016 / p. 36-40 : ill <http://dx.doi.org/10.5755/j01.ms.22.1.7439>

Comparison of values of residual stresses determined by various methods in hard nickel coatings prepared by brush-plating in sulfate solution

Lille, Harri; Ryabchikov, Alexander; Kõo, Jakob; Reitsnik, Renno; **Veinthal, Renno; Mikli, Valdek; Sergejev, Fjodor** Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 680-687 : ill

Correlation between surface fatigue and microstructural defects of cemented carbides

Sergejev, Fjodor; Preis, Irina; Kübarsepp, Jakob; Antonov, Maksim Wear 2007 / 9, p. 770-774 : ill

Correlation between surface fatigue and microstructural defects of cemented carbides

Sergejev, Fjodor; Preis, Irina; Kübarsepp, Jakob; Antonov, Maksim NORDTRIB 2006 : 12th Nordic Symposium in Tribology : Helsingor, Denmark, 7-9 June 2006 2006 / p. 68

Correlation between surface fatigue and microstructural defects of cemented carbides : experimental validation

Sergejev, Fjodor; Preis, Irina; Kübarsepp, Jakob Book of abstracts : International Symposium on Fatigue Design and Material Defects : Trondheim, Norway, 23-25 May 2011 2011 / p. 32-33

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>

Determination of modulus of elasticity, nanohardness and residual stresses in brush-plated gold and silver coatings on copper substrate

Lille, Harri; Kõo, Jakob; Rjabtšikov, Aleksander; **Veinthal, Renno; Mikli, Valdek; Sergejev, Fjodor** Materials science = Medžiagotyra 2012 / p. 51-56 : ill

Determination of the mechanical properties of carbide composites by spherical indentation

Sergejev, Fjodor; Petrov, Mihhail; Kübarsepp, Jakob Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 723-728 : ill

Durability of WC-CO hardmetals and TiC-based cermets : investigation of the fatigue mechanics aspects of PM

hardmetals and cermets

Sergejev, Fjodor 2010 <https://www.amazon.com/Durability-WC-CO-Hardmetals-TiC-based-Cermets/dp/383645632X>

EBSD investigation of microstructure and microtexture evolution on additively manufactured TiC-Fe based cermets—Influence of multiple laser scanning

Maurya, Himanshu Singh; Vikram, R. J.; Kumar, R.; Rahmani, Ramin; **Juhani, Kristjan**; **Sergejev, Fjodor**; **Prashanth, Konda Gokuldoss** Micron 2024 / art. 103613 <https://doi.org/10.1016/j.micron.2024.103613>

Effect of carbide phase and binder chemical composition on surface fatigue of carbide composites [Electronic resource]

Petrov, Mihail; **Kübarsepp, Jakob**; **Sergejev, Fjodor**; **Viljus, Mart** Euro PM2015 Congress & Exhibition : proceedings : 4-7 October 2015, Reims Congress Centre, Reims, France 2015 / [6] p. : ill. [USB]

Effect of high-force impulse loads on the modification of mechanical properties of heat-resistant steel after service

Chausov, Mykola; **Maruschak, Pavlo**; **Pylypenko, Andriy**; **Sergejev, Fjodor**; Student, Oleksandra Estonian journal of engineering 2012 / p. 251-258 : ill

Effect of microstructure and residual stresses on the wear resistance and durability of steel bonded TiC cermets

Sergejev, Fjodor; **Klaasen, Heinrich**; **Kübarsepp, Jakob**; **Traksmaa, Rainer** Abstracts of International Conference on Fatigue Damage of Structural Materials - ICFDSM VIII, 18-24 September 2010 2010 / [1] p

Effect of powder bed preheating on the crack formation and microstructure in ceramic matrix composites fabricated by laser powder-bed fusion process

Maurya, Himanshu Singh; **Kosiba, Konrad**; **Juhani, Kristjan**; **Sergejev, Fjodor**; **Prashanth, Konda Gokuldoss** Additive manufacturing 2022 / art. 103013, 13 p. : ill <https://doi.org/10.1016/j.addma.2022.103013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of preheating and cooling of the powder bed by laser pulse shaping on the microstructure of the TiC based cermets

Maurya, Himanshu Singh; **Kollo, Lauri**; **Juhani, Kristjan**; **Sergejev, Fjodor**; **Prashanth, Konda Gokuldoss** Ceramics international 2022 / p. 20612-20618 <https://doi.org/10.1016/j.ceramint.2022.04.029> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of residual stresses on the surface fatigue of TiC-based carbide composites

Sergejev, Fjodor; **Klaasen, Heinrich**; **Kübarsepp, Jakob** Proceedia engineering 2011 / p. 3152-3161 : ill

Effect of sintering method on surface fatigue of carbide composites

Petrov, Mihail; **Kübarsepp, Jakob**; **Sergejev, Fjodor**; **Viljus, Mart**; **Tarraste, Marek** Engineering materials and tribology XXV 2017 / p. 368-372 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.721.368>

Effect of the laser processing parameters on the selective laser melting of TiC–Fe-based cermets

Maurya, Himanshu Singh; **Kollo, Lauri**; **Tarraste, Marek**; **Juhani, Kristjan**; **Sergejev, Fjodor**; **Prashanth, Konda Gokuldoss** Journal of manufacturing and materials processing 2022 / art. 35, 11 p. : ill <https://doi.org/10.3390/jmmp6020035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Estimation of buttons resistance to rock drilling using laboratory surface fatigue test

Antonov, Maksim; **Karlsson, L.**; **Sergejev, Fjodor**; **Hussainova, Irina** Proceedings of 37th Leeds-Lyon symposium on Tribology : Leeds, 7th-10th September 2010 2010 / [1] p

Estimation of the endurance limit of cemented carbides based on pore size

Preis, Irina; **Gray, Marquis**; **Sergejev, Fjodor** Proceedings of Fatigue 2006, the 9th International Fatigue Congress : Atlanta, GA, 14-19 May 2006 2006 / [9] p. : ill

Evaluation of mechanical properties and residual stresses of hard PVD coatings

Gregor, Andre; **Lille, Harri**; **Kõo, Jakub**; **Sergejev, Fjodor**; **Traksmaa, Rainer**; **Sivitski, Alina**; **Kulu, Priit** 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 34

Experimental analysis of end mill axis inclination and its influence on 3D areal surface texture parameters

Logins, Andris; **Rosado Castellano, Pedro**; **Torims, Toms**; **Gutierrez, Santiago C.**; **Sergejev, Fjodor** Proceedings of the Estonian Academy of Sciences 2017 / p. 194-201 : ill <https://doi.org/10.3176/proc.2017.2.09> http://www.ester.ee/record=b2355998*est

Fatigue mechanics of carbide composites

Sergejev, Fjodor; **Klaasen, Heinrich**; **Kübarsepp, Jakob**; **Preis, Irina** International journal of materials & product technology 2011 / p. 140-163 : ill

Fatigue mechanics of TiC-based cemented carbides

Sergejev, Fjodor; Preis, Irina; Hussainova, Irina; Kübarsepp, Jakob Proceedings of the Institution of Mechanical Engineers. Part J, Journal of engineering tribology 2008 / p. 201-209 : ill <http://dx.doi.org/10.1243/13506501JET342>

Fatigue performance of carbide composites

Klaasen, Heinrich; Kübarsepp, Jakob; Preis, Irina; Sergejev, Fjodor EURO PM2005 : congress & exhibition : 2-5 October 2005, Prague, Czech Republic : proceedings. Volume 1 2005 / p. 323-328 : ill

Fatigue strength prediction of carbide composites by considering pores to be equivalent to small defects : effect of hot isostatic pressing

Sergejev, Fjodor; Preis, Irina; Kübarsepp, Jakob Book of abstracts : International Symposium on Fatigue Design and Material Defects : Trondheim, Norway, 23-25 May 2011 2011 / p. 41-42

Fracture toughness of ceramics fired at different temperatures

Sin, Peter; Veinthal, Renno; Sergejev, Fjodor; Antonov, Maksim; Stubna, Igor Materials science = Medžiagotyra 2012 / p. 90-92 : ill https://www.researchgate.net/publication/268257498_Fracture_Toughness_of_Ceramics_Fired_at_Different_Temperatures

Head lõpetajad! = Dear graduates!

Land, Tiit; Sergejev, Fjodor; Jervan, Gert; Salupere, Andrus; Listra, Enn; Leiger, Roomet Mente et Manu 2021 / lk. 30-50 : fot https://www.ester.ee/record=b1242496*est

High-temperature oxidation resistance and tribological properties of Al₂O₃/ta-C coating

Alamgir, Asad; Bogatov, Andrei; Jõgiaas, Taivo; Viljus, Mart; Raadik, Taavi; Kübarsepp, Jakob; Sergejev, Fjodor; Lümekmann, Andreas; Kluson, Jan; Podgurski, Vitali Coatings 2022 / art. 547 <https://doi.org/10.3390/coatings12040547> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-temperature tribological performance of Al₂O₃/a-C:H:Si coating in ambient air

Podgurski, Vitali; Alamgir, Asad; Yashin, Maxim; Jõgiaas, Taivo; Viljus, Mart; Raadik, Taavi; Danilson, Mati; Sergejev, Fjodor; Lümekmann, Andreas; Kluson, Jan; Sondor, Jozef; Bogatov, Andrei Coatings 2021 / art. 495, 15 p. : ill <https://doi.org/10.3390/coatings11050495> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-temperature tribological performance of hard multilayer TiN-AlTiN/nACo-CrN/AlCrN-AlCrO-AlTiCrN coating deposited on WC-Co substrate

Alamgir, Asad; Yashin, Maxim; Bogatov, Andrei; Viljus, Mart; Traksmaa, Rainer; Sondor, Jozef; Lümekmann, Andreas; Sergejev, Fjodor; Podgurski, Vitali Coatings 2020 / art. 909, 10 p. : ill <https://doi.org/10.3390/coatings10090909> [Journal metrics at WOS](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 and sliding wear properties of single layer, multilayer and nanocomposite physical vapour deposited (PVD) coatings on the plasma nitrided low-alloy 42CrMo4 steel

Surženkov, Andrei; Adoberg, Eron; Põdra, Priit; Sergejev, Fjodor; Mere, Arvo; Viljus, Mart; Mikli, Valdek; Antonov, Maksim; Kulu, Priit Engineering materials and tribology 2013 / p. 223-228 : ill

The impact of microstructural refinement on the tribological behavior of niobium processed by Indirect Extrusion Angular Pressing

Omranpour Shahreza, Babak; Hernandez-Rodriguez, Marco A. L.; Hernandez-Rodriguez, Edgar; Kommel, Lembit; Sergejev, Fjodor Tribology international 2022 / art. 107412 <https://doi.org/10.1016/j.triboint.2021.107412> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Impact wear performance of thin hard coatings on TiC cermets

Veinthal, Renno; Sergejev, Fjodor; Yaldiz, Can Emrah; Mikli, Valdek 18th IFHTSE Congress : 2010 July 26th to 30th, Rio de Janeiro, Brazil 2010 / p. 5046-5056 : ill. [CD-ROM]

Impact wear performance of thin hard coatings on TiC cermets

Veinthal, Renno; Sergejev, Fjodor; Yaldiz, Can Emrah; Mikli, Valdek Journal of ASTM International 2011 / [10] p

Influence of laser hardening to the sliding wear resistance of the PVD (Al,Ti)N-G and nACo® coatings

Surženkov, Andrei; Adoberg, Eron; Antonov, Maksim; Sergejev, Fjodor; Mikli, Valdek; Viljus, Mart; Latokartano, Jyrki; Kulu, Priit Engineering materials & tribology XXII 2014 / p. 28-31

Inseneriteaduskonna dekaan: noori insenere ei tasu liiga vara koolipingist tööle meelitada, Leedu ajab õiget asja

Puusild, Harro toostusuudised.ee 2023 [Inseneriteaduskonna dekaan: noori insenere ei tasu liiga vara koolipingist tööle meelitada, Leedu ajab õiget asja](#)

Investigation of residual stresses and some elastic properties of brush-plated gold and silver galvanic coatings

Lille, Harri; Kõo, Jakub; Rjabtšikov, Aleksander; Reitsnik, Renno; **Veinthal, Renno; Mikli, Valdek; Sergejev, Fjodor** Engineering materials and tribology 2013 / p. 125-130 : ill

Investigation of some properties of brush-plated gold and silver galvanic coatings

Lille, Harri; Kõo, Jakub; Ryabchikov, Alexander; Reitsnik, Renno; **Mikli, Valdek; Sergejev, Fjodor** Proceedings of the 2nd International Conference Optimization and Analysis of Structures : Tartu, Estonia, August 25-27, 2013 / p. 101-107 : ill

Investigation of the fatigue mechanics aspects of PM hardmetals and cermets = Pulberkõvasulamite ja -kermiste väsimusmehaanika aspektide uurimine

Sergejev, Fjodor 2007 https://www.ester.ee/record=b2350243*est

Investigation of the surface fatigue of carbide composites and PVD hard coatings

Sergejev, Fjodor; Antonov, Maksim; Gregor, Andre; Hussainova, Irina; Kulu, Priit; Kübarsepp, Jakob Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [2] 2008 / p. 543-548 : ill

Investigation of the tribological behavior of the additively manufactured TiC-based cermets by scratch testing

Maurya, Himanshu Singh; Jayaraj, Jayamani; Wang, Z.; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss Journal of alloys and compounds 2023 / art. 170496, 9 p. : ill <https://doi.org/10.1016/j.jallcom.2023.170496>

12 uut positsiooni

Salupere, Andrus; Sergejev, Fjodor; Kallaste, Kadri; Pihel, Hele-Riin; Tärnov, Külle; Anton, Maia-Liisa; Annus, Ivar; Kanger, Tõnis; Kerikmäe, Tanel; Illing, Sven; Uutar, Aivar Mente et Manu 2020 / lk. 54-59 : portr https://www.ester.ee/record=b1242496*est
<https://dea.digar.ee/article/AKmenteetmanu/2020/09/0/21.1>

Local tribo-mechanical properties of TiC-based cermets by nanoindentation

Sergejev, Fjodor Proceedings of 14th Nordic Symposium on Tribology : NORDTRIB 2010 : 08.06-11.06.2010, Storforsen, Sweden 2010 / [8] p. [CD-ROM]

[Lõpetajad = Graduates]

Land, Tiit; Sergejev, Fjodor; Jervan, Gert; Salupere, Andrus; Listra, Enn; Leiger, Roomet Mente et Manu 2022 / lk. 24-43 : fot https://www.ester.ee/record=b1242496*est

[Lõpetajad = Graduates]

Land, Tiit; Sergejev, Fjodor; Jervan, Gert; Salupere, Andrus; Avarmaa, Mari; Leiger, Roomet Mente et Manu 2023 / lk. 30-49 : fot https://www.ester.ee/record=b1242496*est

Materjalitehnika instituut

Kulu, Priit; Sergejev, Fjodor Mehaanikainseneride koolitus 1998-2016 2016 / lk. 92-115 : ill., fot https://www.ester.ee/record=b4640989*est

Mehaanikainseneri käsiraamat

2015

Mehaanikainseneri käsiraamat

2013 https://www.ester.ee/record=b3007631*est

Mehaanikateaduskonna hetkeseisust ja tulevikust : [ettekanne mehaanikainseneride päeval 27. septembril 2013 TTÜs]

Otto, Tauno; Sergejev, Fjodor Tallinna Tehnikaülikooli aastaraamat 2013 2014 / lk. 191-193

Mehhanotehnika ja metallide käsiraamat

2012 http://www.ester.ee/record=b2860365*est

Microstructural aspects of fatigue mechanics of hardmetals and cermets

Preis, Irina; Sergejev, Fjodor Macchine Utensili 2004 / July, p. 66-70

Microstructural evolution and mechanical properties of Ti(C,N)–FeCrMo-based green cermets

Maurya, Himanshu Singh; Juhani, Kristjan; Viljus, Mart; Sergejev, Fjodor; Kübarsepp, Jakob Ceramics international 2023 <https://doi.org/10.1016/j.ceramint.2023.12.186>

Murakami approach : fatigue strength prediction of cemented carbides by considering pores to be equivalent to small defects

Sergejev, Fjodor; Preis, Irina; Klaasen, Heinrich; Kübarsepp, Jakob EURO PM2005 : congress & exhibition : 2-5 October 2005, Prague, Czech Republic : proceedings. Volume 1 2005 / p. 335-340 : ill

New high frequency surface fatigue wear tester : design and first results

Antonov, Maksim; Kulu, Priit; Sergejev, Fjodor; Hussainova, Irina; Veinthal, Renno Proceedings of Nordtrib 2008 : 13th Nordic Symposium on Tribology : Tampere, Finland, 10-13 June, 2008 2008 / p. NT2008-87-24

Noore inseneri programm (NIP) levitab tehnikapisikut

Sergejev, Fjodor; Pook, Ghita Mente et Manu 2018 / lk. 40 : fot http://www.ester.ee/record=b1242496*est
<http://dea.digar.ee/publication/AKmenteetmanu> https://www.ttu.ee/public/m/mente-et-manu/MM_05_2018/mobile/index.html

A novel approach in mechanical nanostructuring synthesis of metal hydride : hydrogen sorption enhancement by High Pressure Torsion Extrusion

Omranpour Shahreza, Babak; Ivanisenko, Julia; Sergejev, Fjodor; Omranpour, Hosseinali; Huot, Jacques International Journal of Hydrogen Energy 2024 / p. 133-142 <https://doi.org/10.1016/j.ijhydene.2023.10.343>

On determination of residual stresses in some PVD coatings by the curvature method

Lille, Harri; Ryabchikov, Alexander; Lind, Liina; **Sergejev, Fjodor; Adoberg, Eron; Peetsalu, Priidu** Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 378-382 : ill

Performance of carbide composites in cyclic loading conditions

Klaasen, Heinrich; Kübarsepp, Jakob; Roosaar, Tõnu; Sergejev, Fjodor; Talkop, Adolf International Powder Metallurgy Congress & Exhibition : EURO PM2008 : 29th September - 1st October 2008, Mannheim, Germany : proceedings. Vol.1 2008 / p. 237-242 : ill

Performance of carbide composites in cyclic loading wear conditions

Klaasen, Heinrich; Kübarsepp, Jakob; Tšinjan, Aleksei; Sergejev, Fjodor Wear 2011 / p. 837-841 : ill

Performance of cemented carbides in cyclic loading conditions

Klaasen, Heinrich; Kübarsepp, Jakob; Sergejev, Fjodor; Traksmäa, Rainer Materials science = Medžiagotyra 2006 / 2, p. 144-146 : ill

Performance of cemented carbides in cyclic loading wear conditions

Kübarsepp, Jakob; Klaasen, Heinrich; Sergejev, Fjodor Materials science forum 2007 / Progress in powder metallurgy, p. 1221-1224 : ill

Performance of cemented carbides in cyclic loading wear conditions

Kübarsepp, Jakob; Klaasen, Heinrich; Sergejev, Fjodor Progress in powder metallurgy. Part 2, Proceedings of the 2006 Powder Metallurgy World Congress & Exhibition (PM2006), Busan, Korea, September 24-28, 2006 2006 / p. 1221-1224 : ill

Performance of cemented carbides in cyclic loading wear conditions

Kübarsepp, Jakob; Klaasen, Heinrich; Sergejev, Fjodor Extended abstracts of 2006 Powder Metallurgy World Congress : Busan, Korea, September 24-28. 2 2006 / p. 887-888

Performance of ceramic-metal composites as potential tool materials for friction stir welding of aluminium, copper and stainless steel

Kolnes, Mart; Kübarsepp, Jakob; Sergejev, Fjodor; Kolnes, Märt; Tarraste, Marek; Viljus, Mart Materials 2020 / art. 1994, 18 p. : ill <https://doi.org/10.3390/ma13081994> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Performance of ceramic-metal composites as tool materials for friction stir welding = Keraamilis-metalsed komposiidid otshõõrdkeevituse tööriista materjalidena

Kolnes, Mart 2020 https://www.ester.ee/record=b5391663*est <https://digikogu.taltech.ee/et/Item/407d051a-6584-41fe-8c27-2ddcbcd8d902>

A promising approach to solid-state hydrogen storage : mechanical nanostructuring synthesis of magnesium by high pressure torsion extrusion

Omranpour Shahreza, Babak; Sergejev, Fjodor; Ivanisenko, Julia; Huot, Jacques Advances in science and technology (volume 134) 2023 / p. 43-51 <https://doi.org/10.4028/p-4ccBoQ>

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

Relaxation of residual stresses in brush-plated gold and silver coatings on copper and on brass substrates

Lille, Harri; Kõo, Jakob; Ryabchikov, Alexander; Reitsnik, Renno; **Sergejev, Fjodor; Dong, Minjie** Residual stresses IX 2014 / p. 866-871 : ill

Residual stresses in TiC-based cermets measured by indentation

Sergejev, Fjodor; Kimmari, Eduard; Viljus, Mart *Procedia engineering* 2011 / p. 2873-2881 : ill

Residual stresses on various PVD hard coatings on tube and plate substrates

Lille, Harri; Ryabchikov, Alexander; **Peetsalu, Priidu; Lind, Liina; Sergejev, Fjodor; Mikli, Valdek; Kübarsepp, Jakob** *Coatings* 2020 / art. 1054, 11 p <https://doi.org/10.3390/coatings10111054> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Riiklike tehnikaprofessuuride ees seisab rida väljakutseid

Kers, Jaan *TööstusEST* 2023 / lk. 32-34 : ill https://www.ester.ee/record=b4481084*est

Riiklike tehnikaprofessuuride väljakutsed roheleppe, ringmajanduse ja digiteerimise valguses

Kers, Jaan *Mente et Manu* 2022 / lk. 26-27 https://www.ester.ee/record=b1242496*est

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]

Selective laser melting of TiC-based cermet : HIP studies

Maurya, Himanshu Singh; Kollo, Lauri; Tarraste, Marek; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss *Transactions of the Indian Institute of Metals* 2023 / p. 565–570 : ill <https://doi.org/10.1007/s12666-022-02684-5>

Selective laser melting of TiC-Fe using pulse shaping : microstructure and mechanical properties

Maurya, Himanshu Singh; Kollo, Lauri; Tarraste, Marek; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss *3D Printing and Additive Manufacturing* 2023 / p. 640-649 <https://doi.org/10.1089/3dp.2021.0221>

Strength and failure of TiC based cermets

Klaasen, Heinrich; Kübarsepp, Jakob; Sergejev, Fjodor *Powder metallurgy* 2009 / 2, p. 111-115 : 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

Tailoring the microstructure and tribological properties in commercially pure aluminium processed by High Pressure Torsion Extrusion

Omranpour Shahreza, Babak; Kommel, Lembit; Sergejev, Fjodor; Ivanisenko, Yulia; Antonov, Maksim *Proceedings of the Estonian Academy of Sciences* 2021 / p. 540-548 : ill <https://doi.org/10.3176/proc.2021.4.23> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

TalTech ja Onninen sõlmisid ulatusliku koostöölepingu

goodnews.ee 2023 [TalTech ja Onninen sõlmisid ulatusliku koostöölepingu](#)

TalTechi dekaan: ka tehisintellekt jääb insenerita jänni

aripaev.ee 2023 [TalTechi dekaan: ka tehisintellekt jääb insenerita jänni](#)

TalTechi vilistlased võitlevad uue stipendiumiga inseneride põua vastu

postimees.ee 2024 [TalTechi vilistlased võitlevad uue stipendiumiga inseneride põua vastu](#)

The effect of microstructure evolution on the wear behavior of tantalum processed by Indirect Extrusion Angular Pressing

Omranpour Shahreza, Babak; Huot, Jacques; Antonov, Maksim; Kommel, Lembit; Sergejev, Fjodor; Perez Trujillo, Francisco Javier; Heczal, Anita; Gubicza, Jeno *International journal of refractory metals and hard materials* 2023 / art. 106079, 11 p. : ill <https://doi.org/10.1016/j.jrmhm.2022.106079>

Tribological behavior of hybrid coatings at extreme conditions = Hübridpinnete triboloogiline käitumine ekstreemsetes tingimustes

Shaikh, Asad Alamgir 2021 https://www.ester.ee/record=b5434621*est <https://digikogu.taltech.ee/et/Item/2b9c25e8-2f7f-46ea-859a->

TTÜ tehnoloogiline võimekus : (kõrgkoolide laboratoorne baas, teaduse põhitemaatika)

Karjust, Kristo; Sergejev, Fjodor Eesti Masinatööstuse Liit. TTÜ mehaanikateaduskond 80 2016 / lk. 95-121 : ill

Uued professorid TalTechis

Durst, Susanne; Partanen, Jenni Vilhelmiina; Kasabov, Edward; Palu, Ivo; Sergejev, Fjodor; Triikkel, Andres; Kalda, Jaan; Aav, Riina Mente et Manu 2020 / lk. 32-37 : portr https://www.ttu.ee/public/m/mente-et-manu/MM_01_2020/mobile/index.html
https://www.ester.ee/record=b1242496*est

Wear behavior of ceramic-metal composites as tool material for FSW of copper

Kolnes, Mart; Kübarsepp, Jakob; Sergejev, Fjodor; Kolnes, Märt; Tarraste, Marek; Viljus, Mart Solid state phenomena ; 320 2021 / p. 144–149 <https://doi.org/10.4028/www.scientific.net/SSP.320.144> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Wear of different PVD coatings at industrial fine-blanking field tests

Lind, Liina; Peetsalu, Priidu; Sergejev, Fjodor Medžiagotyra = Materials science 2015 / p. 343-348 : ill
<http://dx.doi.org/10.5755/j01.ms.21.3.7249>

Wear of potential tool materials for aluminium alloys friction stir welding at weld temperatures

Kolnes, Mart; Kübarsepp, Jakob; Sergejev, Fjodor; Kolnes, Märt Proceedings of the Estonian Academy of Sciences 2019 / p. 198–206 : ill <https://doi.org/10.3176/proc.2019.2.12> http://www.kirj.ee/public/proceedings_pdf/2019/issue_2/proc-2019-2-198-206.pdf [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wear performance of PVD coated tool steels

Tšinjan, Aleksei; Klaasen, Heinrich; Kübarsepp, Jakob; Adoberg, Eron; Sergejev, Fjodor; Talkop, Adolf Estonian journal of engineering 2012 / p. 202-210 : ill

Vickers hardness of ceramics fired at different temperatures

Šin, P.; Veinthal, Renno; Sergejev, Fjodor; Antonov, Maksim; Stubna, I. Young Researchers 2011, PhD Students, Young Scientists and Pedagogues Conference proceedings : Nitra, Slovakia, 21-22 September 2011 2011 / p. 565-570
https://www.researchgate.net/publication/265794312_Vickers_hardness_of_ceramics_fired_at_different_temperatures

Декан TalTech: нам не хватает студентов технических направлений

Kraševski, Andrei; Sergejev, Fjodor rus.err.ee 2023 [Декан TalTech: нам не хватает студентов технических направлений](#)

Руководство к лабораторным работам по технологии конструкционных материалов

2006 http://www.ester.ee/record=b2166920*est

Федор Сергеев: искусственный интеллект не спасет от нехватки инженеров

Sergejev, Fjodor dv.ee 2023 [Федор Сергеев: искусственный интеллект не спасет от нехватки инженеров](#)