

## **Advanced cermets as tribomaterials**

**Hussainova, Irina; Antonov, Maksim; Kübarsepp, Jakob** Proceedings of the 5th World Tribology Congress : WTC13 : September 8-13, 2013, Torino, Italy 2013

## **Advanced chromium carbide based hardfacings**

**Zikin, Arkadi; Hussainova, Irina** Surface & coatings technology 2012 / p. 4270-4278 : ill

## **Advanced multifunctional materials and their applications**

**Antonov, Maksim; Hussainova, Irina; Kers, Jaan; Kulu, Priit; Kübarsepp, Jakob; Veinthal, Renno** Research in Estonia : present and future 2011 / p. 146-167

## **Advanced multiphase tribo-functional PTA hardfacings = Mitmefaasilised kulumiskindlad PTA-keevispinded**

**Zikin, Arkadi** 2013 <https://digi.lib.ttu.ee/i/?908> [https://www.ester.ee/record=b2956356\\*est](https://www.ester.ee/record=b2956356*est)

## **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>

## **Analytic and fea wear simulation of spinning contact**

**Põdra, Priit; Tamre, Mart** VI Tribological Conference, 6-7 June 1996, Technical University of Budapest : proceedings 1996 / p. 307

## **Application of memristor in simulation of friction processes**

**Nuzhdin, Kirill; Musalimov, Victor; Sivitski, Alina** Proceedings of the 10th International Conference of DAAAM Baltic Industrial Engineering, 12-13th May 2015, Tallinn, Estonia 2015 / p. 162-167 : ill

## **Assessment of cermets performance in erosive media**

**Hussainova, Irina; Antonov, Maksim** International journal of materials & product technology 2007 / 3/4, p. 361-376 : ill  
<https://www.inderscience.com/info/inarticle.php?artid=13085>

## **Automation of dual-drurn tribometer**

**Koiva, R.; Ajrots, Maito** International Conference Mechatronics 2000 : September 21 - 23, 2000, Warsaw, Poland. Vol. 1 2000 / p. 239-241

## **BALTMATTRIB - 2006 : [TTÜ materjalitehnika instituudi korraldatavast rahvusvahelisest konverentsist "Engineering Materials and Tribology" 5.-6. okt. Tallinnas : eelteade]**

Mente et Manu 2006 / 5. okt., lk. 2 [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

## **Biotribology**

**Hussainova, Irina** 2007

## **Biotribology general approach**

**Ajrots, Maito; Tamre, Mart** 10th Nordic-Baltic Conference on Biomedical Engineering. Satellite Symposium on Bioelectromagnetic and Biomechanic Measurements, June 13-15, 1996, Tallinn, Estonia 1996 / p. 31-37: ill [https://www.ester.ee/record=b1053772\\*est](https://www.ester.ee/record=b1053772*est)

## **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>

## **Comparative analysis of wear rates of microcrystalline diamond and diamond-like carbon coatings deposited on WC-Co substrates**

**Yashin, Maxim; Bogatov, Andrei; Podgurski, Vitali** Engineering materials and tribology XXV 2017 / p. 436-440 : ill  
<http://dx.doi.org/10.4028/www.scientific.net/KEM.721.436>

## **Comparative study of surface roughness and tribological behavior during running-in period of hard coatings deposited by lateral rotating cathode arc**

**Podgurski, Vitali; Nisumaa, Reet; Adoberg, Eron; Surženkov, Andrei; Sivitski, Alina; Kulu, Priit** Wear 2010 / p. 751-755 : ill

## **Comparison of a tribological model and real component test methods for lubricated contacts**

**Antonov, Maksim; Michalczewski, Remigiusz; Pasaribu, Rihard; Piekoszewski, Witold** Estonian journal of engineering 2009 / 4, p. 349-358 : ill

## **Covalent coupling of ionic liquid to carbon nanotubes : preparation and tribological properties**

**Taaber, Triinu; Põhako-Esko, Kaija; Antonov, Maksim; Veinthal, Renno** MRS proceedings 2014 / p. UU06-30 : ill

**Development of solid lubricated composites for high-temperature tribological applications = Tahkmäärdega komposiitide väljatöötamine kõrgtemperatuurseteks triborakendusteks**  
**Kumar, Rahul, 1993- 2022** <https://doi.org/10.23658/taltech.75/2022> <https://digikogu.taltech.ee/et/item/b117812c-4248-4542-ba39-fcbe5349f4e> [https://www.estr.ee/record=b5528171\\*est](https://www.estr.ee/record=b5528171*est)

**Development of sustainable polypropylene based composites = Polüpropeeni baasil jätkusuutlike komposiitide arendus**  
**Hussain, Abrar 2023** <https://doi.org/10.23658/taltech.64/2023> <https://digikogu.taltech.ee/et/item/fdead123-ec1c-4d27-baa6-ed82c6d527cc>  
[https://www.estr.ee/record=b5645373\\*est](https://www.estr.ee/record=b5645373*est)  
[https://www.estr.ee/record=b5645373\\*est](https://www.estr.ee/record=b5645373*est)

#### **Difusion bonding of hardmetals**

**Laansoo, Andres; Klaasen, Heinrich; Kübarsepp, Jakob; Surženkov, Gennadi** Engineering Materials & Tribology 2004 : materials of the XIII-th International Baltic Conference : September 23-24, Riga, Latvia 2004 / p. 16-20 : ill

#### **Dual-drum centrifugal tribometer for dynamical tests**

**Ajaots, Maito; Kõiva, Risto** OST-99 Symposium on Machine Design : [October 1 - September 30, 1999, Stockholm] : proceedings 1999 / p. 159-164: ill [https://www.estr.ee/record=b1332011\\*est](https://www.estr.ee/record=b1332011*est)

#### **Effect of basalt addition on tribological performance of FeCrSiB HVOF coatings**

**Antonov, Maksim; Surženkov, Andrei; Hussainova, Irina; Goljandin, Dmitri; Mikli, Valdek** Estonian journal of engineering 2012 / p. 211-220 : ill [https://artiklid.elnet.ee/record=b2527729\\*est](https://artiklid.elnet.ee/record=b2527729*est)

#### **Effect of free carbon on the mechanical and tribological properties of cemented carbides**

**Joost, Renee; Pirso, Jüri; Tenno, Taavi; Viljus, Mart** Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [II] 2010 / p. 450-455 : ill

#### **The effect of heat treatment on the morphology and mobility of Au nanoparticles**

**Oras, Sven; Vlassov, Sergei; Vigonski, Simon; Polyakov, Boris; Antsov, Mikk; Zadin, Vahur; Lõhmus, Rünno; Mougin, Karine** Beilstein Journal of Nanotechnology 2020 / p. 61-67 <https://doi.org/10.3762/bjnano.11.6> [Journal metrics at Scopus](#) [Article at Scopus](#)  
[Journal metrics at WOS](#) [Article at WOS](#)

#### **Effect of microstructure and service conditions on tribological performance of cermets**

**Hussainova, Irina** Proceedings of World Congres on Powder Metallurgy and Particulate Materials, USA. Vol. 8 2002 / p. 78-87

#### **Effect of nanocrystalline diamond films deflection on wear observed in reciprocating sliding tests**

**Podgurski, Vitali; Bogatov, Andrei; Sobolev, S.; Viljus, Mart; Sedov, V.; Ashkinazi, E.; Ralchenko, V.** Journal of coating science and technology 2016 / p. 109-115 : ill <http://dx.doi.org/10.6000/2369-3355.2016.03.03.2>

#### **Effect of surface features stiffness on tribological performance of 3D printed light-weight Ti6Al4V alloy**

**Antonov, Maksim; Pohlak, Meelis; Ivanov, Roman; Hussainova, Irina** Modern materials and manufacturing 2023 2024 / art. 040015 <https://doi.org/10.1063/5.0189279>

#### **Effect of tribosystem and inertia on run-in behavior of PVD coatings**

**Antonov, Maksim; Adoberg, Eron; Hussainova, Irina; Goljandin, Dmitri; Zikin, Arkadi** ECOTRIB 2011 : 3rd European Conference on Tribology and 4th Vienna International Conference on Nano-Technology : June 7-9, 2011, Vienna, Austria. 1 2011 / p. 159-164

#### **Effect of wear debris entrapment on the tribological performance of AlCoCrFeNi produced by selective laser melting or spark plasma sintering**

**Karimi, Javad; Antonov, Maksim; Prashanth, Konda Gokuldoss** Metallurgical and Materials Transactions A 2022 / p. 4004-4010  
<https://doi.org/10.1007/s11661-022-06805-z> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **18th International Baltic Conference : Engineering Materials & Tribology : BALTMATTRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts**

2009 [http://www.estr.ee/record=b2537121\\*est](http://www.estr.ee/record=b2537121*est)

#### **Der Einfluss Verschiedener Zusatzstoffe auf die Verschlussgeschwindigkeit von Metallen beim Strahlverschleiss**

**Kleis, Ilmar; Uuemöis, Haljand; Balbat, A.; Üksti, Lembit** EUROTRIB '77 : 2. Europäischer Tribologie-Kongreß, 3. bis 5. Oktober 1977; Düsseldorf, Bundesrepublik Deutschland 1977 / p. [?]

#### **Energy transfer in ratchets driven by additive trichotomous noise**

**Sauga, Ako; Martila, Dmitri; Mankin, Romi** AIP conference proceedings 2011 / p. 139-146

#### **Energy transfer in ratchets driven by additive trichotomous noise**

**Sauga, Ako; Martila, Dmitri; Mankin, Romi** Book of abstracts : Third International Conference on Application of Mathematics in Technical and Natural Sciences : 20-25 June 2011, Albena, Bulgaria 2011 / p. 81

**Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts**  
2003 [https://www.esther.ee/record=b1809345\\*est](https://www.esther.ee/record=b1809345*est)

**Engineering materials and tribology**  
2013

**Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATTRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia**  
2016 <http://dx.doi.org/10.4028/www.scientific.net/KEM.674>

**Erosive wear resistance of nature-inspired flexible materials**

**Kumar, Rahul, 1993-; Antonov, Maksim; Holovenko, Yaroslav; Surženkov, Andrei** Tribology letters 2020 / art. 51, 8 p. : ill  
<https://doi.org/10.1007/s11249-020-01296-8> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Exothermically synthesized B4C-Al composites for dry sliding = Eksotermiliselt sünteesitud B4C-Al komposiidid tööks liugehõordumise tingimustes**

**Kimmari, Eduard** 2008 [https://www.esther.ee/record=b2413238\\*est](https://www.esther.ee/record=b2413238*est)

**15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts**

2006 [https://www.esther.ee/record=b2227259\\*est](https://www.esther.ee/record=b2227259*est)

**High temperature cyclic impact/abrasion testing of boiler steels**

**Priss, Jelena; Klevtsov, Ivan; Dedov, Andrei; Antonov, Maksim; Rojacz, Harald; Badisch, Ewald** Engineering materials & tribology XXII 2014 / p. 289-292

**High temperature tribological properties of Al<sub>2</sub>O<sub>3</sub>/NCD films investigated under ambient air conditions**

**Podgurski, Vitali; Yashin, Maxim; Jõgiaas, Taivo; Viljus, Mart; Alamgir, Asad; Danilson, Mati; Bogatov, Andrei** Coatings 2020 / art. 175, 13 p. : ill <https://doi.org/10.3390/coatings10020175> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**High-temperature oxidation resistance and tribological properties of Al<sub>2</sub>O<sub>3</sub>/ta-C coating**

**Alamgir, Asad; Bogatov, Andrei; Jõgiaas, Taivo; Viljus, Mart; Raadik, Taavi; Kübarsepp, Jakob; Sergejev, Fjodor; Lümkemann, 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 Al<sub>2</sub>O<sub>3</sub>/a-C:H:Si coating in ambient air**

**Podgurski, Vitali; Alamgir, Asad; Yashin, Maxim; Jõgiaas, Taivo; Viljus, Mart; Raadik, Taavi; Danilson, Mati; Sergejev, Fjodor; Lümkemann, 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; Lümkemann, 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

**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

**Improving lubrication of elastic seals**

**Tamre, Mart** Proceedings of 3rd International Colloquium Micro-Tribology'01 : Jastarnia, Poland 2001 / p. 39-40

**Industrial approach to circularity of polymer composites : processing, characterization, mechanical testing, and wear regression**

**Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim** Journal of reinforced plastics and composites 2023 / 17 p. : ill <https://doi.org/10.1177/07316844231164563>

**Influence of surface morphology on the tribological behavior of diamond-like carbon coating**

**Podgurski, Vitali; Bogatov, Andrei; Freund, Martin; Kulu, Priit** Engineering materials and tribology 2013 / p. 83-91 : ill

**Influence of surface roughness on the tribological behaviour of the PVD coatings**

**Surženkov, Andrei; Adoberg, Eron; Viljus, Mart; Podgurski, Vitali; Veinthal, Renno; Kulu, Priit; Gregor, Andre** 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATTRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 38

**Inverse methods and integral-differential model demonstration for optimal mechanical operation of power plants - numerical graphical optimization for second generation of tribology models**

**Casesnoves, Francisco** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2018 / p. 39-50 : ill <https://doi.org/10.2478/ecce-2018-0005>

**Investigation of tribological characteristics of polymers used in medicine**

**Andriushchenko, Ekaterina; Semenova, Vlada; Yuan, Pan** New Materials and Technologies in Mechanical Engineering : International Scientific Conference "New Materials and Technologies in Mechanical Engineering" (NMTME 2019) 2019 / p. 656-661 <https://doi.org/10.4028/www.scientific.net/KEM.822.656>

**Investigations of structure and tribological properties of the lightweight c-BN-based composites**

**Kommel, Lembit; Kimmari, Eduard** Materials science = Medžagotyra 2005 / 4, p. 394-397 : ill

**Konstruktori sõnavara : eesti-inglise-saksa-vene terminid ja määratlused**

**Üksti, Lembit** 1999 [https://www.estet.ee/record=b1331312\\*est](https://www.estet.ee/record=b1331312*est)

**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]

**Masinat töökindlus**

**Kleis, Ilmar** 1984 [https://www.estet.ee/record=b1238058\\*est](https://www.estet.ee/record=b1238058*est)

**Mathematical modelling and optimization of erosion and corrosion in tribology = Erosiooni ja korrosooni matemaatiline modelleerimine ja optimeerimine triboloogias**

**Casesnoves, Francisco** 2018 <https://digi.lib.ttu.ee/i/?11175>

**Mathematical models in biotribology with 2D-3D erosion integral-differential model and computational-optimization/simulation programming - a mathematical model construction based on experimental research**

**Casesnoves, Francisco; Surženkov, Andrei** International journal of scientific research in computer science, engineering and information technology 2017 / p. 329-356 : ill <http://ijsrcseit.com/CSEIT17224010>

**Mathematical models in mechanical and biomedical tribology with computational simulations/optimization methods**

**Casesnoves, Francisco; Surženkov, Andrei** International journal of scientific research in computer science, engineering and information technology 2017 / p. 62-89 : ill <http://ijsrcseit.com/CSEIT17211>

**Metallmaatrikskomposiitmaterjalid triboloogias : avalik loeng 3. mail 2007 TTÜs**

**Veinthal, Renno** Tallinna Tehnikaülikooli aastaraamat 2007 2008 / lk. 326-331 : ill

**Microstructural design of ceramic-metal composites for tribological applications**

**Hussainova, Irina** Abstract book of the 5th Asian-Australian Conference on Composite Materials : ACCM-5 : 27-30 November, 2006, Hong-Kong 2006 / p. 16-17

**Microstructural design of ceramic-metal composites for tribological applications**

**Hussainova, Irina** Advances in composite materials and structures 2007 / p. 125-128 : ill

**Microstructural effects on wear of nonhomogeneous hardmetal materials**

**Hussainova, Irina; Viljus, Mart** Proceedings of the Estonian Academy of Sciences. Engineering 2003 / 2, p. 126-136 : ill [https://artiklid.elnet.ee/record=b1012788\\*est](https://artiklid.elnet.ee/record=b1012788*est)

**Microstructural investigation of ni-based high temperature self-lubricating laser claddings containing sulfides of nickel, copper or bismuth**

**Kumar, Rahul, 1993-; Torres, Hector; Rodríguez Ripoll, Manel; Antonov, Maksim; Hussainova, Irina** Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 31 l. [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](https://graduateschoolsfm.ttu.ee/abstracts/2022/)

**Microstructure and tribological behavior of Fe-based amorphous alloy fabricated by plasma spraying and laser remelting**

**Ma, Pan; Yang, Zhilu; Fang, Longfei; Zhang, Zhiyu; Fang, Yacheng; Zhang, Nan; Prashanth, Konda Gokuldoss; Jia, Yandong** Transactions of the Indian Institute of Metals 2023 / p. 1007-1014 <https://doi.org/10.1007/s12666-022-02814-z>

**Miks kodumasinad aina vähem vastu peavad? "Probleem on sarnane kiirmoe edukusega."**

digi.geenius.ee 2023 [Miks kodumasinad aina vähem vastu peavad? "Probleem on sarnane kiirmoe edukusega."](https://digi.geenius.ee/miks-kodumasinad-aina-vahem-vastu-peavad-probleem-on-sarnane-kiirmoe-edukusega)

### **Mild steel tribology for circular economy of textile industries**

**Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim;** Basit, Muhammad Abdul; Ahmad, Tahir Tribology in Industry 2021 / p. 552-560 <https://doi.org/10.24874/ti.1050.02.21.04> [Journal metrics at Scopus](#) [Article at Scopus](#)

**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 [https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est) <https://doi.org/10.4028/www.scientific.net/KEM.799>

**Modern Materials and Manufacturing (MMM 2021), 27th-29th April 2021, Tallinn, Estonia**

2021 <https://iopscience.iop.org/issue/1757-899X/1140/1>

**Nõrgavoolu liugekontaktide triboloogia : väitekiri ... magistri kraadi taotlemiseks**

**Jakobson, Mart** 1998 [https://www.ester.ee/record=b2687184\\*est](https://www.ester.ee/record=b2687184*est)

**Overview of hard cyclic viscoplastic deformation as a new SPD method for modifying the structure and properties of niobium and tantalum**

**Kommel, Lembit** Nanotechnology and advanced material science 2024 / 15 p <http://doi.org/10.31038/NAMS.2024721>

**Performance of polyimide and PTFE based composites under sliding, erosive and high stress abrasive conditions**

**Kumar, Rahul, 1993-; Malaval, Bastien; Antonov, Maksim;** Zhaoc, Gai Tribology international 2020 / art. 106282

<https://doi.org/10.1016/j.triboint.2020.106282> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Plasma transferred arc hardfacings reinforced by chromium carbide based cermet particles**

**Zikin, Arkadi; Hussainova, Irina; Winkelmann, Horst; Kulu, Priit; Badisch, Ewald** International heat treatment and surface engineering 2012 / p. 88-92

[https://www.researchgate.net/publication/227944686\\_Plasma\\_transferred\\_arc\\_hardfacings\\_reinforced\\_by\\_chromium\\_carbide\\_based\\_cermets\\_particles](https://www.researchgate.net/publication/227944686_Plasma_transferred_arc_hardfacings_reinforced_by_chromium_carbide_based_cermets_particles)

**Plasma transferred arc hardfacings reinforced by chromium carbide-based cermet particles**

**Zikin, Arkadi; Hussainova, Irina; Winkelmann, Horst; Kulu, Priit; Badisch, Ewald** Proceedings of the Heat Treatment and Surface Engineering 19th Congress : Glasgow, Scotland, 17-20 October, 2011 2011 / [5] p. : ill

**Preface : [BALTMATTRIB 2015]**

**Kulu, Priit** Proceedings of the Estonian Academy of Sciences 2016 / p. 89 [https://artiklid.elnet.ee/record=b2768201\\*est](https://artiklid.elnet.ee/record=b2768201*est)

**Processing and tribological properties of chromium carbide based cermets**

**Hussainova, Irina; Pirso, Jüri; Viljus, Mart** Proceedings of World Congres on Powder Metallurgy and Particulate Materials, USA. Vol. 6 2002 / p. 166-173

**Processing and tribological properties of Cr<sub>3</sub>C<sub>2</sub>**

**Jevgrafova, Natalja; Hussainova, Irina** OST-01 Symposium on Machine Design : Tallinn, Estonia, October 4-5, 2001 : proceedings 2001 / p. 245-250 : ill

**Processing and tribological properties of Cr<sub>3</sub>C<sub>2</sub>**

**Jevgrafova, Natalja; Hussainova, Irina** International Symposium on Machine Design OST 2001 : [Tallinn, Estonia, October 4-5, 2001] : abstracts 2001 / [1] p

**Recent developments on wear and corrosion behavior of iron/iron–nickel metal matrix composites reinforced with zirconia**

**Singh, Neera; Jha, Pushkar; Parkash, Om; Kumar, Devendra** Transactions of the Indian Institute of Metals 2019 / p. 2151–2158 : ill <https://doi.org/10.1007/s12666-019-01683-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Relation between self-organization and wear mechanisms of diamond films**

**Podgurski, Vitali; Bogatov, Andrei; Yashin, Maxim** Entropy 2018 / art. 279, 16 p. : ill <https://doi.org/10.3390/e20040279> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Research activities in materials engineering and tribology at TUT**

**Kulu, Priit; Veinthal, Renno; Kübarsepp, Jakob** 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATTRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 15

**The role of paradigms and technical strategies for implementation of the circular economy in the polymer and composite recycling industries**

**Hussain, Abrar; Podgurski, Vitali; Viljus, Mart**; Awan, Muhammad Rizwan Advanced Industrial and Engineering Polymer Research 2023 / p. 1-12 <https://doi.org/10.1016/j.aiepr.2022.10.001>

## **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]

## **Self-lubricating materials for extreme temperature tribo-applications**

**Kumar, Rahul, 1993-; Antonov, Maksim** Materials today: proceedings 2021 / p. 4583-4589

[https://doi.org/10.1016/j.matpr.2020.10.824 Conference proceedings at Scopus Article at Scopus](https://doi.org/10.1016/j.matpr.2020.10.824)

## **Sliding wear performance of AlCrN coating on TiB<sub>2</sub>/Ti composites at high temperatures**

**Michałczewski, Remigiusz; Kalbarczyk, Marek; Słomka, Zbigniew; Osuch-Słomka, Edyta; Łuszcz, Maciej; Liu, Le; Antonov, Maksim; Hussainova, Irina** Materials 2021 / art. 6771 [https://doi.org/10.3390/ma14226771 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](https://doi.org/10.3390/ma14226771)

## **Solid lubrication at high-temperatures - a review**

**Kumar, Rahul, 1993-; Hussainova, Irina; Rahmani Ahranjani, Ramin; Antonov, Maksim** Materials 2022 / art. 1695

[https://doi.org/10.3390/ma15051695 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](https://doi.org/10.3390/ma15051695)

## **Solid particle erosion of refractories : A critical discussion of two test standards**

**Varga, Markus; Antonov, Maksim; Tumma, Mike** Wear 2019 / p. 552–561 : ill [https://doi.org/10.1016/j.wear.2018.12.062 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](https://doi.org/10.1016/j.wear.2018.12.062)

## **Solid particle erosion of the Cr<sub>3</sub>C<sub>2</sub>-Ni metalmatrix composites**

**Antonov, Maksim; Hussainova, Irina; Pirso, Jüri** OST-01 Symposium on Machine Design : Tallinn, Estonia, October 4-5, 2001 : proceedings 2001 / p. 233-243 : ill

## **Structure, phase composition, and wear mechanisms of plasma-sprayed NiCrSiB-20wt.% TiB<sub>2</sub> coatings**

**Umanskii, A.; Storoženko, M.; Hussainova, Irina; Antonov, Maksim** Powder metallurgy and metal ceramics 2015 / p. 663-671 : ill <http://dx.doi.org/10.1007/s11106-015-9661-3>

## **Zur Untersuchung der aktuellen Probleme von gerätetechnischen Reibpaarungen an der Technischen Hochschule Tallinn**

**Ajaots, Maito; Hendre, Enn** Materiały VII Konferencji naukowo-technicznej na temat: Postęp w budowie precyzyjnego sprzętu elektroniczno-mechanicznego, Warszawa, 25-27 listopada 1987 r., sekcja III, IV i V 1987 / 6 s.

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

**Omranpour Shahreza, Babak; Kummel, 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](https://doi.org/10.3176/proc.2021.4.23)

## **Technological impact on wear resistant multiphase hardfacings**

**Badisch, Ewald; Katsich, Christian; Zikin, Arkadi** 15th Nordic Symposium on Tribology - NordTrib 2012 : 12-15 June, 2012, Trondheim, Norway : [proceedings] 2012 / 6 p. : ill

## **The ALT-1 tribometer**

**Ajaots, Maito; Laaneots, Rein; Tamre, Mart** 1986

## **The effect of carbon content on the mechanical and tribological properties of WC-Co cemented carbides**

**Joost, Renee; Pirso, Jüri; Viljus, Mart** Proceedings of Nordtrib 2008 : 13th Nordic Symposium on Tribology : Tampere, Finland, 10-13 June, 2008 2008 / [8] p. : ill

## **The influence of alumina and zirconia coats on the tribological properties of alumina nanofibers**

**Aghayan, Marina; Gasik, Michael; Kollo, Lauri; Hussainova, Irina; Rodriguez, Miguel Angel** CIMTEC 2014 : 13th International Ceramics Congress : Montecatini Terme, Tuscany, Italy, June 8-13, 2014 : book of abstracts 2014

## **The influence of Cr<sub>3</sub>C<sub>2</sub> and VC as alloying additives on the microstructure and properties of reactive sintered WC-Co cermets**

**Juhani, Kristjan; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei; Tarraste, Marek** Materials science = Medžiagotyra 2012 / p. 79-83 : ill <https://matsc.ktu.lt/index.php/MatSc/article/view/1347>

## **The light weight boron carbide cermet as tribomaterial**

**Kummel, Lembit; Pirso, Jüri; Traksmaa, Rainer** 9th Nordic Symposium on Tribology NORDTRIB 2000 : Porvoo, Finland, 11-14 June 2000. Vol. 3 2000 / p. 886-895 : ill

### **The wear of PVD coated elements in oscillation motion at high temperature**

Michalczewski, Remigiusz; Kalbarczyk, Marek; Slomka, Zbigniew; **Liu, Le; Antonov, Maksim; Hussainova, Irina** Proceedings of the Estonian Academy of Sciences 2021 / p. 500-507 : ill <https://doi.org/10.3176/proc.2021.4.18> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Theoretische Grundlagen der konstruktiven Gestaltung und Anwendung der Trommeltribometer**

**Ajaots, Maito** Maschinenbau im Informationszeitalter : 44. Internationales Wissenschaftliches Kolloquium, 20. - 23.09.1999 : 3 : Konstruktionstechnik, Konstruktionselemente und Baugruppen, Feinwerktechnik, Produktion und Logistik, Thermo- und Flüssigdynamik, Workshop "Multimedia für Bildung und Wirtschaft" 1999 / S. 255-260: III

### **Thermoeffects on tribological behavior of cermets**

**Hussainova, Irina** International Symposium on Machine Design OST 2001 : [Tallinn, Estonia, October 4-5, 2001] : abstracts 2001 / [1] p

### **Thermoeffects on tribological behavior of cermets**

**Hussainova, Irina** OST-01 Symposium on Machine Design : Tallinn, Estonia, October 4-5, 2001 : proceedings 2001 / p. 283-291 : ill

### **3D printed metal and metal-ceramic cellular lattice structures for wear and thermoacoustic applications = 3D prinditud metall- ja metall-keraamilised kärgvõre struktuurid triboloogilistele- ja termoakustilistele rakendustele**

Holovenko, Yaroslav 2019 <https://digi.lib.ttu.ee/i/?12289>

### **Ti6Al7Nb–TiB nanocomposites for ortho-implant applications**

**Singh, Neera**; Edachery, Vimal; Rajput, Monika; Chatterjee, Kaushik; Kailas, Satish V.; **Prashanth, Konda Gokul dass** Journal of materials research 2022 / p. 2525-2535 <https://doi.org/10.1557/s43578-022-00578-2> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **TiAIN coatings tribology for textile machinery parts**

**Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim** Proceedings of the Estonian Academy of Sciences 2021 / p. 163-171 : ill <https://doi.org/10.3176/proc.2021.2.04> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **TiCN coating tribology for the circular economy of textile industries**

**Hussain, Abrar; Podgurski, Vitali; Antonov, Maksim; Viljus, Mart; Goljandin, Dmitri** Journal of industrial textiles 2022 / p. 8947S-8959S <https://doi.org/10.1177%2F15280837211025726> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Transition from self-organized criticality into self-organization during sliding Si<sub>3</sub>N<sub>4</sub> balls against nanocrystalline diamond films**

**Bogatov, Andrei; Podgurski, Vitali; Vagiström, Heinrich; Yashin, Maxim; Shaikh, Asad Alamgir; Viljus, Mart**; Menezes, Pradeep; Gershman, Iosif Entropy 2019 / art. 1055 ; 12 p <https://doi.org/10.3390/e21111055> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Tribocharacteristics of journal bearings of rotating systems with unlocated axis**

**Ajaots, Maito; Tamre, Mart** OST-94 Symposium on Machine Design : proceedings, Tallinn, Estonia, April 14-15, 1994 1994 / p. 62-71: ill [https://www.esther.ee/record=b1033948\\*est](https://www.esther.ee/record=b1033948*est)

### **Tribological and circular economy aspects of polypropylene/cotton fibre hybrid composite**

**Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim; Kumar, Rahul, 1993-; Kamboj, Nikhil Kumar; Rahmani Ahranjani, Ramin; Viljus, Mart; Ahmad, Tahir; Krumme, Andres; Krasnou, Illia** Proceedings of the Estonian Academy of Sciences 2022 / p. 186-193 : ill <https://doi.org/10.3176/proc.2022.2.03> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Tribological and mechanical properties investigations of post-consumer cotton textiles**

**Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Viljus, Mart; Antonov, Maksim; Bogatov, Andrei; Krasnou, Illia** Solid state phenomena ; 320 2021 / p. 97-102 <https://doi.org/10.4028/www.scientific.net/SSP.320.97> Conference Proceedings at Scopus Article at Scopus

### **Tribological and structural aspects of tribo-design of abrasive wear resistant coatings**

**Kulu, Priit** Tribology of surface layers and coatings : proceedings of the 4th International Tribology Conference, PRAGOTRIB 2004 : Prague, Czech Republic, 17 and 18 June 2004 2004

### **Tribological behavior of hybrid coatings at extreme conditions = Hübridpinnette triboloogiline käitumine ekstreemsetes tingimustes**

**Shaikh, Asad Alamgir** 2021 [https://www.esther.ee/record=b5434621\\*est](https://www.esther.ee/record=b5434621*est) <https://digikogu.taltech.ee/et/item/2b9c25e8-2f7f-46ea-859a-366bf4b7f252> <https://doi.org/10.23658/taltech.33/2021>

**Tribological behavior of Ni-based self-lubricating claddings containing sulfide of nickel, copper, or bismuth at temperatures up to 600 °C**  
Kumar, Rahul, 1993-; Torres, Hector; **Aydinyan, Sofiya; Antonov, Maksim; Varga, Markus; Hussainova, Irina;** Rodrlguez Ripoll, Manel Surface and coatings technology 2023 / art. 129270, 14 p. : ill <https://doi.org/10.1016/j.surfcoat.2023.129270>

**Tribological characteristics of micro- and nano-composites Cu-Al<sub>2</sub>O<sub>3</sub> at room and elevated temperatures**  
**Hvizdoš, Pavol; Besterici, Michal; Kulu, Priit** High temperature materials and processes 2011 / p. 573-577

**Tribological characteristics of nanostructured copper**

Hussainova, Irina; Löhmus, Rünno Book of abstracts : Nano Tribology Workshop : France, 2005 2005 / p. 34

**Tribological parameters of copper-alumina composite**

Hvizdoš, Pavol; **Kulu, Priit; Besterici, Michal** Engineering materials and tribology 2013 / p. 191-196  
[https://www.researchgate.net/publication/271863555\\_Tribological\\_Parameters\\_of\\_Copper-Alumina\\_Composite](https://www.researchgate.net/publication/271863555_Tribological_Parameters_of_Copper-Alumina_Composite)

**Tribological performances of ZrC-Ni and TiC-Ni cermet reinforced PTA hardfacings at elevated temperatures**

Yung, Der-Liang; Zikin, Arkadi; Hussainova, Irina; Danninger, Herbert; Badisch, Ewald; Gavrilovic, A. Surface and coatings technology 2017 / p. 497-505 : ill <https://doi.org/10.1016/j.surfcoat.2016.11.099>

**Tribological properties of PVD coatings with lubricating films**

Lind, Liina; Adoberg, Eron; Aarik, Lauri; **Kulu, Priit; Veinthal, Renno;** Abdel Aal, Alsayed Estonian journal of engineering 2012 / p. 193-201 : ill

**Tribological properties of selective laser melted Al12Si alloy**

Rathod, H.J.; Nagaraju, T.; **Prashanth, Konda Gokuloss;** Ramamurty, U. Tribology international 2019 / p. 94-101 : ill  
<https://doi.org/10.1016/j.triboint.2019.04.038> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Tribological properties of the Cr<sub>3</sub>C<sub>2</sub>-Ni metal-matrix composites**

Hussainova, Irina; **Pirso, Jüri** EUROMAT 2001 : 7th European Conference on Advanced Materials and Processes : Rimini, Italy, 10-14 June, 2001 : conference abstracts 2001 / p. 122-123

**Tribological properties of the Cr<sub>3</sub>C<sub>2</sub>-Ni metal-matrix composites [Electronic resource]**

Hussainova, Irina; **Pirso, Jüri** Proceedings of 7th European Conference on Advanced Materials and Processes : EUROMAT 2001 : Italy 2001 / [CD-ROM]

**Tribological studies on nc-TiC/a-C:H coatings**

**Kollo, Lauri; Schwaller, P.; Michler, J.** Engineering Materials & Tribology 2004 : materials of the XIII-th International Baltic Conference : September 23-24, Riga, Latvia 2004 / p. 130-131

**Tribology of fine-grained cermets**

Letunovitš, Sergei 2003 [https://www.esther.ee/record=b1782627\\*est](https://www.esther.ee/record=b1782627*est)

**Triboloogia aitab kadusid vähendada**

Hendre, Enn; **Ajaots, Maito** Rahva Hääl 1984 / lk. [2] [https://www.esther.ee/record=b1072826\\*est](https://www.esther.ee/record=b1072826*est)

**Triboloogia lühikursus**

Kleis, Ilmar 1996 [https://www.esther.ee/record=b1071102\\*est](https://www.esther.ee/record=b1071102*est)

**Triboloogia lühikursus**

Kleis, Ilmar Tehnika ja Tootmine 1995 / 5, lk. 17-19; 6, lk. 16-19: ill

**Triboloogia? Kas see on midagi uut?**

Kleis, Ilmar Horisont 1974 / lk. 10-11 : ill [https://www.esther.ee/record=b1072243\\*est](https://www.esther.ee/record=b1072243*est) <https://www.digar.ee/arhiiv/et/perioodika/69736>

**2D computational-numerical hardness comparison between fe-based hardfaces with WC-Co reinforcements for integral-differential modelling**

Casesnovas, Francisco Key engineering materials 2018 / p. 330 - 338 <https://doi.org/10.4028/www.scientific.net/KEM.762.330>  
[Conference Proceedings at Scopus Article at Scopus](https://www.researchgate.net/publication/271863555_Tribological_Parameters_of_Copper-Alumina_Composite)

**Using FEM in tribology**

Põdra, Priit Proceedings of the First National DAAAM Conference in Estonia : Science '95 1996 / p. 67-75: ill

**WC tribology for circular economy of manufacturing textile industries**

Hussain, Abrar; Podgurski, Vitali; Antonov, Maksim; Goljandin, Dmitri; Viljus, Mart GSFMT Scientific Conference 2021 : Tartu, June 14-15, 2021 : abstracts 2021 / P 33 [https://fmtdk.ut.ee/wp-content/uploads/2021/06/GSFMT\\_abstractbook\\_2021.pdf](https://fmtdk.ut.ee/wp-content/uploads/2021/06/GSFMT_abstractbook_2021.pdf)

## **Wear and friction in boron carbide cermet-steel sliding system**

Kommel, Lembit; Hussainova, Irina; Kimmari, Eduard Abstracts of papers from 2nd World Tribology Congress 2001 / p. 93

## **Wear protection of highly loaded components: advantages of plasma transferred arc welding as hardfacing technology**

Katsich, Christian; Zikin, Arkadi; Badisch, Ewald Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 639-644 : ill

## **Wear rate of nanocrystalline diamond coating under high temperature sliding conditions**

Yashin, Maxim; Baroniš, Janis; Menezes, Pradeep; Viljus, Mart; Raadik, Taavi; Bogatov, Andrei; Antonov, Maksim; Podgurski, Vitali Materials Engineering 2017 : selected, peer reviewed papers from the 26th International Baltic Conference on Materials Engineering 2017, October 26-27, Kaunas, Lithuania 2017 / p. 219-223 : ill  
<http://dx.doi.org/10.4028/www.scientific.net/SSP.267.219>

## **Вопросы триботехнического материаловедения порошковых карбидостальных композитов**

Valdma, Leo; Kübarsepp, Jakob; Annuka, Harri Современные проблемы триботехнологии : тезисы докладов Всесоюзный научно-технологической конференций 1988 / с. 152-153

## **Исследование влияния конструкционных и технологических параметров пухние покоя миниатюрных направляющих скольжения**

Andreeva, O.; Romanova, O.; Arsentjeva, L.; Ajaots, Maito; Möldre, Heino Триботехника - машиностроению : тезисы докладов третьей Московской научно-технической конференций, 2-4 сент. 1987 г 1987 / с. [126-127]

## **Исследование пневмовибратора к трибометру BT-1**

Saar, Bernhard; Tani, Peeter XXV студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР, 21-23 апреля 1981 года : тезисы докладов. Том 2, Автоматика. Энергетика. Механика. Химия 1981 / с. 135-136 [https://www.esther.ee/record=b1322629\\*est](https://www.esther.ee/record=b1322629*est)

## **Моделирующая испытательная система для исследования триботехнических характеристик миниатюрных узлов трения**

Ajaots, Maito; Möldre, Heino; Tamre, Mart Всесоюзная научно-техническая конференция "Динамическое моделирование сложных систем", 22-24 сент. 1987 г., Гродно : Тезисы докладов 1987 / с. 93

## **Модернизированный четырехшариковый трибометр для исследования упорных подшипников двигателей прямого привода**

Kressa, H.; Poller, P.; Velling, Ants XXXII студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР, 19-21 апреля 1988 г. : тезисы докладов : [в 3-х частях], ч. 1 1988 / с. 101  
[https://www.esther.ee/record=b1571601\\*est](https://www.esther.ee/record=b1571601*est)

## **Определение относительной износстойкости полимерных материалов на вибрационном трибометре**

Tanberg, J.; Nanits, Mats-Maidu XXX студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР, 8-10 апреля 1986 года : тезисы докладов. Том II, Автоматика. Энергетика. Механика. Химия 1986 / с.102 [https://www.esther.ee/record=b1305565\\*est](https://www.esther.ee/record=b1305565*est)

## **Опыт применения вибрационных трибометров при определении износстойкости материалов**

Ajaots, Maito Всесоюзная научно-техническая конференция "Повышение ресурса узлов трения, работающих в экстремальных условиях" (г. Пермь, 28-30 мая 1986 г.) : тезисы докладов 1986 / с. [231-232]

## **Опыт применения вибрационных трибометров при ускоренном определении износстойкости материалов**

Ajaots, Maito; Nanits, Mats-Maidu Всесоюзная научно-практическая конференция "Теория и практика создания, испытания и эксплуатация триботехнических ция триботехнических систем" (г. Андропов, 28-30 мая 1986 г.) : Тезисы докладов 1986 / с. 113

## **Оценка контактных площадей и давлений в парах вал-втулка при наклоненной оси**

Ajaots, Maito; Tamre, Mart Триботехника - машиностроению : тезисы докладов 5-ой научно-технической конференции, Н.-Новгород, 1991 1991 / с. 207-208

## **Самосмазывающиеся пористые подшипники скольжения с повышенной работоспособностью**

Ajaots, Maito; Lees, Rein Трение и износ = Friction and Wear : международный научный журнал 1985 / с. 347-351 : ил  
[https://www.esther.ee/record=b1312784\\*est](https://www.esther.ee/record=b1312784*est)

## **Структурно-фазовый состав и механизмы изнашивания плазменного покрытия системы NiCrSiB-20% (мас.) TiB2**

Umanskii, A.; Storoženko, M.; Hussainova, Irina; Antonov, Maksim Порошковая металлургия = Powder metallurgy : ежемесячный научно-технический журнал 2014 / с. 57-68

## **Термотрибохимия на амониев сульфат**

Петкова, В.; Tõnsuaadu, Kaia; Домбалов, И.; Пеловски, Й.; Петров, Л. Дванадесета научно-технологична сесия Контакт 2003

"Трибология и интердисциплинност" : Трибология 2003 : 30-31 октомври 2003, София 2003 / с. 117-120 : ил

**Трибометр ALT-1**

**Ajaots, Maito; Laaneots, Rein; Tamre, Mart** 1986