

Abrasion of WC based hardmetals

Voltšihhin, Nikolai; Hussainova, Irina; Antonov, Maksim ECOTRIB 2011 : 3rd European Conference on Tribology and 4th Vienna International Conference on Nano-Technology : June 7-9, 2011, Vienna, Austria. 1 2011 / p. 229-232

Abrasive erosion of non-tungsten cemented carbides

Pirso, Jüri; Kallas, Paul Powder Technology 95 : Vth Baltic Conference, November 7-8, 1995, Tallinn 1995 / I. 30-33
https://www.ester.ee/record=b1492085*est

Abrasive wear and mechanical properties of carbide composites

Kübarsepp, Jakob; Klaasen, Heinrich; Roosaar, Tõnu; Annuka, Harri 15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 56-57 : ill

Abrasive wear powder materials and coatings

Kulu, Priit; Tarbe, Riho; Vallikivi, Ahto Materials science = Medžiagotyra 2005 / p. 230-234 : ill

Abrasive wear resistance of hardmetals

Pirso, Jüri; Liiskmann, Guido; Suominen, Sauli International DAAAM : [DAAAM National Estonia] : proceedings of the 1st International Conference, 25-27th September 1997, Tallinn, Estonia 1997 / p. 141-144: ill

Abrasive wear resistance of hardmetals

Pirso, Jüri; Liiskmann, Guido; Suominen, Sauli International Conference "Novel Processes and Materials in Powder Metallurgy" : PM-97 : November 24-28, 1997, Kiev : abstracts 1997 / p. 323

Abrasive wear resistance of recycled hardmetal reinforced thick coating

Kulu, Priit; Tarbe, Riho; Zikin, Arkadi; Sarjas, Heikki; Surženkov, Andrei Engineering materials and tribology 2013 / p. 185-190

Abrasive wear resistance of recycled hardmetal reinforced thick coatings

Kulu, Priit; Tarbe, Riho; Zikin, Arkadi; Sarjas, Heikki; Surženkov, Andrei Proceedings 20th IFHTSE : International Federation for Heat Treatment and Surface Engineering Congress : Beijing, China, October 23-25, 2012 2012 / p. 541-546

Abrasive wear resistant composite hardfacings with ex-situ and in-situ synthesized carbide reinforcement =

Tkachivskyi, Dmytro 2021

Tkachivskyi, Dmytro 2021 <https://doi.org/10.23658/taltech.41/2021> <https://digikogu.taltech.ee/et/Item/4ee05e38-b68b-4bb6-a708-6f2b8159f947>

Adhesive wear behaviour of carbide composites and tool steels

Annuka, Harri; Klaasen, Heinrich; Kübarsepp, Jakob; Suvi, Vahur Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 175-176 : ill

Adhesive wear behaviour of hardalloys

Klaasen, Heinrich; Kübarsepp, Jakob; Annuka, Harri Engineerings Materials & Tribology 2004 : materials of the XIII-th International Baltic Conference : September 23-24, Riga, Latvia 2004 / p. 114-115 : ill

Adhesive wear performance of hardmetals and cermets

Klaasen, Heinrich; Kübarsepp, Jakob; Roosaar, Tõnu; Viljus, Mart; Traksmäa, Rainer Wear 2010 / 9/10, p. 1122-1128 : ill

Adhesive wear resistance of hard metals and their durability in metal forming operations

Reshetnjak, Heinrich; Kübarsepp, Jakob Advances in hard materials production : proceedings of the 1996 European Conference on Advances in Hard Materials Production, Stockholm, Sweden, May 27-29, 1996 1996 / p. 327-332: ill

Advanced hard metal grades and technologies improving their durability in blanking operations

Reshetnjak, Heinrich; Kübarsepp, Jakob Materials Engineering - 96 : materials of VI-th International Baltic Conference 1996 / p. 12-16

Angularity evaluation of milled WC-Co powder

Kulu, Priit; Mikli, Valdek; Käerdi, Helmo; Besterčí, Michal International journal of materials & product technology 2005 / p. 289-298 : ill

Angularity of the disintegrated ground hardmetal powder particles

Mikli, Valdek; Kulu, Priit; Käerdi, Helmo; Besterčí, Michal Medžiagotyra = Materials science 2002 / 4, p. 430-433 : ill

Angularity of the disintegrated ground hardmetal powder particles

Mikli, Valdek; Kulu, Priit; Käerdi, Helmo; Besterčí, Michal Abstracts of International Conference Materials Engineering and Tribology 2002 / ? p

Application of magnetic methods for structure investigation of steel-bonded hardmetals

Laansoo, Andres; Kübarsepp, Jakob International DAAAM : [DAAAM National Estonia] : proceedings of the 1st International Conference, 25-27th September 1997, Tallinn, Estonia 1997 / p. 145-148

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>

Applications of recycled hardmetal powder

Zimakov, Sergei; Pihl, Toomas; Kulu, Priit; Antonov, Maksim; Mikli, Valdek Proceedings of the Estonian Academy of Sciences. Engineering 2003 / 4, p. 304-316 : ill

Applications of recycled hardmetal powder

Zimakov, Sergei; Pihl, Toomas; Kulu, Priit; Antonov, Maksim; Mikli, Valdek Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts 2003 / p. 43-44

Assessment of cermets performance in aggressive media

Antonov, Maksim 2006 http://www.ester.ee/record=b2208731*est

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

Assessment of zirconia doped hardmetals as tribomaterials

Hussainova, Irina; Antonov, Maksim; Voltšihhin, Nikolai Wear 2011 / p. 1909-1915 : 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

Behaviour of hard alloys in sliding and erosion wear conditions

Kübarsepp, Jakob; Vainola, Vello; Klaasen, Heinrich; Loel, Rein Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 203-206 : ill

Brazing and diffusion welding of tungsten free hardmetals

Surženkov, Gennadi; Laansoo, Andres; Kübarsepp, Jakob Abstracts of International Conference on Welding - Quality - Competitiveness 2002 / p. 61-63

Brazing and diffusion welding of tungsten free hardmetals [Electronic resource]

Surženkov, Gennadi; Laansoo, Andres; Kübarsepp, Jakob; Klaasen, Heinrich Proceedings of International Conference on Welding - Quality - Competitiveness 2002 / [CD-ROM]

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 and application of TiC-based iron alloys bonded cermets

Annuka, Harri 1999 http://www.ester.ee/record=b1273069*est

Characterization of disintegrator milled hardmetal powder

Kulu, Priit; Mikli, Valdek; Käerdi, Helmo; Besterici, Michal Powder metallurgy progress 2003 / p. 39-48 : ill

Characterization of hardmetals wear

Kübarsepp, Jakob; Reshetnjak, Heinrich Materials Engineering - 98 : materials of the VII-th International Baltic Conference, September 24-25, Jurmala, Latvia 1998 / p. 123-127 : ill

Characterization of morphology of hardmetal powder particles

Käerdi, Helmo; Mikli, Valdek; Kulu, Priit; Velgosova, Oksana; Kohutek, Ivan; Besterici, Michal Materials Engineering & Balttrib 2001 : materials of the X-th International Baltic Conference : September 27-28, Jurmala, Latvia 2001 / p. 3-7 : ill

Characterization of powder particle angularity

Mikli, Valdek; Käerdi, Helmo; Kulu, Priit; Besterici, Michal Acta metallurgica Slovaca 2001 / 1, p. 75-78

Characterization of serviceability of steel-bonded hardmetals

Kübarsepp, Jakob; Reshetnjak, Heinrich; **Annuka, Harri** International journal of refractory metals & hard materials 1994 / 6, p. 341-348: ill

Characterization of WC-Co composite thermal spray powder and coating

Peetsalu, Priidu; **Zimakov, Sergei**; **Pirso, Jüri**; **Mikli, Valdek**; **Tarbe, Riho**; **Kulu, Priit** 15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 52-53

Chemical pre-treatment of recycled hardmetal powders for plasma transferred arc hardfacing

Yung, Der-Liang TTÜ üliõpilaste teadustööde konkursi kokkuvõtted : Tipika teaduskonverents, 24. november 2011, Tallinn 2011 / p. 15

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 <https://doi.org/10.4028/www.scientific.net/KEM.604.8> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Comparative investigation of disintegrated WC-Co powders by different analyzing methods

Mikli, Valdek; **Kulu, Priit**; **Zimakov, Sergei**; **Käerdi, Helmo** Proceedings of the Third National DAAAM Conference in Estonia : SCIENCE '98 1998 / p. 103-106: ill

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 cermets and hardmetals

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

Comparing tungsten carbide based composites reinforced by alumina nanofibers or zirconia

Yung, Der-Liang; **Dong, Minjie**; **Hussainova, Irina** Proceedings of the PM13 International Conference on Powder Metallurgy and Particulate Materials 2013 / p. 24-35 : ill

Composite powders for coatings on the base of recovered hard metals

Kulu, Priit; **Tümanok, Aleksei**; **Arensburger, Daniil**; **Pihl, Toomas** Reports and theses of International Conference of Welding Technologies, Equipment, Materials : MET-97 1997 / p. 135-143

Composition and structure of bimodal WC-Co materials related to mechanical properties and abrasive wear

Yung, Der-Liang; **Antonov, Maksim**; **Hussainova, Irina**; **Veinthal, Renno**; **Hogmark, Sture** M2D2015 : proceedings of the 6th International Conference on Mechanics and Materials in Design, 2015 2015 / p. 655-664

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

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

Densification and microstructure development in zirconia toughened hardmetals

Voltšihhin, Nikolai; **Hussainova, Irina**; **Cura, M. Erkin**; **Hannula, Simo-Pekka**; **Traksmäa, Rainer** Engineering materials and tribology 2013 / p. 50-55 : ill

Deposition and characterization of refractory cermet particle reinforced Ni-based PTA hardfacings

Zikin, Arkadi; **Yung, Der-Liang**; **Hussainova, Irina**; **Danninger, Herbert**; **Pirso, Jüri**; **Gavrilović-Wohlmuther, A.** Proceedings of the 18th PLANSEE Seminar, 2013 2013

Der Einfluss technologischer Faktoren auf die Hydroabrasiv-Verschleissfestigkeit der Titankarbid-Sinterlegierungen

Valdma, Leo; **Kudrjartsev, Vladimir**; **Kallas, Paul** Grundlagen, Herstellung und Eigenschaften von Sinter- und Verbundwerkstoffen : Abhandlungen der VI Internationalen Pulvermetallurgischen Tagung in der DDR, Dresden, 27.-29. Sept. 1977 : Vorabdruck 1977 / S. 43-1-43-16

Determination of mechanical properties of thin hard coatings using nanoindentation

Yaldiz, Can Emrah; **Veinthal, Renno**; **Gregor, Andre**; **Georgiadis, Kyriakos** 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATTRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 48

Development of cemented carbides with high chromium iron alloy binder = Kõrge kroomisisaldusega rauasulamsideainega kõvasulamite arendus

Tarraste, Marek 2018 <https://digi.lib.ttu.ee/i/?9959> https://www.ester.ee/record=b5138025*est

Development of coarse recycled hardmetal reinforced hardfacings = Taaskasutatava jämekõvasulamarmatuuriga kõvapinnete arendus

Simson, Taavi 2018 <https://digi.lib.ttu.ee/i/?9946> https://www.ester.ee/record=b5054964*est

Development of the morphology and granulometry methods for characterization of WC-Co hardmetal powders

Mikli, Valdek; Kulu, Priit; Käerdi, Helmo Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 189-192 : ill

Diffusion bonding hardmetals with steels

Laansoo, Andres; Klaasen, Heinrich; Kübarsepp, Jakob; Surženkov, Gennadi Materials Engineering & Balttrib 2001 : materials of the X-th International Baltic Conference : September 27-28, Jurmala, Latvia 2001 / p. 58-61

Diffusion bonding of steels with ceramic and metal composites

Kübarsepp, Jakob; Laansoo, Andres; Klaasen, Heinrich Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 171-174

Diffusion welding and brazing of tungsten free hardmetals

Laansoo, Andres; Kübarsepp, Jakob; Klaasen, Heinrich Proceedings of 7th International Conference "Brazing, High Temperature Brazing and Diffusion Welding" : June 15-17, 2004, Aachen, Germany 2004 / p. 27-30

Diffusion welding as an alternative for joining cermets (hardmetals) and steels

Kübarsepp, Jakob; Reshetnjak, Heinrich; Laansoo, Andres Proceedings of the 3rd International Conference MET-99 on Welding : Technologies, Equipment, Materials, Related Technologies : June 3-4, 1999, Riga, Latvia 1999 / p. 126-129

Diffusion bonding of hardmetals

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

Double-cemented recycled hardmetal based powders for thermal spray

Mikli, Valdek; Kulu, Priit; Tarbe, Riho; Peetsalu, Priidu Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 211-214 : ill

Durability characteristics of compression-sintered hardmetals

Klaasen, Heinrich; Kübarsepp, Jakob EURO PM2001 : [European Congress and Exhibition on Powder Metallurgy] : October 22-24, 2001, Nice, France. Vol. 1 : proceedings 2001 / p. 153-157 : ill

Durability in application of TiC-base cermets

Klaasen, Heinrich; Kübarsepp, Jakob; Preis, Irina PM2004 : Powder Metallurgy World Congress & Exhibition : 17-21st October 2004, Vienna, Austria : Euro PM2004 : conference proceedings. Volume 3 2004 / p. 617-622 : 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>

Effect of electrode covering composition on the microstructure, wear, and economic feasibility of Fe-C-Cr manual arc-welded hardfacings

Jankauskas, Vytenis; Katinas, Egidijus; Laskauskas, Arturas; Antonov, Maksim; Varnauskas, Valentinas; Gedzevičius, Irmantas; Aleknevičiene, Vilija Coatings 2020 / art. 294, 19 p. : ill <https://doi.org/10.3390/coatings10030294> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Effect of grain growth inhibitors VC/Cr3C2 on WC-ZrO2-Ni composite mechanics

Yung, Der-Liang; Dong, Minjie; Hussainova, Irina Engineering materials & tribology XXII 2014 / p. 106-109 <https://doi.org/10.4028/www.scientific.net/KEM.604.106> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Electron microscopy and image analysis study of powdered hardmetal materials and optoelectronic thin films

Mikli, Valdek 2003 https://www.ester.ee/record=b1782316*est

Enhancement of corrosion resistance in stainless TiC-base hardmetals

Baranovskaja, Irina; Kübarsepp, Jakob; Kallast, Vambola Proceedings of the Second National DAAAM Conference in Estonia : Science'96 1997 / p. 6-12

Enhancing of corrosion resistance of steel-bonded hardmetals in acid conditions

Kübarsepp, Jakob; Kallast, Vambola; Annuka, Harri Powder Technology 95 : Vth Baltic Conference, November 7-8, 1995, Tallinn 1995 / I. 37-38 https://www.ester.ee/record=b1492085*est

Erosion-corrosion wear of WC-Co hardmetals in solid-liquid mixture

Viljus, Mart; Pirso, Jüri Materials Engineering & Baltrib 2001 : materials of the X-th International Baltic Conference : September 27-28, Jurmala, Latvia 2001 / p. 193-197 : ill

Erosive and impact-abrasive wear of hardmetals with Fe-based binders

Tarraste, Marek; Antonov, Maksim; Kolnes, Märt; Viljus, Mart; Ormus, Andres-Hardi Journal of the Japan Society of Powder and Powder Metallurgy 2025 / p. S1437-S1444 <https://doi.org/10.2497/jjspm.16F-T15-05>

Estimation of erosive and adhesive wear resistance of titanium carbide-base cemented carbides

Annuka, Harri; Kübarsepp, Jakob Proceedings of the First National DAAAM Conference in Estonia : Science '95 1996 / p. 80-87: ill

Evaluation of hardmetals and cermets durability in plastic forming of metals

Kübarsepp, Jakob; Klaasen, Heinrich Proceedings of Joint Nordic Conference in Powder Technology 2000 / p. 4

Evaluation of mechanical properties and residual stresses of hard PVD coatings

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

Evaluation of residual stresses in PVD coatings by means of strip substrate length variation and curvature method of plate substrate

Lille, Harri; Ryabchikov, Alexander; Kõo, Jakob; Adoberg, Eron; Lind, Liina; Kurisoo, Liisa; Peetsalu, Priidu Materials Engineering 2017 : selected, peer reviewed papers from the 26th International Baltic Conference on Materials Engineering 2017, October 26-27, Kaunas, Lithuania 2017 / p. 212-218 <https://doi.org/10.4028/www.scientific.net/SSP.267.212> [Journal metrics at Scopus](#)
[Article at Scopus](#)

Evaluation of residual stresses in PVD coatings by means of the curvature method of plate

Lille, Harri; Ryabchikov, Alexander; Adoberg, Eron; Kurisoo, Liisa; Peetsalu, Priidu; Lind, Liina Engineering materials and tribology XXV 2017 / p. 404-408 <https://doi.org/10.4028/www.scientific.net/KEM.721.404> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Experimental spray powders and coatings produced from recycled hardmetal by various mechanical methods

Tarbe, Riho; Zimakov, Sergei; Peetsalu, Priidu; Kulu, Priit; Mikli, Valdek Euro PM2006 : congress & exhibition : proceedings : PM in Belgium, a crossroads in industry development : 23-25 October 2006 : Ghent, Belgium. Vol. 1, Hard materials 2006 / p. 259-264

Fatigue performance and mechanical reliability of cemented carbides

Preis, Irina 2004 https://www.ester.ee/record=b1994273*est

Features of hardmetals wear resistance

Reshetnjak, Heinrich; Kübarsepp, Jakob NORDTRIB '98 : proceedings of the 8th International Conference on Tribology, Ebeltoft, Denmark, 7-10 June 1998. Vol. 1 1998 / p. 239-246: ill

Features of wear of TiC-base hardmetals

Kübarsepp, Jakob; Reshetnjak, Heinrich; Pirso, Jüri; Annuka, Harri Proceedings of the World Congress and Exhibition on Powder Metallurgy, October 18-22, Granada, Spain 1998 / p. 75-79

Forming ability of the WC-based ceramic metal composites with different Fe-based binders by unique laser beam modulation

Maurya, Himanshu Singh; Juhani, Kristjan; Sergejev, Fjodor; Kumar Yadav, Mayank; Hussain, Abrar; Prashanth, Konda Gokuldoss Next Materials 2025 / art. 100524 <https://doi.org/10.1016/j.nxmate.2025.100524>

Friction and wear behaviour of cemented carbides

Pirso, Jüri; Letunovitš, Sergei; Viljus, Mart Wear 2004 / p. 257-265 : ill

From scrap to product : the effect of recycled tungsten carbide and alumina content on the mechanical properties of

oxide-carbide duplex ceramic composite

Kariminejad, Arash; Klimczyk, Piotr; **Antonov, Maksim;** Hussainova, Irina Proceedings of the Estonian Academy of Sciences 2025 / p. 192-197 <https://doi.org/10.3176/proc.2025.2.20>

Grain size-dependent mechanical and wear properties of TiC-FeNi steel cermets

Kollo, Lauri; Kübarsepp, Jakob Advances in Powder Metallurgy & Particulate Materials 2008 2008 / p. 90-85 : ill

Hard coatings manufacturing technology used in tooling

Gregor, Andre; Podgurski, Vitali; Adoberg, Eron; **Kulu, Priit** 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. 255-260 : ill

Hard metals serviceability in sheet metal forming operations

Reshetnjak, Heinrich 1996 http://www.ester.ee/record=b1070449*est

Hard PVD coatings for tooling = PVD kõvapinded tööriistamajanduses

Gregor, Andre 2010 <https://digi.lib.ttu.ee/i/?495> https://www.ester.ee/record=b2607112*est

Hardmetals improved serviceability characteristics prolong the lifetime of blanking and stamping dies

Kübarsepp, Jakob; Reshetnjak, Heinrich Tallinna Tehnikaülikooli Toimetised 1994 / lk. 33-42: ill

High velocity thermal sprayed coatings from hardmetal powders

Kulu, Priit; Ojaviir, Marek; Arensbürger, Daniil Proceedings of Joint Nordic Conference in Powder Technology 2000 / p. 21

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

Induction brazing of tungsten free hardmetals to steel

Laansoo, Andres; Kübarsepp, Jakob; Surženkov, Gennadi Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts 2003 / p. 49

Influence of particles properties on the collision of solid particles with hardmetal and cermet

Hussainova, Irina; Kübarsepp, Jakob; Štšeglov, Igor; Tisler, Sergei International Conference Balttrib'99 : 21-22 September 1999, Kaunas, Lithuania : proceedings 1999 / p. 281-287: ill

Influence of the technology to the properties of gas-flame coatings

Pihl, Toomas; Kulu, Priit Proceedings of the Third National DAAAM Conference in Estonia : SCIENCE '98 1998 / p. 118-121: 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://matssc.ktu.lt/index.php/MatSc/article/view/26413>

Investigation of impact of solid particles against hardmetal and cermet targets

Hussainova, Irina; Kübarsepp, Jakob; Štšeglov, Igor Tribology international 1999 / p. 337-344 : ill

Investigation of impact of solid particles against hardmetal and cermet targets

Hussainova, Irina; Kübarsepp, Jakob; Štšeglov, Igor Abstracts of 12th International Conference on Wear of Materials, April 25-29, 1999, Atlanta (Georgia), USA 1999 / p. 15

Investigation of the corrosion and tribological properties of WC-Co tools hardened with PVD coatings in solid oak wood processing

Kazlauskas, Deividas; Jankauskas, Vytenis; Antonov, Maksim Coatings 2024 / art. 569 <https://doi.org/10.3390/coatings14050569>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 (Ti, Al)N based coatings grown by physical vapor deposition

Podgurski, Vitali; Torp, Bo; **Traksmäa, Rainer; Veinthal, Renno; Viljus, Mart;** Coddet, Olivier; Morstein, Marcus; **Gregor, Andre;** **Kulu, Priit** Materials science = Medžiagotyra 2005 / 4, p. 352-355 : ill
https://www.researchgate.net/publication/237812860_Investigation_of_Ti_AlN_Based_Coatings_Grown_by_Physical_Vapor_Deposition

Joining hardmetals to steel using brazing processes

Laansoo, Andres; Kübarsepp, Jakob; Klaasen, Heinrich; Surženkov, Gennadi Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 177-180 : ill

Korrosionsbestandigkeit und Verschleissfestigkeit von Sinterlegierungen aus Titankarbid und Chromstahl

Schächter, Klára; **Kallast, Vambola; Kübarsepp, Jakob;** Lohonyai, Nándor Korrosionswoche : Budapest, 11-15 April, 1988 : Vorträge = Corrosion Week : Lectures 1988 / S. 147-153

Kõvasulamid ja terassideainega kõvasulamid

Kübarsepp, Jakob Tehnika ja Tootmine 1990 / 5, lk. 10-12

Legeeritud titaankarbiidsete paagutatud kõvasulamite hüdroabrasiivne kulumine

Põld, R.; Kallas, P. XXIX vabariiklik üliõpilaste teaduslik- tehniline konverents 30. märtsist - 1. aprillini 1977 : ettekannete teesid 1977 / lk. 80-81 https://www.ester.ee/record=b2449987*est

Low temperature synthesized WC and its usability for fine-grained hardmetal

Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei Proceedings of EURO PM2006 Congress & Exhibition : Ghent, Belgium, October 23-25. 1, Hard materials 2006 / p. 281-286

Mechanical and wear behaviour of compression sintered hardmetals

Klaasen, Heinrich; Kübarsepp, Jakob; Kahar, Andres PM2004 : Powder Metallurgy World Congress & Exhibition : 17-21st October 2004, Vienna, Austria : Euro PM2004 : conference proceedings. Volume 3 2004 / p. 557-562 : ill

Mechanical properties and microstructure of reactive sintered WC-TiC-Co cemented carbides

Tarraste, Marek; Juhani, Kristjan; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei Proceedings of the 2012 Powder Metallurgy World Congress & Exhibition 2012
https://www.researchgate.net/publication/239937576_Mechanical_Properties_and_Microstructure_of_Reactive_Sintered_WC-TiC-Co_Cemented_Carbides

Mechanical properties of hard metals and their erosive wear resistance

Reshetnjak, Heinrich; **Kübarsepp, Jakob** Wear 1994 / p. 185-193: ill

Metal-matrix hardmetal/cermet reinforced composite powders for thermal spray

Goljandin, Dmitri; Sarjas, Heikki; Kulu, Priit; Käerdi, Helmo; **Mikli, Valdek** Materials science = Medžiagotyra 2012 / p. 84-89 : ill
https://www.researchgate.net/publication/267243513_Metal-Matrix_HardmetalCermet_Reinforced_Composite_Powders_for_Thermal_Spray

Microstructural aspects of fatigue mechanics of hardmetals and cermets

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

New composite coatings on the base of recycled hardmetals

Zimakov, Sergei; Tarbe, Riho; Kulu, Priit Thermal Spray 2003 : proceedings of the International Thermal Spray Conference : [Orlando, Florida, 5-8 May 2003] 2003 / p. 455-459
https://www.researchgate.net/publication/363288015_New_Composite_Coatings_on_the_Base_of_Recycled_Hardmetals

Novel methods for hardmetal production and recycling = Uudsed meetodid WC-Co kõvasulamite valmistamiseks ja taaskasutamiseks

Joost, Renee 2010 https://www.ester.ee/record=b2604910*est

Novel wear resistant WC-based thermal sprayed coatings

Zimakov, Sergei 2004 https://www.ester.ee/record=b1988316*est

Novel wear resistant WC-based thermal sprayed coatings

Zimakov, Sergei; Kulu, Priit 2004 https://www.ester.ee/record=b1953734*est

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

Optimization of reinforcement content of powder metallurgy hardfacings in abrasive wear conditions

Simson, Taavi; Kulu, Priit; Surženkov, Andrei; Tarbe, Riho; Viljus, Mart; Tarraste, Marek; Goljandin, Dmitri Proceedings of the Estonian Academy of Sciences 2016 / p. 90-96 : ill https://artiklid.elnet.ee/record=b2768203*est <https://doi.org/10.3176/proc.2016.2.03>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimization of structure of sprayed WC-Co hardmetal based coatings

Zimakov, Sergei; Tarbe, Riho; Veinthal, Renno; Kulu, Priit Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 224-227 : ill

Optimization of WC-Ni-ZrO₂ structure

Voltšihhin, Nikolai; Hussainova, Irina; Traksmaa, Rainer; Juhani, Kristjan ECCM15 - 15th European Conference on Composite Materials : Venice, Italy, 24-28 June 2012 / 8 p. : ill <http://www.escm.eu.org/eccm15/data/assets/296.pdf>

Paagutatud kõvasulamid

Pirso, Jüri Tehnika ja Tootmine 1984 / lk. 16-17 https://www.ester.ee/record=b1073047*est

Peculiarities of hardmetals wear in blanking of sheet metals

Klaasen, Heinrich; Kübarsepp, Jakob; Eigi, R. Tribology international 2006 / 4, p. 303-309 : ill

Performance of carbide composites for cyclic loading applications

Klaasen, Heinrich; Kübarsepp, Jakob International journal of materials & product technology 2007 / 3/4, p. 399-424 : 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 wear conditions

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

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 otshöördkeevituse tööriista materjalidena

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

Performance of hard alloys in abrasive-erosive and sliding wear conditions

Kübarsepp, Jakob; Klaasen, Heinrich; Vainola, Vello Proceedings of the Estonian Academy of Sciences. Engineering 2004 / 4, p. 308-314 : ill

Performance of sinterhipped TiC-base cermets

Klaasen, Heinrich; Kübarsepp, Jakob; Kollo, Lauri Proceedings of EURO PM 2006 Congress & Exhibition : Ghent, Belgium, 23-26 Oct. 2006. 1 2006 / p. 213-216

Performance of tool steels strengthened by PVD coatings

Klaasen, Heinrich; Kübarsepp, Jakob; Tšinjan, Aleksei; Adoberg, Eron; Vainola, Vello World PM 2010 : International Powder Metallurgy Congress & Exhibition : 10th October – 14th October 2010 : Fortezza da Basso, Florence, Italy 2010 / [6] p

Plasma transferred ARC (PTA) hardfacing of recycled hardmetal reinforced nickel-matrix surface composites

Zikin, Arkadi; Ilo, Sotirak; Kulu, Priit; Hussainova, Irina; Katsich, Christian; Badisch, Ewald Materials science = Medžiagotyra 2012 / p. 12-17 : ill <https://matsc.ktu.lt/index.php/MatSc/article/view/1334>

Plasma-transferred arc-welded composite hardfacings with ZrB₂ and TiC reinforcements

Melakh, Liudmyla; Surzhenkov, Andrei; Juhani, Kristjan; Viljus, Mart; Traksmaa, Rainer; Vedel, Dmytro Proceedings of the Estonian Academy of Sciences 2025 / p. 165-169 <https://doi.org/10.3176/proc.2025.2.15>

Porkohászati uton előállított TiC-acélötvözetek korrózióállósága ásványi savakban

Kallast, Vambola; Kübarsepp, Jakob; Schächter, Klára; Talimets, Ellen; Lohonyai, Nándor Korróziós figyelő 1987 / o. 110-114

Prediction of erosive wear of powder materials with hardmetal-type structure

Veinthal, Renno; Käerdi, Helmo; Kulu, Priit The 16th International Federation for Heat Treatment and Surface Engineering (IFHTSE) Congress, Brisbane, Australia, 30.10-02.11.2007 2008 / ? p

Preliminary assessment of durability of hardmetals and cermets

Preis, Irina; Kübarsepp, Jakob; Strizak, Viktor Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 175-178 : ill

Preparation of nanocrystalline WC powder and ultrafine WC-Co hardmetals

Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei Nanopowders, Nanostuctured Materials and Coatings : Network for Nanostructured Materials of ACC : March 17, 2005, Tallinn, Estonia : book of abstracts 2005 / p. 31-33 : 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

Properties of hardmetals influencing their adhesive wear in sheet metal blanking

Klaasen, Heinrich; Kübarsepp, Jakob Tribologia 2001 / 1, p. 23-30 : ill

Properties of hardmetals influencing their adhesive wear in sheet metal blanking

Klaasen, Heinrich; Kübarsepp, Jakob 9th Nordic Symposium on Tribology NORDTRIB 2000 : Porvoo, Finland, 11-14 June 2000. Vol. 3 2000 / p. 877-885 : ill

Properties of hardmetals influencing their durability

Reshetnjak, Heinrich; Kübarsepp, Jakob EURO PM'99 : European Conference on Advances in Hard Materials Production : Turin, Italy, November 8-10, 1999 : proceedings 1999 / p. 349-355: ill

Reactive sintering of bimodal WC-Co hardmetals

Tarraste, Marek; Juhani, Kristjan; Pirso, Jüri; Viljus, Mart Medžiagotyra = Materials science 2015 / p. 382-385 : ill

<https://doi.org/10.5755/j01.ms.21.3.7511> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reactive sintering of WC-Cr-Co hardmetals [Electronic resource]

Juhani, Kristjan; Pirso, Jüri; Tarraste, Marek; Viljus, Mart; Letunovitš, Sergei Proceedings of the 18th Plansee Seminar : International Conference on Refractory Metals and Hard Materials : Reutte/Austria, 3-7 June, 2013 2013 / [CD-ROM]

Recovery of hardmetals and the coatings on the base of recovered hardmetals

Kulu, Priit; Tümanok, Aleksei; Pihl, Toomas Materials Engineering-96 : materials of VI-th International Baltic Conference, Kaunas, 22-23 October 1996 1996 / p. 44-50: ill

Recycle hard metal-base spraying powder

Kulu, Priit Spraytime 2000 / 1, p. 8

Recycled hard metal-base wear-resistant composite coatings

Kulu, Priit; Halling, Jaanus Journal of thermal spray technology 1998 / 2, p. 173-178: ill

Recycled hardmetal-based powders for thermal spray

Mikli, Valdek; Kulu, Priit; Tarbe, Riho; Peetsalu, Priidu; Zimakov, Sergei Proceedings of Estonian Academy of Sciences. Engineering 2004 / 4, p. 315-325 : ill

Recycling of hard metals

Kulu, Priit; Tümanok, Aleksei; Arensbürger, Daniil; Pihl, Toomas; Mikli, Valdek; Käerdi, Helmo Proceedings of the Estonian Academy of Sciences. Engineering 1996 / p. 49-60 : ill

Recycling of hardmetal scrap to WC-Co powder by oxidation-reduction process

Joost, Renee; Pirso, Jüri; Viljus, Mart Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [2] 2008 / p. 449-454 : ill

https://www.researchgate.net/publication/289593153_Recycling_of_hardmetal_scrap_to_wc-co_powder_by_oxidationreduction_process

Recycling of WC-Co hardmetals by oxidation and carbothermal reduction in combination with reactive sintering

Joost, Renee; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei; Juhani, Kristjan Estonian journal of engineering 2012 / p. 127-139 : ill

Reliability characteristics of hardmetals

Kübarsepp, Jakob; Reshetnjak, Heinrich Proceedings of the World Congress and Exhibition on Powder Metallurgy, October 18-22, Granada, Spain 1998 / p. 15-20

Reliability characteristics of sinterhipped hardmetals

Klaasen, Heinrich; Kübarsepp, Jakob Materials Engineering & Balttrib 2001 : materials of the X-th International Baltic Conference : September 27-28, Jurmala, Latvia 2001 / p. 55-57

Research of abrasive erosion wear for Fe-C-Cr-B hard layers

Janauskas, V.; Kreivaitis, R.; Kulu, Priit; Antonov, Maksim; Milcius, D.; Varnauskas, V. Mechanika 2008 / 4, p. 71-76 : ill
<https://mechanika.ktu.lt/index.php/Mech/article/view/15098>

Resistance of hardmetals to fracture

Reshetnjak, Heinrich; Kübarsepp, Jakob Powder metallurgy 1998 / 3, p. 211-216: ill

Retreatment of used hardmetals

Kulu, Priit; Käerdi, Helmo; Mikli, Valdek TMS Fall 2002 Extraction and Processing Division Meeting on Recycling and Waste

Treatment in Mineral and Metal Processing : technical and economic aspects, 16-20 June 2002, Lulea, Sweden. Vol. 1 2002 / p. 139-146 : ill

Selection criteria for wear resistant powder coatings under extreme erosive wear conditions

Kulu, Priit; Pihl, Toomas Journal of thermal spray technology 2002 / p. 517-522 : ill

Serviceability characteristics of steel-bonded hardmetals and their structure sensitivity

Kübarsepp, Jakob; Reshetnjak, Heinrich; **Annuka, Harri** International Conference "Novel Processes and Materials in Powder Metallurgy" : PM-97 : November 24-28, 1997, Kiev : abstracts 1997 / p. 330

Significance of structural characteristics on wear resistance of hardmetals

Kübarsepp, Jakob; Annuka, Harri; Reshetnjak, Heinrich Proceedings of the Third National DAAAM Conference in Estonia : SCIENCE '98 1998 / p. 90-93: ill

Sintering routes for zirconia doped hardmetals

Voltšihin, Nikolai; Cura, M. Erkin; **Hussainova, Irina**; Hannula, Simo-Pekka Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 765-770 : ill

Sliding and erosion wear of cemented carbides

Kübarsepp, Jakob; Klaasen, Heinrich; Vainola, Vello Engineerings Materials & Tribology 2004 : materials of the XIII-th International Baltic Conference : September 23-24, Riga, Latvia 2004 / p. 120-122 : ill

Solid particle erosion of thermal sprayed coating

Kulu, Priit Abstracts of International Conference on Erosive and Abrasive Wear II : Cambridge, UK, 2003 2003 / p. 1.3
<https://www.sciencedirect.com/science/article/abs/pii/S0043164804001644>

Sprayed coatings on the base of recycled hardmetals

Zimakov, Sergei; Arensbürger, Daniil; Tarbe, Riho International Conference Novel Technologies in Power Metallurgy and Ceramics : Kiev, Ukraine, 2003 2003 / p. 333

Stainless hardmetals and their electrochemical corrosion resistance

Kübarsepp, Jakob; Kallast, Vambola Werkstoffe und Korrosion 1994 / p. 452-458: ill

Steel-bonded hardmetals

Kübarsepp, Jakob 1992 http://www.ester.ee/record=b1062341*est

Stereologische Untersuchungen der Verschleissfestigkeit der Hartmetallen

Valdma, Leo Grundlagen, Herstellung und Eigenschaften pulvermetallurgischer Werkstoffe : [VII. Internationale Pulvermetallurgische Tagung vom 22.0bis 24. September 1981 in Dresden, DDR] 1981 / p. 051-062

Strength and wear resistance of sinterhipped hardmetals

Klaasen, Heinrich; Kübarsepp, Jakob Euro PM 2002 : European Conference on Hard Materials and Diamond Tooling, Lausanne, Switzerland, October 7-9th 2002 : hard materials proceedings 2002 / p. 234-239 : ill

Structure and wear resistance of hard metals

Kübarsepp, Jakob; Reshetnjak, Heinrich; Järv, Jaan Powder Technology 95 : Vth Baltic Conference, November 7-8, 1995, Tallinn 1995 / I. 26-28 https://www.ester.ee/record=b1492085*est

Structure formation and distribution of elements in the TiC-NiMo cemented carbides

Viljus, Mart; Pirso, Jüri Powder Technology 95 : Vth Baltic Conference, November 7-8, 1995, Tallinn 1995 / I. 24-25
https://www.ester.ee/record=b1492085*est

Structure sensitivity of hard metals and their durability in metal forming operations

Kübarsepp, Jakob; Reshetnjak, Heinrich International DAAAM : [DAAAM National Estonia] : proceedings of the 1st International Conference, 25-27th September 1997, Tallinn, Estonia 1997 / p. 133-136: ill

Structure sensitivity of wear resistance of hardmetals

Reshetnjak, Heinrich; **Kübarsepp, Jakob** The technology, application and markets of hard and superhard materials : abstracts of the International Conference in Johannesburg, South-Africa, 1995 / South-African Powder Metallurgy Association 1995 / p. 24

Structure sensitivity of wear resistance of hardmetals

Reshetnjak, Heinrich; **Kübarsepp, Jakob** International journal of refractory metals & hard materials 1997 / p. 89-95: ill
[https://doi.org/10.1016/S0263-4368\(96\)00018-2](https://doi.org/10.1016/S0263-4368(96)00018-2)

Study of submerged and plasma arc welded composite hardfacings with a novel Cr₃C₂-Ni reinforcement

Bendikiene, Regita; **Surženkov, Andrei**; Tkachivskyi, Dmytro; Juhani, Kristjan; **Viljus, Mart**; Traksmäa, Rainer; Antonov,

Maksim; Kulu, Priit Proceedings of the Estonian Academy of Sciences 2019 / p. 150–157 : ill <https://doi.org/10.3176/proc.2019.2.06>
http://www.kirj.ee/public/proceedings_pdf/2019/issue_2/proc-2019-2-150-157.pdf Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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
https://www.researchgate.net/publication/289598093_Surface_fatigue_and_wear_resistance_of_thin_and_thick_hard_coatings

Synergistic effects of fluorine and carbonate on Cd²⁺ binding properties of apatites

Tõnsuaadu, Kaia; Peld, Merike; Veiderma, Mihkel XIVth International Conference on Phosphorus Chemistry : XIVth-ICPC : Cincinnati, Ohio USA, July 12-17, 1998 : meeting program and abstracts 1998 / p. P279
<https://www.tandfonline.com/doi/abs/10.1080/10426509908053688>

Synthesis of an WC-Co composite material from the waste WC-Co bulk hardmetal

Joost, Renee; Pirso, Jüri; Viljus, Mart 17th International Baltic Conference : Materials Engineering 2008 : November 6-7, Kaunas, Lithuania : abstracts of papers 2008 / p. 28

Technology and equipment for production of hardmetal powders from used hardmetal

Tümanok, Aleksei; Kulu, Priit; Mikli, Valdek; Käerdi, Helmo Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 197-200 : ill

Technology and equipment for production of hardmetal powders from used hardmetal

Kulu, Priit; Tümanok, Aleksei; Goljandin, Dmitri; Arensburger, Daniil Proceedings of Joint Nordic Conference in Powder Technology 2000 / p. 39

Terassideainega kõvasulamite lõiketöötlemisest

Kübarsepp, Jakob; Talimets, Ellen Tehnika ja Tootmine 1990 / 6, lk. 12-13: tab

The composition and structure investigation of recycled hardmetal powders for thermal spray

Mikli, Valdek; Kulu, Priit; Käerdi, Helmo Proceedings of Joint Nordic Conference in Powder Technology 2000 / p. 21

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 effect of Cr and C on the characteristics of WC-FeCr hardmetals [Electronic resource]

Tarraste, Marek; Juhani, Kristjan; Kübarsepp, Jakob; Pirso, Jüri; Mikli, Valdek Euro PM2015 Congress & Exhibition : proceedings : 4-7 October 2015, Reims Congress Centre, Reims, France 2015 / [6] p. : ill. [USB]

The effect of VC, TiC and Cr₃C₂ on the microstructure and properties of WC-15Co hardmetals fabricated by the reactive sintering

Pirso, Jüri; Juhani, Kristjan; Tarraste, Marek; Viljus, Mart; Letunovits, Sergei Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 383-388 : ill

The features of wear and application of hardmetals

Kübarsepp, Jakob; Pirso, Jüri; Annuka, Harri Mekaaniset kulumisilmiöt ja kulutusta kestävät materiaalit : proceedings of spring seminar, June 8-10, 1998, Korpilahti, Finland 1998 / p. 14.1-14.5

The microstructure and properties of fine-grained cermets

Viljus, Mart 2003

The modelling and prognosis of hydroabrasive wear of hard alloys

Valdma, Leo; Kallas, Paul Proceedings of the 5th international congress on tribology, vol. 3 1989 / p. 71-75 : ill
https://www.ester.ee/record=b4467987*est

The oxidation of chromium and titanium carbide based hard metals

Pirso, Jüri; Liiskmann, Guido Powder Technology 95 : Vth Baltic Conference, November 7-8, 1995, Tallinn 1995 / I. 34-36: ill
https://www.ester.ee/record=b1492085*est

The structure and properties of recycled hardmetals

Joost, Renee; Pirso, Jüri; Viljus, Mart 17th Plansee Seminar : International Conference on High Performance P/M Materials :

The structure formation of TiC-NiMo hardmetals during the sintering process

Viljus, Mart; Pirso, Jüri; Traksmaa, Rainer Proceedings of Joint Nordic Conference in Powder Technology : May 5-6, 1999, Oslo, Norway 1999 / p. 13

Thermally sprayed WC-Co hardmetal based coatings

Zimakov, Sergei; Tarbe, Riho; Kulu, Priit Abstracts of International Conference Materials Engineering and Tribology 2002 / p. 39

Thermally sprayed WC-Co hardmetal based coatings

Zimakov, Sergei; Tarbe, Riho; Kulu, Priit Medžiagotyra = Materials science 2002 / 4, p. 409-412 : ill

Three-body abrasive wear of cermets

Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei; Juhani, Kristjan; Joost, Renee Wear 2011 / p. 2868-2878 : ill

Three-body abrasive wear of reactive sintered WC-Co hardmetals with grain growth inhibitors

Juhani, Kristjan; Pirso, Jüri; Tarraste, Marek; Viljus, Mart; Suurkivi, Taavi Engineering materials & tribology XXII 2014 / p. 277-282 <https://doi.org/10.4028/www.scientific.net/KEM.604.277> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Three-body abrasive wear of WC-Co composites manufactured by reactive sintering of nanocrystalline powders [Electronic resource]

Juhani, Kristjan; Joost, Renee; Pirso, Jüri; Letunovitš, Sergei; Viljus, Mart; Tarraste, Marek 5th World Tribology Congress, WTC 2013 : [proceedings]. Vol. 3 2014 / p. 2084-2087. [CD-ROM]

Ti-B based composites by spark plasma sintering and selective laser melting = Sädepaagutus- ja selektiivse lasersulatus-tehnoloogia abil valmistatud Ti-B baasil komposiitmaterjalid

Liu, Le 2021 https://www.ester.ee/record=b5460101*est <https://digikogu.taltech.ee/et/Item/2a4de866-52a3-4bef-8c4e-e136c89285a3> <https://doi.org/10.23658/taltech.47/2021>

Ti-C-acéltözetek korrózióállóságának vizsgálata ásványi savakban

Kallast, Vambola; Kübarsepp, Jakob; Lohonyai, Nándor; Schächter, Klára A III. Korróziós Inhibitor Szeminárium előadásai : Csopak, 1985. október 7-9 1985 / o.15

TiC-base cermet steel dual compounds produced by diffusion bonding

Kübarsepp, Jakob; Klaasen, Heinrich; Laansoo, Andres Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 173-176 : ill

Titanium and chromium carbide based cermets

Pirso, Jüri 1996 http://www.ester.ee/record=b1070455*est

Toughness characteristics of carbide composites

Klaasen, Heinrich; Kübarsepp, Jakob; Preis, Irina Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 154-156 : ill

Toughness of hardmetals and their durability in metalforming operations

Reshetnjak, Heinrich; **Kübarsepp, Jakob** Proceedings of Joint Nordic Conference in Powder Technology : May 5-6, 1999, Oslo, Norway 1999 / p. 37

Treatment of recycled hardmetals

Kulu, Priit; Tümanok, Aleksei; Zimakov, Sergei Abstract book of 4th ASM International Conference and Exhibition on the Recycling of Metals : Vienna, Austria, 1999 1999 / p. 21

Treatment of recycled hardmetals

Tümanok, Aleksei; Kulu, Priit; Zimakov, Sergei 4th ASM International Conference and Exhibition on the Recycling of Metals : book of proceedings : 17-18 June, 1999, the Forum Hotel Vienna, Vienna, Austria 1999 / p. 319-327 : ill

Two-body abrasive wear of WC-Co hardmetals in wet and dry environments

Pirso, Jüri; Juhani, Kristjan; Viljus, Mart; Letunovitš, Sergei Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 711-716 : ill

WC-Co hardmetal powders for formation of wear resistant coatings

Mikli, Valdek; Kulu, Priit; Käerdi, Helmo Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 201-204 : ill

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 behaviour and mechanical properties of sinterhipped hardmetals

Klaasen, Heinrich; Kübarsepp, Jakob Powder metallurgy 2004 / 2, p. 161-167 : ill

Wear behaviour of Cr3C2-Ni cermet reinforced hardfacings

Bendikiene, Regita; Ciuplys, Antanas; Sertvytis, Rolandas; Surženkov, Andrei; Tkachivskyi, Dmytro; Viljus, Mart; Traksmaa, Rainer; Antonov, Maksim; Kulu, Priit Journal of materials research and technology 2020 / p. 7068-7078 : ill
<https://doi.org/10.1016/j.jmrt.2020.05.042> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wear of advanced cemented carbides for metalforming tool materials

Klaasen, Heinrich; Kübarsepp, Jakob Wear 2004 / p. 846-853 : ill <https://doi.org/10.1016/j.wear.2003.08.004>

Wear of coatings and hard alloys for jig bushings

Kallas, Paul; Pirs, Jüri Tallinna Tehnikaülikooli Toimetised 1994 / lk. 43-51: ill

Wear of hard coatings evaluated by means of kaloMax

Podgurski, Vitali; Gregor, Andre; Adoberg, Eron; Kulu, Priit 15th International Baltic Conference "Engineering Materials & Tribology. Balttrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 64-65

Wear of hard coatings, evaluated by means of kaloMax

Podgurski, Vitali; Gregor, Andre; Adoberg, Eron; Kulu, Priit Proceedings of the Estonian Academy of Sciences. Engineering 2006 / 4, p. 419-426 : ill

Wear of PVD coatings on fineblanking punches = PVD pinnete kulumine siselõikestantsi templitel

Lind, Liina 2014 https://www.ester.ee/record=b4422007*est

Wear of PVD hard coatings in sliding contacts

Sivitski, Alina; Ajaots, Maido; Põdra, Priit Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [2] 2008 / p. 549-554 : ill
<http://innomet.ttu.ee/daaam08/online/Materials%20Engineering/Sivitski.pdf>

Wear performance of WC- and TiC-based ceramic-metallic composites

Kübarsepp, Jakob; Klaasen, Heinrich; Tšinjan, Aleksei; Roosaar, Tõnu; Annuka, Harri Proceedings of VI International Scientific Conference BALTRIB 2011 2011 / p. 150-155

Wear performance of WC- and TiC-based ceramic and metal composites

Roosaar, Tõnu; Kübarsepp, Jakob; Klaassen, Heinrich Materials engineering & Baltrib 2010 : materials of the XIX-th International Baltic Conference : October 28-29, 2010, Riga, Latvia 2010 / p. 28

Wear performance of WC- and TiC-based ceramic-metallic composites = WC- ja TiC-baasil keraamilis-metallsete komposiitide kulumiskindlus

Roosaar, Tõnu 2010 https://www.ester.ee/record=b2634532*est

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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Wear resistance and toughness of hardmetals

Reshetnjak, Heinrich; Kübarsepp, Jakob Medžiagotyra = Materials science 1999 / 2, p. 69-71: ill

Wear resistance and toughness of hardmetals

Reshetnjak, Heinrich; Kübarsepp, Jakob Proceedings of the 8th International Baltic Conference : Materials Engineering-99 : September 23-24, Kaunas, Lithuania 1999 / p. 152

Wear resistance assessment of cermets and hardmetals

Kübarsepp, Jakob; Reshetnjak, Heinrich; Annuka, Harri International Conference Balttrib'99 : 21-22 September 1999, Kaunas, Lithuania : proceedings 1999 / p. 76-84: ill

Wear resistance assessment of steel-bonded hard metals

Kübarsepp, Jakob; Reshetnjak, Heinrich; Annuka, Harri Materials Engineering - 96 : materials of VI-th International Baltic Conference 1996 / p. 51-57: ill

Wear resistance of hardmetals and cermets in conditions with prevailation of adhesion

Kübarsepp, Jakob; Reshetnjak, Heinrich Proceedings of the International Conference on Powder Metallurgy & Particulate Materials PM2TEC'99 : June 20-24, 1999, Vancouver, Canada 1999 / [10] p

Wear resistance of hardmetals and cermets in conditions with prevailation of adhesion

Kübarsepp, Jakob; Reshetnjak, Heinrich Advances in Powder Metallurgy & Particulate Materials - 1999. Part 10, Cemented carbides 1999 / p. 179-188 : ill

Wear resistance of sintered composite hardfacings under different abrasive wear conditions

Simson, Taavi; Kulu, Priit; Surženkov, Andrei; Tarbe, Riho; Goljandin, Dmitri; Tarraste, Marek; Viljus, Mart; Traksmaa, Rainer Medžiagotyra = Materials science 2017 / p. 249-253 : ill <https://doi.org/10.5755/j01.ms.23.3.17640> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wear resistance of thermal sprayed coatings on the base of recycled hardmetal

Kulu, Priit; Zimakov, Sergei Surface and coatings technology 2000 / p. 46-51 : ill

Wear resistance of thermal sprayed hardmetal coatings

Kulu, Priit Proceedings of 2000 International Conference on Powder Metallurgy & Particulate Materials 2000 / p. 10

Wear resistant powder coatings on the base of recycled hardmetal

Tarbe, Riho; Zimakov, Sergei; Mikli, Valdek; Kulu, Priit; Veinthal, Renno Powder metallurgy progress 2005 / p. 148-157 : ill

Wear resistant self-fluxing alloy based TiC-NiMo and Cr₂C₃-Ni hardmetal particles reinforced composite coatings

Surženkov, Andrei; Vallikivi, Ahto; Mikli, Valdek; Viljus, Mart; Vilgo, Timo; Kulu, Priit Proceedings of the 2nd International Scientific Conference Manufacturing Engineering & Management 2012 : ICMEM 2012 2012 / p. 33-36 : ill https://www.researchgate.net/publication/262731588_WEAR_RESISTANT_SELF-FLUXING_ALLOY_BASED_TIC-NIMO_AND_CR2C3-NI_HARDMETAL_PARTICLES_REINFORCED_COMPOSITE_COATINGS

Wear resistant thermal sprayed composite coatings based on iron self-fluxing alloy and recycled cermet powders

Sarjas, Heikki; Goljandin, Dmitri; Kulu, Priit; Mikli, Valdek; Surženkov, Andrei; Vuoristo, Petri Materials science = Medžiagotyra 2012 / p. 34-39 : ill <https://matsc.ktu.lt/index.php/MatSc/article/view/1338>

Wear-resistance of non-tungsten cemented carbides

Pirso, Jüri; Kallas, Paul Advances in hard materials production : proceedings of the 1996 European Conference on Advances in Hard Materials Production, Stockholm, Sweden, May 27-29, 1996 1996 / p. 333-338: ill

Wear-resistant composite hard metal consisting coatings

Kulu, Priit; Arensbürger, Daniil; Tümanok, Aleksei; Pihl, Toomas; Halling, Jaanus International DAAAM : [DAAAM National Estonia] : proceedings of the 1st International Conference, 25-27th September 1997, Tallinn, Estonia 1997 / p. 160-164: ill

Wear-resistant detonation sprayed WC-Co coatings

Kulu, Priit; Zimakov, Sergei Proceedings of the Third National DAAAM Conference in Estonia : SCIENCE '98 1998 / p. 94-96: ill

Wear-resistant thermal sprayed coatings on the base of recycled hardmetal

Kulu, Priit; Zimakov, Sergei Abstracts of the Fifth IUMRS International Conference on Advanced Materials, 1999, China 1999 / X-37, p. 259 <https://www.sciencedirect.com/science/article/pii/S0257897200006873>

Безвольфрамовые порошковые твердые сплавы и карбидостали : тезисы докладов IV республиканской научно-технической конференции

1985 https://www.ester.ee/record=b1253975*est

Безвольфрамовые порошковые твердые сплавы и карбидостали : тезисы докладов IV республиканской научно-технической конференции

1985 https://www.ester.ee/record=b1253990*est

Безвольфрамовые порошковые твердые сплавы. Состояние и перспективы развития

Pirso, Jüri Безвольфрамовые порошковые твердые сплавы и карбидостали. Часть 1 : тезисы докладов IV республиканской научно-технической конференции 1985 / с. 8-10 https://www.ester.ee/record=b1253975*est

Безвольфрамовые твердые сплавы, их свойства и области применения

Эйхманс Э.Ф.; Литвинюк Н.И. Износостойкие порошковые материалы и покрытия : тезисы докладов второй конференции Балтийских республик 1991 / с. 4-6

Влияние внешнесиловых факторов на гидроабразивный износ порошковых твердых сплавов

Valdma, Leo Свойства и технология изготовления износостойких материалов 1984 / с. 41-46

Влияние механических свойств на гидроабразивный износ спеченных сплавов TiC-Ni-Co-Cr

Kallas, Paul; Valdma, Leo Порошковая металлургия. 1 1976 / с. 17-23 : илл https://www.ester.ee/record=b2111354*est
<https://digikogu.taltech.ee/et/Item/c96ed6d3-4203-45dd-8179-87f8028f1fba>

Влияние микроструктуры сплавов BK20 на их свойства

Kudrjajtsev, Vladimir; Kallas, Paul; Tani, P. Износостойкие спеченные материалы и покрытия 1988 / с. 19-29

Влияние содержания молибдена на свойства твердого сплава TiC-Ni-Mo

Pirso, Jüri Tallinna Tehnikaülikooli Toimetised 1990 / lk. 63-68: ill

Влияние состава и технологии изготовления на абразивную эрозию твердых сплавов TiC-WC с никель-молибденовой связкой

Kallas, Paul; Pirso, Jüri; Agošavili, B.T.; Bujanovski, I.N. Свойства и технология изготовления композиционных материалов 1986 / с. 31-37

Влияние твердости абразива на механизм абразивной эрозии спеченных твердых сплавов

Pirso, Jüri; Kallas, Paul Трение и износ в машинах : сборник статей. 11 1981 / с. 91-102 : илл
https://www.ester.ee/record=b2191149*est <https://digikogu.taltech.ee/et/Item/983b9430-cae0-4a0d-a83d-ddb843ffcae>

Влияние технологических и конструктивных факторов на точность изделий сложной формы из спеченного твердого сплава

Madis, Jevdokia; Valdma, Leo; Kudrjajtsev, Vladimir XX студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР : тезисы докладов. Часть 1 1974 / с.179
https://www.ester.ee/record=b1306141*est

Влияние технологических факторов и состава на свойства карбидохромовых спеченных твердых сплавов

Pirso, Jüri; Valdma, Leo Порошковая металлургия : сборник статей. 2 1977 / с. 19-28 https://www.ester.ee/record=b2111366*est
<https://digikogu.taltech.ee/et/Item/70a3ad25-126c-4b5f-b887-e5dc1aa558b3>

Влияние технологических факторов на механические свойства спеченных сплавов TiC-Ni-Co-Cr

Valdma, Leo; Kudrjajtsev, Vladimir; Kallas, Paul Порошковая металлургия = Powder metallurgy : ежемесячный научно-технический журнал 1977 / с. 11-16 : фот., табл. https://www.ester.ee/record=b1645489*est

Вопросы армирования рабочих органов турбинных мельниц твердым сплавом

Kleis, Ilmar; Arensbürger, Daniil; Sokolov, A. F.; Üksti, Lembit Химическое и нефтегазовое машиностроение : научно-технический и производственный журнал 1979 / с. 28-29 : илл https://www.ester.ee/record=b2158380*est

Вопросы окалиностойкости карбидтитановых спеченных твердых сплавов

Kudrjajtsev, Vladimir; Valdma, Leo Трение и износ в машинах 1980 / с. 45-53 : илл https://www.ester.ee/record=b2191013*est
<https://digikogu.taltech.ee/et/Item/ce30370b-afd1-4c7d-a563-4e4f7a1b178e>

Вопросы окалиностойкости карбидо-титановых спеченных твердых сплавов

Kudrjajtsev, Vladimir; Valdma, Leo Направления развития инструментального производства в X пятилетке : сборник тезисов докладов научно-технического семинара 1978 / с. 171-172 https://www.ester.ee/record=b1308562*est

Вопросы термостойкости карбидо-титановых спеченных твердых сплавов

Valdma, Leo; Kudrjajtsev, Vladimir Порошковая металлургия : сборник статей. 2 1977 / с. 11-17
https://www.ester.ee/record=b2111366*est <https://digikogu.taltech.ee/et/Item/70a3ad25-126c-4b5f-b887-e5dc1aa558b3>

Выбор сплава для кондукторных втулок

Pirso, Jüri; Kallas, Paul; Klautš, D.N.; Kuštševa, M.N. Трение и износ в машинах. 15 1989 / с. 53-62

Газоабразивная износостойкость и твердость порошковых твердых сплавов

Kallas, Paul; Pirso, Jüri Тезисы докладов пятой республиканской конференции "Эрозионностойкие порошковые материалы и покрытия" 1988 / с. 33-34 https://www.ester.ee/record=b1256812*est

Газоабразивное изнашивание порошковых легированных карбидтитановых сплавов

Kudrjajtsev, Vladimir; Kallas, Paul Свойства и технология изготовления износостойких материалов 1984 / с. 19-25

Гидроабразивная износостойкость спеченных термообрабатываемых твердых сплавов

Valdma, Leo; Kübarsepp, Jakob Трение и износ = Friction and Wear : международный научный журнал 1983 / с. 1046-1050
https://www.ester.ee/record=b1312784*est

Гидроабразивная износостойкость твердых сплавов

Valdma, Leo; Kallas, Juha; Pirso, Jüri; Kübarsepp, Jakob Трение, износ и смазочные материалы. Т. 2, Смазочное действие и

смазочные материалы. Триботехническое материаловедение. Самоорганизующиеся процессы фрикционного контакта : труды международной научной конференции (Ташкент, 22-26 мая 1985 г.) : тезисы секционных докладов 1985 / с. 249-253 https://www.ester.ee/record=b2770097*est

Гидроабразивное изнашивание спеченных твердых сплавов на основе карбидов титана и хрома : автореферат ... кандидата технических наук (05.02.04)
Kallas, Paul 1978 http://www.ester.ee/record=b1315626*est

Гидроабразивный износ порошковых твердых сплавов
Valdma, Leo Трение и износ = Friction and Wear : международный научный журнал 1984 / с. 859-864 : илл https://www.ester.ee/record=b1312784*est

Гидроабразивный износ спеченных карбидохромовых сплавов
Kallas, Paul; Pirso, Jüri; Valdma, Leo Трение и износ = Friction and Wear : международный научный журнал 1980 / с. 858-863 : ил., табл https://www.ester.ee/record=b1312784*est

Закономерности измельчения твердосплавных смесей
Pirso, Jüri; Arensburg, Daniil; Kübarsepp, Jakob [Порошковая металлургия] : тезисы докладов XV всесоюзной научно-технической конференции : (19-22 нояб. 1985 г.) 1985 / с. 140-141 https://www.ester.ee/record=b2336294*est

Изнашивание материалов с гетерогенной структурой в струе абразивных частиц
Pirso, Jüri; Rõuk, Marina; Kallas, Paul Трение и износ в машинах. 15 1989 / с. 63-70

Изнашивание твердого сплава в матрицах вырубного штампа
Pirso, Jüri; Vitsut, E.; Kallas, Paul; Tomingas, H. Электротехническая промышленность. Технология электротехнического производства : реферативный научно-технический сборник 1984 / с. 9-10

Износ твердосплавных кондукторных втулок
Pirso, Jüri; Kallas, Paul; Klautš, D.N.; Kuštševa, M.N. Tallinna Tehnikaülikooli Toimetised 1990 / lk. 3-11

Износ, усталость и коррозия металлов : сборник статей
1972 https://www.ester.ee/record=b2190525*est <https://digikogu.taltech.ee/et/Item/bf437fe1-81f3-4dff-97b2-b8d240135d43>

Износ, усталость и коррозия металлов : сборник статей
1973 https://www.ester.ee/record=b2190621*est <https://digikogu.taltech.ee/et/Item/b72113fb-37ed-41e2-b029-bf4661300cc1>

Износ, усталость и коррозия металлов : сборник статей
1975 https://www.ester.ee/record=b2190702*est <https://digikogu.taltech.ee/et/Item/7b7b4d74-55e0-43cf-b22c-bd484ceb163f>

Износ, усталость и коррозия металлов : сборник статей
1965 https://www.ester.ee/record=b2181989*est <https://digikogu.taltech.ee/et/Item/c8c0d777-7bb9-4cb8-9189-55809fb62535>

Износ, усталость и коррозия металлов : сборник статей
1966 https://www.ester.ee/record=b2182111*est <https://digikogu.taltech.ee/et/Item/28931306-2b98-4361-82fd-7171241556da>

Износ, усталость и коррозия металлов : сборник статей
1969 https://www.ester.ee/record=b2183085*est <https://digikogu.taltech.ee/et/Item/28ca169d-6b4f-44b6-92fd-45d8fc81e458/>

Износ, усталость и коррозия металлов : сборник статей
1970 https://www.ester.ee/record=b2189975*est <https://digikogu.taltech.ee/et/Item/08de6dd6-c065-4fa4-8684-9b41e91f1bd2/>

Износостойкие безвольфрамовые твердые сплавы на основе легированного порошка карбида титана
Левинский Ю.В.; Петров А.П.; Песоцкая Г.В. Износостойкие порошковые материалы и покрытия : тезисы докладов второй конференции Балтийских республик 1991 / с. 11-12

Износостойкие порошковые твердосплавные покрытия
Peitre, T.; Kulu, Priit 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. 131 https://www.ester.ee/record=b1305565*est

Износостойкие порошковые твердосплавные покрытия
Halling, Jaanus; Kulu, Priit; Kallas, Paul Свойства и технология изготовления композиционных материалов 1986 / с. 45-51

Износостойкость порошковых твердосплавных покрытий
Kallas, Paul; Kulu, Priit; Halling, Jaanus Безвольфрамовые порошковые твердые сплавы и карбидостали. Часть 1 : тезисы докладов IV республиканской научно-технической конференции 1985 / с. 56-58 https://www.ester.ee/record=b1253975*est

Износостойкость порошковых твердых сплавов

Pirso, Jüri; Kallas, Paul Технологични процеси и оборудоване за ефективно използване на металните материали 1989 / с. 161

Износостойкость твердых сплавов с термическими упрочняемыми связками

Kübarsepp, Jakob; Valdma, Leo; Arensbürger, Daniil Трение и износ в машинах : сборник статей. 11 1981 / с. 49-55 : илл https://www.ester.ee/record=b2191149*est <https://digikogu.taltech.ee/et/Item/983b9430-cae0-4a0d-a83d-ddb843ffcae>

Исследование возможностей повышения износостойкости твердых сплавов TiC-сталь

Kübarsepp, Jakob; Valdma, Leo; Post, Tiit Трение и износ в машинах 1983 / с. 95-102 : ил https://www.ester.ee/record=b2191148*est <https://digikogu.taltech.ee/et/Item/876d7109-271d-48ba-b6b2-7bd68c0f4458>

Исследование износостойкости твердых сплавов на основе TiC-C в условиях эрозионного изнашивания

Bujanovski, I.; Lindo, G.; Tšistjakova, V.; Agošašvili, B.; Pirso, Jüri; Kallas, Paul Износ в машинах и методы защиты от него : тезисы докладов Всесоюзной научной конференции, посвященной 1000-летию г. Брянска (Брянск, 1985 г.) 1985 / с. 180

Исследование механических свойств и коррозионной стойкости порошковых твердых сплавов TiC-сталь

Kallast, Vambola; Kübarsepp, Jakob; Talimets, Ellen; Schächter, K.; Lohonyai, N. Комплексная переработка фосфатного сырья, анализ природных и технических объектов 1986 / с. 89-94

Исследование некоторых условий применимости твердых сплавов TiC-сталь при абразивном и гидроабразивном изнашивании

Kübarsepp, Jakob; Annuka, Harri; Valdma, Leo Трение и износ = Friction and Wear : международный научный журнал 1985 / с. 851-858 : илл https://www.ester.ee/record=b1312784*est

Исследование технологических возможностей улучшения износостойкости сплавов TiC-сталь

Annuka, Harri; Kübarsepp, Jakob; Valdma, Leo Трение и износ в машинах. 14 1987 / с. 54-63

К вопросу оценки износостойкости твердых сплавов WC-Co

Klaasen, Heinrich; Kallas, Paul Тезисы докладов пятой республиканской конференции "Эрозионностойкие порошковые материалы и покрытия" 1988 / с. 32-33 https://www.ester.ee/record=b1256812*est

К прогнозированию газоабразивной износостойкости порошковых твердых сплавов

Kallas, Paul; Pirso, Jüri Трение и износ = Friction and Wear : международный научный журнал 1989 / с. 649-655 : ил https://www.ester.ee/record=b1312784*est

Карбидохромовые спеченные сплавы

Pirso, Jüri Пути экономии вольфрамсодержащих инструментальных материалов : сборник тезисов докладов научно-технического семинара 1980 / с. 32-33 : табл https://www.ester.ee/record=b1275894*est

Кинетика абразивного изнашивания поверхностей спеченных твердых сплавов

Pirso, Jüri; Kallas, Paul Всесоюзная конференция по текстурам и рекристаллизации в металлах и сплавах (11-13 июня) : тезисы докладов 1980 / с. 282

Коррозионная стойкость и износостойкость порошковых твердых сплавов на основе карбида титана и хромистой стали

Kallast, Vambola; Kübarsepp, Jakob; Schächter, Klára; Lohonyai, Nándor Periodica polytechnica. Chemical engineering = Химия 1989 / с. 141-148 : ил., табл. https://www.ester.ee/record=b1198772*est

Коррозионная стойкость нержавеющей порошковых твердых сплавов TiC-сталь

Kallast, Vambola; Kübarsepp, Jakob; Schächter, Klára; Lohonyai, Nándor Periodica polytechnica. Chemical engineering = Химия 1987 / с. 213-219 : ил., табл https://www.ester.ee/record=b1198772*est

Коррозионная стойкость спеченных твердых сплавов TiC-Fe-Cr и её влияние на коррозионно-абразивное изнашивание

Kallast, Vambola; Kübarsepp, Jakob Защита металлов 1989 / с. 107-111 : ил., табл https://www.ester.ee/record=b2054384*est

Коррозионноизносостойкие безвольфрамовые композиты на основе тугоплавких соединений для деталей узлов трения, работающих в перегретом бидистилляте воды

Халепа А.П. Износостойкие порошковые материалы и покрытия : тезисы докладов второй конференции Балтийских республик 1991 / с. 6-8

Легирование карбидной фазы спеченного твердого сплава TiC-Ni-Co-Cr

Kudrjavitsev, Vladimir; Valdma, Leo Порошковая металлургия. 1 1976 / с. 25-32 : илл https://www.ester.ee/record=b2111354*est <https://digikogu.taltech.ee/et/Item/c96ed6d3-4203-45dd-8179-87f8028f1fba>

Место спеченных сплавов TiC-сталь среди твердых сплавов

Valdma, Leo; Kübarsepp, Jakob Тезисы докладов XIV Всесоюзной конференции по порошковой металлургии (г. Ташкент, 1979 г.) 1979 / с. 80-81

Механизм избирательного изнашивания порошковых твердых сплавов

Pirso, Jüri; Kallas, Paul Трение и износ в машинах. 13 1985 / с. 27-36

Механизм изнашивания боковой поверхности матриц вырубных твердосплавных штампов

Vitsut, E.; Pirso, Jüri; Kallas, Paul Пути повышения эффективности использования инструментальных ресурсов : сборник тезисов докладов научно-технического семинара 1983 / с. 42-49 : ил https://www.ester.ee/record=b1291705*est

Механизм изнашивания порошковых твердых сплавов при малой скорости абразивных частиц

Kallas, Paul; Pirso, Jüri Трение и износ = Friction and Wear : международный научный журнал 1986 / с. 484-492 : ил https://www.ester.ee/record=b1312784*est

Моделирование гидроабразивного износа и разработка безвольфрамовых твердых сплавов

Valdma, Leo; Kallas, Paul XVI Всесоюзная научно-техническая конференция "Порошковая металлургия" : тезисы докладов. Ч. 3 1989 / с. 9-10

Модель селективного безвольфрамовых порошковых твердых сплавов в гидроабразивной среде

Valdma, Leo Тезисы докладов научно-технических семинаров "Теория и практика порошковой металлургии", "Электрофизические технологии в порошковой металлургии" 1984 / с. 25-26

Некоторые вопросы получения и использования спеченных дисперсионно-твердеющих сплавов на медной основе

Arensburger, Daniil Тезисы докладов пятой республиканской конференции "Эрозионностойкие порошковые материалы и покрытия" 1988 / с. 41-43 https://www.ester.ee/record=b1256812*est

Некоторые зависимости между технологическими факторами свойствами карбидо-хромовых твердых сплавов

Valdma, Leo; Pirso, Jüri Eigenschaften, Herstellung, Einsatz metallischer Sinter- und Verbundwerkstoffe : Abhandlungen der V. Internationalen Pulvermetallurgischen Tagung, Dresden, 23. bis 25. Oktober 1973 1973 / S. 29-1-29-14

Некоторые закономерности абразивной эрозии твердых сплавов : автореферат ... кандидата технических наук (325)

Kabral, Hillar-Endel 1970 https://www.ester.ee/record=b1388325*est

Некоторые показатели работоспособности безвольфрамовых твердых сплавов "TiC-сталь"

Kübarsepp, Jakob; Rešetnjak, Heinrich Твердосплавная штамповая оснастка в электромашиностроении : тезисы докладов V отраслевого научно-технического семинара 1987 / с. 56-58 : таб https://www.ester.ee/record=b1272870*est

Некоторые проблемы изготовления и применения карбидтитановых сплавов со стальным связками

Kübarsepp, Jakob; Valdma, Leo; Annuka, Harri Металловедение и термическая обработка металлов : [ежемесячный научно-технический и производственный журнал] 1987 / с. 43-45 : илл

Некоторые проблемы применения термической обработки сплавов TiC-сталь

Kübarsepp, Jakob; Annuka, Harri; Valdma, Leo Безвольфрамовые порошковые твердые сплавы и карбидостали. Часть 1 : тезисы докладов IV республиканской научно-технической конференции 1985 / с. 15-17 : таб https://www.ester.ee/record=b1253975*est

Некоторые пути повышения износостойкости твердых сплавов TiC-сталь в абразивной струе

Kübarsepp, Jakob; Valdma, Leo; Annuka, Harri Трение и износ = Friction and Wear : международный научный журнал 1985 / с. 698-703 : илл https://www.ester.ee/record=b1312784*est

Некоторые результаты исследования структуры и износостойкости твердых сплавов типа TiC-Ni-Mo

Kabral, Hillar-Endel; Mosberg, Rudolf Износ, усталость и коррозия металлов : сборник статей. 3 1969 / с. 15-22 : илл https://www.ester.ee/record=b2183085*est <https://digikogu.taltech.ee/et/Item/28ca169d-6b4f-44b6-92fd-45d8fc81e458/>

О влиянии режимов спекания на износостойкость твердого сплава BK15M в абразивной струе

Pirso, Jüri; Mosberg, Rudolf; Valdma, Leo Расширенные тезисы докладов VI республиканского семинара по порошковой металлургии 1970 / с. 52-56 : табл https://www.ester.ee/record=b1372156*est

О коррозионной стойкости порошковых карбидтитановых твердых сплавов

Kallast, Vambola; Kübarsepp, Jakob Защита металлов 1987 / с. 659-662 : фот., табл https://www.ester.ee/record=b2054384*est

О механизме разрушения карбидохромовых спеченных твердых сплавов

Pirso, Jüri Трение и износ в машинах 1980 / с. 63-70 : илл https://www.ester.ee/record=b2191013*est
<https://digikogu.taltech.ee/et/Item/ce30370b-afd1-4c7d-a563-4e4f7a1b178e>

О механизме разрушения карбидохромовых спеченных твердых сплавов

Pirso, Jüri Направления развития инструментального производства в X пятилетке : сборник тезисов докладов научно-технического семинара 1978 / с. 173 https://www.ester.ee/record=b1308562*est

О результатах исследования износостойкости твердых сплавов TiC-Ni-Mo в абразивной струе

Kabral, Hillar-Endel; Mosberg, Rudolf Тезисы докладов республиканского семинара по порошковой металлургии 1969 / с. 24-26 https://www.ester.ee/record=b1339858*est

О характере разрушения твердых сплавов при абразивной эрозии

Kabral, Hillar-Endel; Mosberg, Rudolf Износ, усталость и коррозия металлов : сборник статей. 4 1970 / с. 17-22 : илл https://www.ester.ee/record=b2189975*est <https://digikogu.taltech.ee/et/Item/08de6dd6-c065-4fa4-8684-9b41e91f1bd2/>

Окисление твердых сплавов на основе карбида титана, содержащих железо, хром и кремний

Lavrenko, V.; Protchenko, T.; **Kübarsepp, Jakob; Valdma, Leo** Сверхтвердые материалы 1982 / с. 47-50

Особенности коррозии твердых сплавов TiC-сталь

Kallast, Vambola; Kübarsepp, Jakob Республиканская конференция по коррозии и защите металлов : 25 лет с начала систематических исследований по коррозии в ЭССР : тезисы докладов 1983 / с. 26-27 https://www.ester.ee/record=b1288836*est

Особенности механизма гидроабразивного изнашивания карбидохромовых спеченных сплавов

Kallas, Paul; Pirso, Jüri; Valdma, Leo Трение и износ в машинах 1978 / с. 67-77 : илл https://www.ester.ee/record=b2190999*est
<https://www.etera.ee/zoom/121378/view?page=1&p=separate&search=%D0%A2%D1%80%D0%B5%D0%BD%D0%B8%D0%B5%20%D0%B8%20%D0%B8%D0%B7%D0%BD%D0%BE%D1%81%20%D0%B2%20%D0%BC%D0%B0%D1%88%D0%B8%D0%BD%D0%B0%D1%85&tool=search&view=0.0.1964.3047>

Перспективность использования спеченного твердого сплава типа карбид титана - сталь для форсунок жидкого топлива

Kübarsepp, Jakob; Valdma, Leo Порошковая металлургия. 1 1976 / с. 33-44 : илл https://www.ester.ee/record=b2111354*est
<https://digikogu.taltech.ee/et/Item/c96ed6d3-4203-45dd-8179-87f8028f1fba>

Показатели оценки износа твердосплавного разделительного штампа

Visut, E.; **Pirso, Jüri; Kleis, Ilmar** Тезисы докладов пятой республиканской конференции "Эрозионностойкие порошковые материалы и покрытия" 1988 / с.36-37 https://www.ester.ee/record=b1256812*est

Применение износостойких сплавов карбид титана-сталь при газо- и гидроабразивном изнашивании

Kiparissov, Sergei; Narva, Valentina; **Valdma, Leo; Šanajeva, D.; Kallas, Paul** Проблемы трения и изнашивания : республиканский межведомственный научно-технический сборник. Вып. 18 1981 / с. 50-53

Применение математических методов при изучении влияния технологических факторов и состава на свойства твердого сплава на основе карбидов хрома

Pirso, Jüri; Valdma, Leo Тезисы докладов II Всесоюзного семинара по металлокерамическим конструкционным материалам и изделиям 1972 / с. 39-40

Применение поверхностных и объемных свойств для оценки абразивной износостойкости

Kübarsepp, Jakob; Кудрявцев В.А.; Reshetnjak, Heinrich; Annuka, Harri Износостойкие порошковые материалы и покрытия : тезисы докладов второй конференции Балтийских республик 1991 / с. 14-15

Принципы оптимизации структуры и состава порошковых твердых сплавов, работающих в гидроабразивной струе

Valdma, Leo Исследование и разработка теоретических проблем в области порошковой металлургии и защитных покрытий : Материалы всесоюзной конференции, Минск, 24-26 мая 1983 г. Ч. 3 : Принципы оптимизации структуры и свойств порошковых материалов и защитных покрытий 1984 / с. 251-254

Принципы управления комплексом гидроабразивная износостойкость-прочность твердых сплавов

Valdma, Leo; Pirso, Jüri; Kallas, Paul; Kübarsepp, Jakob Порошковая металлургия : тезисы докладов XV всесоюзной научно-технической конференции : (19-22 нояб. 1985 г.) 1985 / с. 403-404 https://www.ester.ee/record=b2336294*est

Проблема износостойкость-прочность твердых сплавов

Valdma, Leo Свойства и технология изготовления композиционных материалов 1986 / с. 52-57

Проблемы выбора состава твердых сплавов для изготовления износостойких деталей

Kübarsepp, Jakob; Valdma, Leo; Annuka, Harri Безвольфрамовые порошковые твердые сплавы и карбидостали. Часть 1 :

тезисы докладов IV республиканской научно-технической конференции 1985 / с. 13-15 https://www.ester.ee/record=b1253975*est

Проблемы легирования карбидотитановых твёрдых сплавов, цементированных сплавами на основе железа
Kübarsepp, Jakob; Valdma, Leo Карбиды и материалы на их основе : [Сборник статей] 1983 / с. [?]

Проблемы снижения термонапряжений твердосплавных сопел

Valdma, Leo Износостойкие порошковые материалы и покрытия : тезисы докладов второй конференции Балтийских республик 1991 / с. 10-11

Прочность и износ вольфрамокобальтовых твердых сплавов в струе абразива

Klaasen, Heinrich; Kallas, Paul Трение и износ = Friction and Wear : международный научный журнал 1988 / с. 519-523 : ил https://www.ester.ee/record=b1312784*est

Регенерация отходов твердых сплавов на основе карбида вольфрама методом газофазной окислительно-восстановительной переработки

Кудрявцев В.А.; Козьяков В.А. Износостойкие порошковые материалы и покрытия : тезисы докладов второй конференции Балтийских республик 1991 / с. 26-27

Свойства безвольфрамовых твердых сплавов TiC-сталь

Kübarsepp, Jakob; Valdma, Leo Пути экономии вольфрамсодержащих инструментальных материалов : сборник тезисов докладов научно-технического семинара 1979 / с. 30-32 : табл https://www.ester.ee/record=b1275894*est

Свойства и области применения спеченных твердых сплавов TiC-сталь

Kübarsepp, Jakob; Valdma, Leo Развитие конструкции и технологии изготовления твердосплавных штампов : сборник тезисов докладов научно-технического семинара 1978 / с. 45-49 : табл. https://www.ester.ee/record=b1304998*est

Связь микроструктуры карбидотитановых спеченных твердых сплавов с их свойствами

Kudrjavitsev, Vladimir Тезисы докладов XIV Всесоюзной конференции по порошковой металлургии (г. Ташкент, 1979 г.) 1979 / с. 79-80

Связь упругопластических свойств поверхности твердых сплавов со стойкостью в условиях изнашивания

Кудрявцев В.А. Износостойкие порошковые материалы и покрытия : тезисы докладов второй конференции Балтийских республик 1991 / с. 24-26

Твердые сплавы со стальной связкой

Kübarsepp, Jakob; Reshetnjak, Heinrich 1991 http://www.ester.ee/record=b1235762*est

Термодиффузионная обработка твердых сплавов на основе карбида хрома

Kudrjavitsev, Vladimir; Pirso, Jüri Порошковая металлургия = Powder metallurgy : ежемесячный научно-технический журнал 1982 / с. 69-73 https://www.ester.ee/record=b1645489*est

Управление комплексном износостойкость-прочность твердых сплавов работающих в гидроабразивной среде

Valdma, Leo Трение и износ = Friction and Wear : международный научный журнал 1984 / с. 305-310 : илл https://www.ester.ee/record=b1312784*est

Характер изнашивания спеченных твердых сплавов в струях абразива и гидроабразива

Kallas, Paul; Valdma, Leo Направления развития инструментального производства в X пятилетке : сборник тезисов докладов научно-технического семинара 1978 / с. 157 https://www.ester.ee/record=b1308562*est

Характер изнашивания спеченных твердых сплавов в струях гидроабразива и абразива

Kallas, Paul; Valdma, Leo Трение и износ в машинах 1980 / с. 11-17 : илл https://www.ester.ee/record=b2191013*est
<https://digikogu.taltech.ee/et/Item/ce30370b-afd1-4c7d-a563-4e4f7a1b178e>

Химико-термическая обработка спеченных твердых сплавов

Kotkas, Kalev; Pirso, Jüri 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. 133 https://www.ester.ee/record=b1322629*est

Эффективность применения безвольфрамовых спеченных твёрдых сплавов в гидроабразивной среде

Valdma, Leo Порошковая металлургия. 1 1976 / с. 3-15 : илл https://www.ester.ee/record=b2111354*est
<https://digikogu.taltech.ee/et/Item/c96ed6d3-4203-45dd-8179-87f8028f1fba>