

Abrasion and erosion resistance of cermets : a review

Kübarsepp, Jakob; Juhani, Kristjan; Tarraste, Marek Materials 2022 / art. 69 <https://doi.org/10.3390/ma15010069> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Abrasion of cermets

Pirso, Jüri; Viljus, Mart; Juhani, Kristjan; Letunovitš, Sergei Advances in engineering research. Volume 3 2011 / p. 397-426

Abrasive erosion of chromium carbide based cermets

Pirso, Jüri; Viljus, Mart; Kübarsepp, Jakob 9th Nordic Symposium on Tribology NORDTRIB 2000 : Porvoo, Finland, 11-14 June 2000. Vol. 3 2000 / p. 959-967 : ill

Abrasive erosion of titanium carbide-base cermets

Pirso, Jüri; Kübarsepp, Jakob; Letunovitš, Sergei NORDTRIB '98 : proceedings of the 8th International Conference on Tribology, Ebeltoft, Denmark, 7-10 June 1998. Vol. 1 1998 / p. 231-237: ill

Abrasive erosive wear of powder steels and cermets

Veinthal, Renno; Tarbe, Riho; Kulu, Priit; Käerdi, Helmo Wear 2009 / 11, p. 1838-1844 : ill

Abrasive impact wear of WC-Co and TiC-NiMo cermets

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei; Tarraste, Marek Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 621-626 : ill
https://www.researchgate.net/publication/286139638_Abrasive_impact_wear_of_WC-Co_and_TiC-NiMo_cermets

Abrasive wear and erosion of titanium carbide based cermets

Pirso, Jüri; Kübarsepp, Jakob EURO PM'99 : European Conference on Advances in Hard Materials Production : Turin, Italy, November 8-10, 1999 : proceedings 1999 / p. 423-428: ill

Abrasive wear of chromium carbide based cermets

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei Tribologia : Finnish journal of tribology 2008 / 2/3, p. 23-32 : ill

Abrasive wear of Cr₃C₂ base cermets

Pirso, Jüri; Viljus, Mart; Kübarsepp, Jakob; Hussainova, Irina Abstracts of papers from 2nd World Tribology Congress 2001 / p. 158

Abrasive wear of Cr₃C₂ base cermets [Electronic resource]

Pirso, Jüri; Viljus, Mart; Kübarsepp, Jakob; Hussainova, Irina WTC 2001 : 2nd World Tribology Congress : Vienna, Austria, 03-07 September 2001 2001 / [4] p. : ill. [CD-ROM]

Abrasive wear resistance of TiC-NiMo cermets

Pirso, Jüri; Kübarsepp, Jakob International Conference Balttrib'99 : 21-22 September 1999, Kaunas, Lithuania : proceedings 1999 / p. 200-205: ill

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

Abrasiivkulumiskindlad komposiitpinded ex-situ ja in-situ sünteesitud karbiidkõvafaasiga

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

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

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

Additive manufacturing of TiC-based cermets : a detailed comparison with spark plasma sintered samples

Maurya, Himanshu Singh; Jayaraj, Jayamani; Vikram, Raja Jothi; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss Journal of alloys and compounds 2023 / art. 170436 <https://doi.org/10.1016/j.jallcom.2023.170436> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Titaankarbiidsete Fe-baasil sideainega kermiste valmistamine uudse laserskaneeriva kihtlisandustehnoloogia teel

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

Adhesive wear performance of hardmetals and cermets

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

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

Alloying of TiC-FeCr cermet in manganese vapor

Kolnes, Märt; Tarraste, Marek; Kübarsepp, Jakob; Juhani, Kristjan; Viljus, Mart IOP conference series : materials science and engineering 2021 / art. 012043 <https://doi.org/10.1088/1757-899X/1140/1/012043>

Alumina-silica hollow microspheres in metallo-ceramic matrix composite [Electronic resource]

Šiškins, Andrejs; Mironovs, Viktors; Zemčenkova, Vjačeslavs; **Hussainova, Irina** Cellular Materials CellMat 2014 : Dresden, Germany, 22-24 October, 2014 2014 / [CD-ROM]

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

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

Assessment of cermets performance in aggressive media

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

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>

Assessment of mechanically mixed layer developed during high temperature erosion of cermets

Antonov, Maksim; Hussainova, Irina; Pirso, Jüri; Volobujeva, Olga Wear 2007 / 2, p. 878-886 : ill

Assessment of zirconia doped hardmetals as tribomaterials

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

Assessment of the erosion resistance of carbides based cermets

Hussainova, Irina; Kübarsepp, Jakob; Pirso, Jüri Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts 2003 / p. 74

Behaviour of carbide composites in different operation conditions

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

Behaviour of TiC-base cermets in different wear conditions

Kübarsepp, Jakob; Klaasen, Heinrich; Pirso, Jüri Wear 2001 / p. 229-234 : ill

Binder jetting 3D printing of green TiC-FeCr based cermets- Effect of sintering temperature and systematic comparison study with Laser powder bed fusion fabricated parts

Maurya, Himanshu Singh; Marczyk, J.; Juhani, Kristjan; Sergejev, Fjodor; Kumar, R.; Hussain, Abrar; Akhtar, F.; Hebda, M.; Prashanth, Konda Gokuldoss Materials Today Advances 2025 / art. 100562 <https://doi.org/10.1016/j.mtadv.2025.100562>

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]

Brazing of cermets with steel using amorphous filler metals

Laansoo, Andres; Kübarsepp, Jakob; Surženkov, Gennadi Abstracts of International Conference Materials Engineering and Tribology 2002 / p. 9

Brazing of cermets with steel using amorphous filler metals

Laansoo, Andres; Kübarsepp, Jakob; Surženkov, Gennadi Medžiagotyra = Materials science 2002 / 4, p. 451-454

Brazing of TiC cermet to steel

Laansoo, Andres; Kübarsepp, Jakob; Vainola, Vello Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [II] 2010 / p. 480-485 : ill

Carbide grain and structure formation in Cr₃C₂-base cermets during sintering

Viljus, Mart; Traksmäa, Rainer; Pirso, Jüri Proceedings of Joint Nordic Conference in Powder Technology 2000 / p. 24

Carbide grain growth in Cr₃C₂-based cermets during sintering

Viljus, Mart; Pirso, Jüri; Traksmäa, Rainer Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 159-162 : ill

Cermets surface transformation under erosive and abrasive wear

Antonov, Maksim; Hussainova, Irina Tribology international 2010 / p. 1566-1575 : ill

Cermets with designed characteristics for wear and wear-corrosion working conditions

Pirso, Jüri; Kübarsepp, Jakob; Liiskmann, Guido Proceedings of Joint Nordic Conference in Powder Technology, November 26-27, Helsinki 1997 / p. 38

Cermets with Fe-alloy binder : a review

Kübarsepp, Jakob; Juhani, Kristjan International journal of refractory metals and hard materials 2020 / art. 105290, 25 p. : ill
<https://doi.org/10.1016/j.ijrmhm.2020.105290> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Characterisation of corrosion resistance of stainless TiC-base cermets

Baranovskaja, Irina; Kübarsepp, Jakob; Idla, Katrin; Viljus, Mart Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 163-166
https://www.researchgate.net/publication/260133663_Characterisation_of_corrosion_resistance_of_stainless_TiC-base_cermets

Characterisation of TiC-NiMo reinforced Ni-based hardfacing

Zikin, Arkadi; Badisch, Ewald; Hussainova, Irina; Tomastik, C.; Danninger, Herbert Surface & coatings technology 2013 / p. 36-44 : ill
<https://www.sciencedirect.com/science/article/pii/S0257897213001825> <https://doi.org/10.1016/j.surfcoat.2013.02.027> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Characterisation of TiC-NiMo reinforced NiCrBSi hardfacing

Zikin, Arkadi; Hussainova, Irina; Badisch, Ewald; Danninger, Herbert Proceedings 20th IFHTSE : International Federation for Heat Treatment and Surface Engineering Congress : Beijing, China, October 23-25, 2012 2012 / p. 535-540
<https://www.sciencedirect.com/science/article/pii/S0257897213001825>

Characteristics and application of tungsten free cermets

Kübarsepp, Jakob; Pirso, Jüri; Reshetnjak, Heinrich Proceedings of Joint Nordic Conference in Powder Technology : May 5-6, 1999, Oslo, Norway 1999 / p. 19

Characteristics of steel-bonded cermets and their application

Kübarsepp, Jakob; Annuka, Harri; Reshetnjak, Heinrich 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. 523-529: ill

Characteristics of titanium- and chromium carbide-base cermets and their application

Kübarsepp, Jakob; Pirso, Jüri; Annuka, Harri Proceedings of Joint Nordic Conference in Powder Technology, November 13-14, Copenhagen, 1996 1996 / p. 19

Characterization and application of TiC-based iron alloys bonded cermets

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

Characterization and application of TiC-based iron alloys bonded cermets

Annuka, Harri 1999 http://www.ester.ee/record=b1337168*est

Characterization of mechanically milled cermet powders produced by disintegrator technology

Käerdi, Helmo; Goljandin, Dmitri; Kulu, Priit; Sarjas, Heikki; Mikli, Valdek Engineering materials and tribology 2013 / p. 148-153
<https://www.scientific.net/KEM.527.148>

Characterization of microstructure and mechanical properties of cermets at micro- and nanoscales

Hussainova, Irina; Antonov, Maksim; Jasiuk, Iwona; Du, Xiangdong International journal of materials & product technology 2011 / p. 58-74 : ill

Characterization of TiC-FeCrMn cermets produced by powder metallurgy method

Kolnes, Märt; Kübarsepp, Jakob; Kollo, Lauri; Viljus, Mart Medžiagotyra = Materials science 2015 / p. 353-357 : ill
<https://doi.org/10.5755/j01.ms.21.3.7364> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chromium carbide based cermets as the wear resistant materials

Antonov, Maksim; Hussainova, Irina; Pirso, Jüri Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 177-180 : ill

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

Kolnes, Märt 2018 <https://digi.lib.ttu.ee/i/?9960> https://www.ester.ee/record=b5138030*est

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

Kolnes, Mart; Kübarsepp, Jakob; Sergejev, Fjodor; Kolnes, Märt Materials Engineering 2017 : selected, peer reviewed papers from the 26th International Baltic Conference on Materials Engineering 2017, October 26-27, Kaunas, Lithuania 2017 / p. 224-228 : ill
<https://doi.org/10.4028/www.scientific.net/SSP.267.224> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Comparative study on indentation fracture toughness measurements of cemented carbides

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

Comparative study on indentation fracture toughness measurements of cermets and hardmetals

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

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

Corrigendum to "The influence of high energy milling and sintering parameters on reactive sintered (Ti, Mo)C–Ni cermets" [J. Alloys Compd. 636 (2015) 381–386] (S0925838815005009) (10.1016/j.jallcom.2015.02.071))

Jõelet, Marek; Pirso, Jüri; Juhani, Kristjan; Viljus, Mart; Traksmäa, Rainer Journal of alloys and compounds 2018 / p. 128
<https://doi.org/10.1016/j.jallcom.2018.05.128> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Corrosion of titanium carbide cermets in mineral acids

Viljus, Mart; Pirso, Jüri; Kallavus, Urve Materials Engineering - 98 : materials of the VII-th International Baltic Conference, September 24-25, Jurmala, Latvia 1998 / p. 141-145: ill

Corrosion resistance of iron-alloys bonded cermets under acid conditions

Kübarsepp, Jakob; Baranovskaja, Irina; Idla, Katrin; Kallast, Vambola Proceedings of the 8th International Baltic Conference : Materials Engineering-99 : September 23-24, Kaunas, Lithuania 1999 / p. 151

Corrosion resistance of iron-alloys bonded cermets under acid conditions

Kübarsepp, Jakob; Baranovskaja, Irina; Idla, Katrin; Kallast, Vambola Medžiagotyra = Materials science 1999 / 2, p. 15-18

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

Developments in cermet design, technology and performance

Kübarsepp, Jakob; Pirso, Jüri; Juhani, Kristjan; Viljus, Mart International journal of materials & product technology 2014 / p. 160-179 <https://doi.org/10.1504/IJMP.2014.064046> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 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

Dry sliding wear of cermets

Viljus, Mart; Pirso, Jüri International journal of materials & product technology 2007 / 3/4, p. 468-486 : ill

Dry sliding wear of cermets under high-speed conditions

Pirso, Jüri; Ajaots, Mairo; Viljus, Mart; Vallikivi, Ahto Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts 2003 / p. 76

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 advanced TiC base cermets

Klaasen, Heinrich; Preis, Irina; Kübarsepp, Jakob Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts 2003 / p. 21

Durability of advanced TiC-base cermets

Klaasen, Heinrich; Kübarsepp, Jakob; Preis, Irina Proceedings of the Estonian Academy of Sciences. Engineering 2003 / 4, p. 272-280 : ill

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

Maurya, Himanshu Singh; Vikram, R. J.; **Kumar, Rahul, 1993-;** Rahmani Ahranjani, Ramin; **Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss** Micron 2024 / art. 103613 <https://doi.org/10.1016/j.micron.2024.103613> [Journal metrics at Scopus](#)
[Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of carbide produces technique on the structure and properties of the Cr₃C₂-Ni cermets

Letunovitš, Sergei; Viljus, Mart; Pirso, Jüri Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 181-184 : ill

Effect of carbon content on sinterability and properties of ZrO₂ doped WC-cermets

Cura, M. Erkin; **Voltšihhin, Nikolai; Hussainova, Irina; Viljus, Mart;** Hannula, Simo-Pekka Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 771-776

Effect of erodent particle impact energy on wear of cemented carbides

Antonov, Maksim; Yung, Der-Liang; **Goljandin, Dmitri; Mikli, Valdek; Hussainova, Irina** Wear 2017 / p. 507-515 : ill
<https://doi.org/10.1016/j.wear.2016.11.032> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of HBN on wear of AlCrN-coated spark plasma - sintered TiB₂/Ti composites at temperatures up to 900°C

Luszcz, Maciej; Michalczewski, Remigiusz; Kalbarczyk, Marek; Osuch-Słomka, Edyta; Molenda, Jarosław; **Liu, Le; Antonov, Maksim; Hussainova, Irina** Quarterly tribologia 2022 / p. 43-55 <https://doi.org/10.5604/01.3001.0015.8756>

Effect of high chromium content additions in iron-bonded Ti(C,N) cermets: a hardness-toughness tradeoff

Pampori, Tabeen Halawat; Kolnes, Märt; Juhani, Kristjan; Tarraste, Marek; Kübarsepp, Jakob Proceedings of the Estonian Academy of Sciences 2025 / p. 170-174 : ill <https://doi.org/10.3176/proc.2025.2.16>

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

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

Effect of microstructure and service conditions on tribological performance of cermets

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

Effect of microstructure on the erosive wear of titanium carbide-based cermets

Hussainova, Irina 14th International Conference on Wear of Materials : 30 March-3 April 2003, Washington, DC, USA. Part 1 2003 / p. 121-128 : ill

Effect of microstructure on the erosive wear of titanium carbide-based cermets

Hussainova, Irina Wear 2003 / p. 121-128

Effect of oxidation on abrasive wear behaviour of TiC-based cermets in SiO₂ medium

Antonov, Maksim; Hussainova, Irina; Pirso, Jüri; Juhani, Kristjan Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [III] 2010 / p. 510-515 : ill

Effect of oxidation on abrasive wear of TiC-based cermets at various temperatures

Antonov, Maksim; Hussainova, Irina; Pirso, Jüri; Juhani, Kristjan Proceedings of 14th Nordic Symposium on Tribology : NORDTRIB 2010 : 08.06-11.06.2010, Storforsen, Sweden 2010 / p. 0054 [CD-ROM]

Effect of oxidation on sliding wear behavior of NiCrSiB-TiB₂ plasma sprayed coatings

Umanskii, A.; **Hussainova, Irina;** Storoženko, M.; Terentyev, O.; **Antonov, Maksim** Engineering materials & tribology XXII 2014 / p. 16-19 <https://doi.org/10.4028/www.scientific.net/KEM.604.16> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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

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

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

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

Effect of selective laser melting process parameters on microstructural and mechanical properties of TiC–NiCr cermet

Aramian, Atefeh; Sadeghian, Zohreh; Razavi, Seyed Mohammad J.; **Prashanth, Konda Gokuldoss**; Berto, Filippo Ceramics international 2020 / p. 28749-28757 <https://doi.org/10.1016/j.ceramint.2020.08.037> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of sinter/HIP technology on properties of TiC-NiMo cermets

Kollo, Lauri; Pirso, Jüri; Juhani, Kristjan Materials science forum 2007 / Progress in powder metallurgy, p. 1169-1172 : ill

Effect of sintering conditions on microstructure and performance of TiC-FeCrMn cermets [Electronic resource]

Kolnes, Märt; Kübarsepp, Jakob; Viljus, Mart; Traksmäa, Rainer; Illopmägi, Siim World PM2016 proceedings 2016 / [7] p. : ill. [USB]

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

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

Effect of thermo-elastic residual stresses on erosive performance of cermets with core-rim structured ceramic grains

Hussainova, Irina; Kolesnikova, Anna; Hussainov, Medhat; Romanov, Alexey Wear 2009 / 1/4, p. 177-185 : ill

Elevated temperature wear of chromium carbide based cermets

Hussainova, Irina; Antonov, Maksim Proceedings of the Estonian Academy of Sciences. Engineering 2003 / 4, p. 261-271 : ill

Elevated temperature wear of chromium carbide based cermets

Hussainova, Irina; Antonov, Maksim Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts 2003 / p. 67

Erosion and abrasion of chromium carbide based cermets produced by different methods

Hussainova, Irina; Pirso, Jüri; Antonov, Maksim; Juhani, Kristjan; Letunovičs, Sergei Wear 2007 / 2, p. 905-911 : ill

Erosion of cermets based on titanium and chromium carbides

Pirso, Jüri; Kübarsepp, Jakob International Conference Balttrib'99 : 21-22 September 1999, Kaunas, Lithuania : proceedings 1999 / p. 206-211 : ill

Erosion testing of refractory cermets at high temperature [Electronic resource]

Antonov, Maksim; Hussainova, Irina Proceedings of 12th Nordic Symposium in Tribology : NORDTRIB 2006 : Helsingor, Denmark, 7-9 June 2006 2006 / [10] p. [CD-ROM]

Erosion wear behavior of HVOF-sprayed WC/Cr₃C₂-based cermet and martensitic stainless steel coatings on AlSi₇Mg_{0.3} alloy : a comparative study

Korobov, Yuri; Antonov, Maksim; Astafiev, Vladimir; Brodova, Irina; Kutaev, Vladimir; Estemirova, Svetlana; Devyatyarov, Mikhail; Okulov, Artem Journal of manufacturing and materials processing 2024 / art. 231 <https://doi.org/10.3390/jmmp8050231> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Erosion wear of reactive sintered WC-TiC-Co cermets

Tarraste, Marek; Juhani, Kristjan; Pirso, Jüri; Viljus, Mart Engineering materials & tribology XXII 2014 / p. 63-66 <https://doi.org/10.4028/www.scientific.net/KEM.604.63> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Erosion-corrosion of Cr₃C₂-Ni cermets in salt water

Antonov, Maksim; Stack, Margaret; Hussainova, Irina Proceedings of the Estonian Academy of Sciences. Engineering 2006 / 3-1, p. 176-187 : ill

Erosive wear of TiC-base cermets

Kübarsepp, Jakob; Klaasen, Heinrich; Mikli, Valdek; Viljus, Mart Medžiagotyra = Materials science 2002 / 4, p. 486-488 : ill

Erosive wear of TiC-base cermets

Kübarsepp, Jakob; Klaasen, Heinrich; Mikli, Valdek; Viljus, Mart Abstracts of International Conference Materials Engineering and Tribology 2002 / p. 41

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

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

Evaluation of hardmetals and cermets durability in plastic forming of metals

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

Evolution of the characteristics of light weight boron carbide cermet after heat treatment

Kommel, Lembit; Kurik, Lembit; Traksmäa, Rainer EUROMAT 2001 : 7th European Conference on Advanced Materials and Processes : Rimini, Italy, 10-14 June, 2001 : conference abstracts 2001 / p. 319

Evolution of the characteristics of light weight boron carbide cermet after heat treatment [Electronic resource]

Kommel, Lembit; Kurik, Lembit; Traksmäa, Rainer Proceedings of 7th European Conference on Advanced Materials and Processes : EUROMAT 2001 : Italy 2001 / [CD-ROM]

Exploring microstructural properties, phase transformations, and wettability in high-chromium content iron-bonded Ti(C,N)-based cermet

Pampori, Tabeen Halawat; Kolnes, Märt; Juhani, Kristjan; Tarraste, Marek; Maurya, Himanshu Singh; Kübarsepp, Jakob Journal of the Japan Society of Powder and Powder Metallurgy 2025 / p. S1533-S1540 <https://doi.org/10.2497/jjspm.16P-T14-06>

Fatigue mechanics of TiC-based cemented carbides

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

Fatigue performance and mechanical reliability of cemented carbides

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

Features of cermets wear resistance

Hussainova, Irina; Kübarsepp, Jakob Abstracts of NATO Symposium on Fundamentals of Tribology 2000 / p. 79

Fe-Ni binder modified NbC cermets: A cost-effective solution with superior mechanical properties

Basit, Muhammad Abdul; Anwar, Furqan; Ali, Sadaqat; Umer, Malik Adeel; Shahbaz, Tauheed; Ud Din, Emad; Mubashar, Aamir Ceramics international 2024 / p. 47768-47779 : ill <https://doi.org/10.1016/j.ceramint.2024.09.121> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Friction and dry sliding wear behaviour of cermets

Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei Wear 2006 / 7/8, p. 815-824 : ill

Friction and wear changes of boron carbide cermet depending on the structure

Kommel, Lembit; Kimmari, Eduard Abstracts of International Conference Materials Engineering and Tribology 2002 / p. 35

Friction and wear changes of boron carbide cermets depending on the structure

Kommel, Lembit; Kimmari, Eduard Materials science = Medžiagotyra 2003 / 1, p. 51-53 : ill

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. 90-95 : ill

High temperature erosion of Ti(Mo)C-Ni cermets

Hussainova, Irina; Pirso, Jüri; Antonov, Maksim; Juhani, Kristjan Wear 2009 / 11, p. 1894-1899 : ill

High temperature erosion wear of cermet particles reinforced self-fluxing alloy HVOF sprayed coatings

Surženkov, Andrei; Goljandin, Dmitri; Traksmäa, Rainer; Viljus, Mart; Talviste, Kristofer; Aruniit, Aare; Latokartano, Jyrki; Kulu, Priit Medžiagotyra = Materials science 2015 / p. 386-390 : ill <https://doi.org/10.5755/j01.ms.21.3.7617> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High temperature wear of cermet particle reinforced NiCrBSi hardfacing

Zikin, Arkadi; Antonov, Maksim; Hussainova, Irina Tribology international 2013 / p. 45-55 : ill <https://doi.org/10.1016/j.triboint.2012.08.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High virucidal potential of novel ceramic-metal composites fabricated via hybrid selective laser melting and spark plasma sintering routes

Rahmani Ahranjani, Ramin; Molan, Katja; Brojan, Miha; Prashanth, Konda Gokuldoss; Stopar, David The international journal of advanced manufacturing technology 2022 / p. 975-988 : ill <https://doi.org/10.1007/s00170-022-08878-x> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-specific strength cermet for production of anti-skid studs

Kübarsepp, Jakob; Teeri, Niilo Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 167-170 : ill

High-temperature erosion of Cr₃C₂-based cermets

Hussainova, Irina; Antonov, Maksim Abstracts of 10th Nordic Symposium on Tribology NORDTRIB 2002 / p. 112

High-temperature erosion of Cr₃C₂-based cermets [Electronic resource]

Hussainova, Irina; Antonov, Maksim Proceedings of 10th Nordic Symposium on Tribology NORDTRIB 2002 / Ref 21 [CD-ROM]

High-temperature erosion of Fe-based coatings reinforced with cermet particles

Surženkov, Andrei; Antonov, Maksim; Goljandin, Dmitri; Kulu, Priit; Viljus, Mart; Traksmaa, Rainer; Mere, Arvo Surface engineering 2016 / p. 624-630 : ill <https://doi.org/10.1080/02670844.2016.1145377> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Impact of Nb content on the morphology and properties of Ti (C_{0.5}N_{0.5})-FeCrMo-based green cermets

Maurya, Himanshu Singh; Tarraste, Marek; Viljus, Mart; Juhani, Kristjan; Sergejev, Fjodor; Kübarsepp, Jakob Ceramics international 2024 / 10 p <https://doi.org/10.1016/j.ceramint.2024.11.188>

Impact of solid particles against cermet targets

Hussainova, Irina; Kübarsepp, Jakob; Štšeglov, Igor Proc. of BELTRIB-99 Intern. Conference : Gomel, Belarus, 1999 1999 / p. 53-60

Impact wear of chromium carbide based cermets

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei Materials science 2008 / p. 341-344 : ill

Impact wear of chromium carbide based cermets

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei 17th International Baltic Conference : Materials Engineering 2008 : November 6-7, Kaunas, Lithuania : abstracts of papers 2008 / p. 27-28

Impact wear performance of thin hard coatings on TiC cermets

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

Impact wear performance of thin hard coatings on TiC cermets

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

Induction brazing of cermets to steel

Laansoo, Andres; Kübarsepp, Jakob; Vainola, Vello; Viljus, Mart Estonian journal of engineering 2012 / p. 232-242 : ill

Induction brazing of cermets to steel and eddy current testing of joint quality

Laansoo, Andres; Kübarsepp, Jakob; Surženkov, Andrei; Land, Raul; Märten, Olev; Viljus, Mart Welding in the World 2020 / p. 563-571 <https://doi.org/10.1007/s40194-020-00854-x> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 pressurized sintering on the performance of TiC-based cermets

Kübarsepp, Jakob; Klaasen, Heinrich; Tsinjan, Aleksei; Juhani, Kristjan; Kollo, Lauri; Viljus, Mart Engineering materials and tribology 2013 / p. 56-61 https://www.researchgate.net/publication/272047524_Influence_of_Pressurized_Sintering_on_Performance_of_TiC-Based_Cermets

Influence of sintering techniques on performance characteristics of TiC-based cermet

Tšinjan, Aleksei; Klaasen, Heinrich; Kübarsepp, Jakob; Annuka, Harri 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATTRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 26

Influence of sintering techniques on the performance characteristics of steel-bonded TiC-based cermets

Tšinjan, Aleksei; Klaasen, Heinrich; Kübarsepp, Jakob; Annuka, Harri Estonian journal of engineering 2009 / 4, p. 283-292 : ill https://www.researchgate.net/publication/237428192_Influence_of_sintering_techniques_on_the_performance_characteristics_of_steel-bonded_TiC-based_cermets

Influence of sintering technology on cermet performance

Kübarsepp, Jakob; Pirso, Jüri; Juhani, Kristjan BALTTTRIB'2013 : VII International Scientific Conference : 14-15 November 2013, Kaunas, Lithuania : proceedings 2013 / p. 56-61 https://www.researchgate.net/publication/384980961_Influence_of_sintering_technology_on_cermet_performance

Influence of strong carbide-forming elements (Nb and Ta) on the development of the green (Ti, Me)(C,N)-high chromium Fe-based cermets

Maurya, Himanshu Singh; Juhani, Kristjan; Tarraste, Marek; Viljus, Mart; Kumar, Rahul, 1993-; Hussain, Abrar; Sergejev, Fjodor; Kübarsepp, Jakob Vacuum 2024 / art. 113723, 12 p <https://doi.org/10.1016/j.vacuum.2024.113723> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

In-situ alloying of TiC-FeCr cermets in manganese vapour

Kolnes, Märt; Tarraste, Marek; Kübarsepp, Jakob; Juhani, Kristjan; Viljus, Mart Proceedings of the Estonian Academy of Sciences 2021 / p. 533-539 : ill <https://doi.org/10.3176/proc.2021.4.22> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Internal stresses in diffusion bonded joints

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

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

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

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

Maurya, Himanshu Singh; Jayaraj, Jayamani; Wang, Z.; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss Journal of alloys and compounds 2023 / art. 170496, 9 p. : ill <https://doi.org/10.1016/j.jallcom.2023.170496> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Kermiste mikrostruktuur

Kolnes, Märt; Tarraste, Marek Horisont 2017 / lk. 20-21 : ill http://www.ester.ee/record=b1072243*est
https://artiklid.elnet.ee/record=b2819541*est

Laser powder bed fusion of WC-Ni cermets : microstructural, phase and mechanical studies

Singh, Shalini; Meszaros, Kimberley; Narayanan, Jinoop Arackal; Dehgahi, Shirin; Prashanth, Konda Gokuldoss; Qureshi, Ahmed Jawad Tungsten 2025 <https://doi.org/10.1007/s42864-025-00329-w>

Load and temperature dependent sliding wear performance of Binder Jet 3D printed stainless-steel bonded cermet

Maurya, Himanshu Singh; Akhtar, F.; Prashanth, Konda Gokuldoss Journal of materials research and technology 2025 / p. 1199-1212 <https://doi.org/10.1016/j.jmrt.2025.06.095>

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]

Mechanical and wear behaviour of Tic-base cermets sintered by different techniques

Klaasen, Heinrich; Kollo, Lauri; Kübarsepp, Jakob EURO PM2005 : congress & exhibition : 2-5 October 2005, Prague, Czech Republic : proceedings. Volume 1 2005 / p. 217-222 : ill

Mechanical characterization and wear performance of WC–ZrO2–Ni cermets produced by hot isostatic pressing

Hussainova, Irina; Smirnov, Anton; Antonov, Maksim Advances in Key Engineering Materials 2011 / p. 344-348 : ill

Mechanical properties and features of erosion of cermets

Hussainova, Irina; Kübarsepp, Jakob 4th EUROMECH : Solid Mechanics Conference, Metz, France, June 26-30, 2000 : book of abstracts II, general sessions 2000 / p. 509

Mechanical properties and features of erosion of cermets

Hussainova, Irina; Jevgrafova, Natalja Book of abstracts of 4th EUROMECH Solid Mech. Conf 2000 / p. 509

Mechanical properties and features of erosion of cermets

Hussainova, Irina; Pirso, Jüri; Kübarsepp, Jakob Abstracts of 13th International Conference on Wear of Materials 2001 / p. 99

Mechanical properties and features of erosion of cermets

Hussainova, Irina; Kübarsepp, Jakob; Pirso, Jüri Wear 2001 / p. 818-825

Mechanical properties and wear performance of compression sintered TiC based cermets

Klaasen, Heinrich; Kollo, Lauri; Kübarsepp, Jakob Powder metallurgy 2007 / 2, p. 132-136

Mechanical properties of chromium carbide based cermets at micro-level

Hussainova, Irina; Jasiuk, Iwona; Du, X.; Cabassa, D.; **Pirso, Jüri** Advances in powder metallurgy & particulate materials 2008 : proceedings of the 2008 World Congress on Powder Metallurgy & Particulate Materials. IV 2009 / p. 180-191

Mechanical properties of chromium carbide based cermets at micro-level [Electronic resource]

Hussainova, Irina; Jasiuk, Iwona; Du, X.; Cabassa, D.; **Pirso, Jüri** Proceedings of the PM08 World Congress on Powder Metallurgy and Particulate Materials : Washington, NY, USA, June 12-16 2008 / ? p. [CD-ROM]

Mechanical properties of thin hard coatings on TiC-NiMo substrates

Yaldiz, Can Emrah; **Veinthal, Renno**; **Gregor, Andre**; Georgiadis, Kyriakos Estonian journal of engineering 2009 / 4, p. 329-339 : ill

Mechanically activated synthesis of nanocrystalline chromium carbide powders

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. 34-36 : ill

Mechanical properties of PVD coatings on TiC-based cermets

Veinthal, Renno; Yaldiz, Can Emrah; **Gregor, Andre** 1st Mediterranean Conference on Heat Treatment and Surface Engineering : Heat Treatment and Surface Engineering in the Manufacturing of Metallic Engineering Components : December 1-3, 2009, Sharm El-Sheikh, Egypt 2009 / p. 54

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

Micromechanical properties and erosive wear performance of chromium carbide based cermets

Hussainova, Irina; Jasiuk, Iwona; Sardela, M.; **Antonov, Maksim** Wear 2009 / p. 152-159 : ill

Microstructural aspects of fatigue mechanics of hardmetals and cermets

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

Microstructural characteristics and properties of reactive sintered TiC-based cermets

Juhani, Kristjan; **Pirso, Jüri**; **Viljus, Mart**; **Letunovitš, Sergei** 17th Plansee Seminar : International Conference on High Performance P/M Materials : Reutte, Austria, 25-29.05.2009 : proceedings. Vol. 2 2009 / p. HM56/1-HM65/6

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

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

Maurya, Himanshu Singh; **Juhani, Kristjan**; **Viljus, Mart**; **Sergejev, Fjodor**; **Kübarsepp, Jakob** Ceramics international 2024 / p. 8695-8705 <https://doi.org/10.1016/j.ceramint.2023.12.186> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Microstructure and erosive wear of ceramic based composites

Hussainova, Irina Abstracts of International Conference on Erosive and Abrasive Wear II : Cambridge, UK, 2003 2003 / p. 31
<https://www.sciencedirect.com/science/article/pii/S0043164804002236>

Microstructure and properties of reactive sintered TiC-based cermets

Juhani, Kristjan; **Pirso, Jüri**; **Viljus, Mart**; **Letunovitš, Sergei** International Powder Metallurgy Congress & Exhibition : EURO PM2008 : 29th September - 1st October 2008, Mannheim, Germany : proceedings. Vol.3 2008 / p. 89-94 : ill

Microstructure evolution of TiC cermets with ferritic AISI 430L steel binder

Kolnes, Märt; **Mere, Arvo**; **Kübarsepp, Jakob**; **Viljus, Mart**; **Maaten, Birgit**; **Tarraste, Marek** Powder metallurgy 2018 / p. 197-209 : ill <https://doi.org/10.1080/00325899.2018.1447268> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Microstructure formation of (Ti, Mo)C-Ni cermet

Jõelet, Marek; **Pirso, Jüri**; **Juhani, Kristjan** TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p. : ill

Microstructured cermet powders for HVOF spraying

Zimakov, Sergei; **Kulu, Priit**; **Goljandin, Dmitri**; **Peetsalu, Priidu** 4th International Conference Welding & Powder Metallurgy : MET-2005 : reports and thesis 2006 / p. 185-191 : ill

Microstructured cermet powders for HVOF spraying

Zimakov, Sergei; **Kulu, Priit**; **Goljandin, Dmitri**; **Peetsalu, Priidu** Proceedings of Jurmala International Conference Welding and

Powder Metallurgy : April 28-29, Jurmala, Latvia 2005 / ? p. [CD-ROM]

Mikroskoopia kujutiste ja röntgenspektrogrammide töötlemine ja rakendamine materjalide uurimisel : aruanne : G444 : teadussuuna klass 1.2, 2.2

Viljus, Mart 1994 https://www.ester.ee/record=b2084735*est

Multi-scale characterization and modeling of chromium carbide based cermets

Jasiuk, Iwona; **Hussainova, Irina**; Hamed, Elham Characterization of Metal Matrix Composites : Materials Science and Technology 2009 : conference and exhibition : October 25-29, 2009, Pittsburgh, Pennsylvania, USA. Vol. 3 2009 / p. 1775-1784

Nanoindentation of Cr₃C₂-Ni cermets [Electronic resource]

Du, Xiangdong; Jasiuk, Iwona; **Hussainova, Irina** Proceedings of 2006 SEM Annual Conference & Exposition on Experimental and Applied Mechanics : St.Louis, MI, USA, June 4-6, 2006 2006 / [CD-ROM]

Non-tungsten and non-cobalt cermets with designed serviceability characteristics

Kübarsepp, Jakob; Pirso, Jüri; Annuka, Harri Abstracts of 7th International Exhibition and Symposium on Powder Metallurgy, March 18-21, Minsk 1997 / p. 91

Oxidation resistance of titanium and chromium carbide-base cermets

Pirso, Jüri; Kübarsepp, Jakob Proceedings of the Estonian Academy of Sciences. Engineering 1996 / 1, p. 4-13: ill

Oxidation-abrasion of TiC-based cermets in SiC medium

Antonov, Maksim; Hussainova, Irina; Kübarsepp, Jakob; Traksmäa, Rainer Wear 2011 / p. 23-31 : 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 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 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 TiC-base cermets sintered by different techniques

Klaasen, Heinrich; Kollo, Lauri; Kübarsepp, Jakob Materials science & technology 2005 / 9, p. 1049-1053 : ill

Performance of tool materials in blanking = Tööriistamaterjalide toimivus väljalõikestantsimisel

Tšinjan, Aleksei 2012

Phase evolution, microstructure characteristics and properties of Cr₃C₂-Ni cermets prepared by reactive sintering

Juhani, Kristjan; Pirso, Jüri; Letunovitš, Sergei; Viljus, Mart International journal of materials & product technology 2011 / p. 75-91 : ill

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

Pressurized sintering of TiC-base cermets

Klaasen, Heinrich; Kollo, Lauri; Kübarsepp, Jakob; Viljus, Mart Proceedings of European Powder Metallurgy Congress : EURO PM2007 : Toulouse (France), 15-17 October 2007. Vol. 1 2007 / p. 215-220

Processing and microstructural characterization of WC based cermets doped by ZrO₂

Kimmari, Eduard; Hussainova, Irina; Smirnov, Anton; Traksmäa, Rainer; Preis, Irina 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATTRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 24

Processing and microstructural characterization of WC-based cermets doped by ZrO₂

Kimmari, Eduard; Hussainova, Irina; Smirnov, Anton; Traksmäa, Rainer; Preis, Irina Estonian journal of engineering 2009 / 4, p. 275-282 : ill

Processing and properties of zirconia toughened WC-based cermets

Hussainova, Irina; Voltšihhin, Nikolai; Cura, M. Erkin; Hannula, Simo-Pekka Advanced processing and manufacturing technologies for structural and multifunctional materials VII : a collection of papers presented at the 37th International Conference on Advanced Ceramics and Composites, January 27-February 1, 2013, Daytona Beach, Florida 2014 / p. 97-103
<https://ceramics.onlinelibrary.wiley.com/doi/abs/10.1002/9781118807965.ch11> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Processing and properties of zirconia toughened WC-based cermets

Hussainova, Irina; Voltšihhin, Nikolai; Cura, M. Erkin; Hannula, Simo-Pekka Proceedings of the 37th Int'l Conf & Expo on Advanced Ceramics & Composites (ICACC 2013) 2013 / 1-7 : ill

Processing and tribological properties of chromium carbide based cermets

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

Processing and tribological properties of Cr₃C₂

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 Cr₃C₂

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

Processing route effects on NbC-Fe-Ni cermets: Improving mechanical properties via mechanical alloying

Basit, Abdul; Ali, Sadaqat; Umer, Malik Adeel; Anwar, Furqan International journal of refractory metals and hard materials 2025 / art. 107372 <https://doi.org/10.1016/j.ijrmhm.2025.107372>

Reactive carburizing sintering - a novel production method for high quality chromium carbide-nickel cermets

Pirso, Jüri; Viljus, Mart; Letunovits, Sergei; Juhani, Kristjan International journal of refractory metals & hard materials 2006 / 3, p. 263-270 : ill <https://www.sciencedirect.com/science/article/abs/pii/S0263436805000909>

Reactive sintered chromium and titanium carbide-based cermets = Reaktsioonpaagutatud kroom- ja titaankarbiidsed kermised

Juhani, Kristjan 2009 https://www.ester.ee/record=b2498183*est

Reactive sintering of Cr₃C₂-Ni cermets

Viljus, Mart; Pirso, Jüri Abstracts of the 12th Joint Nordic Conference in Powder Technology : Tampere, Finland, 2003 2003 / p. 24

Reactive sintering of zirconium carbide based systems

Yung, Der-Liang; Kollo, Lauri; Hussainova, Irina; Zikin, Arkadi Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 783-788 : ill

Reactive sintering of ZrC-TiC composites

Yung, Der-Liang; Kollo, Lauri; Hussainova, Irina; Zikin, Arkadi Engineering materials and tribology 2013 / p. 20-25
https://www.researchgate.net/publication/234110368_Reactive_Sintering_of_ZrC-TiC_Composites

Reactive sintering of (Ti,W)C-Ni and TiC-FeNiSi cermets from high-energy milled powders

Kollo, Lauri; Volobujeva, Olga Proceedings of European Powder Metallurgy Congress : EURO PM2007 : Toulouse (France), 15-17 October 2007. Vol. 1 2007 / p. 227-231 https://www.researchgate.net/publication/287638623_Reactive_sintering_of_TiWC-Ni_and_TiC-FeNiSi_cermets_from_high-energy_milled_powders

Residual stresses in TiC-based cermets measured by indentation

Sergejev, Fjodor; Kimmari, Eduard; Viljus, Mart Procedia engineering 2011 / p. 2873-2881 : ill
<https://www.sciencedirect.com/science/article/pii/S1877705811006655>

Selective laser melting of TiC-based cermet : HIP studies

Maurya, Himanshu Singh; Kollo, Lauri; Tarraste, Marek; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss Transactions of the Indian Institute of Metals 2023 / p. 565-570 : ill <https://doi.org/10.1007/s12666-022-02684-5> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Maurya, Himanshu Singh; Kollo, Lauri; Tarraste, Marek; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss 3D Printing and Additive Manufacturing 2023 / p. 640-649 <https://doi.org/10.1089/3dp.2021.0221> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sinter/HIP technology of TiC-based cermets = Titaankarbiidkermiste survepaagutustehnoloogia

Kollo, Lauri 2007

Sintering parameters of TiC cermets with FeCr binder

Kolnes, Märt; Kübarsepp, Jakob TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p. : ill

Sintering technology and properties of TiC-base cermets

Klaasen, Heinrich; Kübarsepp, Jakob; Kollo, Lauri Engineering Materials & Tribology 2004 : materials of the XIII-th International Baltic Conference : September 23-24, Riga, Latvia 2004 / p. 56-57

Sliding Wear and Debris Evolution in LPBFed Ceramic-Reinforced Steel Composites Under Variable Loads and Temperatures

Maurya, Himanshu Singh; Kumar, Rahul, 1993-; Subramaniyan, Anand Kumar; **Tarraste, Marek; Hussain, Abrar;** Rahmani Ahranjani, Ramin; **Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss** Materials Chemistry and Physics 2025 / art. 131195 <https://doi.org/10.1016/j.matchemphys.2025.131195>

Sliding wear of chromium carbide based cermets under different wear conditions

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [2] 2008 / p. 455-459 : ill
<http://innomet.ttu.ee/daaam08/Online/Materials%20Engineering/Juhani.pdf>

Sliding wear of Cr₃C₂-Ni base cermets

Letunovitš, Sergei; Viljus, Mart; Pirso, Jüri Medžiagotyra = Materials science 2002 / 4, p. 477-480 : ill

Sliding wear of Cr₃C₂-Ni cermets

Letunovitš, Sergei; Viljus, Mart; Pirso, Jüri Abstracts of International Conference Materials Engineering and Tribology 2002 / p. 9

Sliding wear of HVOF sprayed self-fluxing alloy matrix cermet particles reinforced composite coatings

Surženkov, Andrei; Antonov, Maksim; Mikli, Valdek; Latokartano, Jyrki; **Vilgo, Timo; Kulu, Priit** BALTTTRIB'2013 : VII International Scientific Conference : 14-15 November 2013, Kaunas, Lithuania : proceedings 2013 / p. 62-66
https://www.researchgate.net/publication/258862543_SLIDING_WEAR_OF_HVOF_SPRAYED_SELF-FLUXING_ALLOY_MATRIX_CERMET_PARTICLES_REINFORCED_COMPOSITE_COATINGS

Sliding wear of the cermets

Letunovitš, Sergei; Pirso, Jüri; Viljus, Mart Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts 2003 / p. 70

Sliding wear of TiC-NiMo and Cr₃C₂-Ni cermet particles reinforced FeCrSiB matrix HVOF sprayed coatings

Surženkov, Andrei; Antonov, Maksim; Goljandin, Dmitri; Vilgo, Timo; Mikli, Valdek; Viljus, Mart; Latokartano, Jyrki; **Kulu, Priit** Estonian journal of engineering 2013 / p. 203-211 : ill <https://doi.org/10.3176/eng.2013.3.03> [Article at Scopus](#)

Sliding wear of TiC-NiMo cermets

Pirso, Jüri; Letunovitš, Sergei; Viljus, Mart Tribology international 2004 / p. 817-824 : ill

Sliding wear performance of AlCrN coating on TiB₂/Ti composites at high temperatures

Michalczewski, 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](#)

Slurry erosion resistance of Cr₃C₂-Ni cermets

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart International Powder Metallurgy Congress & Exhibition : EURO PM2009 : 12th October - 14th October 2009, Copenhagen, Denmark : proceedings. Vol.1 2009 / p. 305-310 : ill
https://www.researchgate.net/publication/288472950_Slurry_erosion_resistance_of_Cr3C2-Ni_cermets

Slurry erosion wear of TiC-NiMo and WC-Co cermets

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [11] 2010 / p. 456-461 : ill

Slurry erosion-corrosion of TiC-NiMo cermets

Pirso, Jüri; Kübarsepp, Jakob Proceedings of the International Conference on Powder Metallurgy & Particulate Materials PM2TEC'99 : June 20-24, 1999, Vancouver, Canada 1999 / [7] p

Slurry erosion-corrosion of TiC-NiMo cermets

Pirso, Jüri; Viljus, Mart; Kübarsepp, Jakob Advances in Powder Metallurgy & Particulate Materials - 1999. Part 11, Cermets & Refractory Metals 1999 / p. 11-29 - 11-35 : ill

Solid particle erosion of the Cr₃C₂-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

Some aspects of solid particle erosion of cermets

Hussainova, Irina Tribology international 2001 / p. 89-93

Spark plasma sintered ZrC-Mo cermets : influence of temperature and compaction pressure

Yung, Der-Liang; Antonov, Maksim; Hussainova, Irina Ceramics international 2016 / p. 12907-12913 : ill

<https://doi.org/10.1016/j.ceramint.2016.05.059> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Strength and failure of TiC based cermets

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

Structure and properties of HVOF-sprayed and PTA-welded cermet hard phase reinforced Fe-matrix based coatings

Kulu, Priit; Zikin, Arkadi; Surženkov, Andrei; Tarbe, Riho 2nd Mediterranean Conference & New Challenges on Heat Treatment and Surface Engineering : Dubrovnik-Cavtat, Croatia, 11-14 June 2013 2013 / p. 37-44

<https://www.inderscienceonline.com/doi/abs/10.1504/IJMMP.2014.061054>

Structure and properties of HVOF-sprayed and PTA-welded cermet hard phase reinforced Fe-matrix-based coatings

Kulu, Priit; Zikin, Arkadi; Surženkov, Andrei; Tarbe, Riho International journal of microstructure and materials properties 2014 / p. 4-14 <https://doi.org/10.1504/IJMMP.2014.061054> [Journal metrics at Scopus](#) [Article at Scopus](#)

Structure formation and characteristics of chromium carbide-iron-titanium cermets

Kolnes, Märt; Pirso, Jüri; Kübarsepp, Jakob; Viljus, Mart; Traksmäa, Rainer Proceedings of the Estonian Academy of Sciences 2016 / p. 138-143 : ill <https://doi.org/10.3176/proc.2016.2.09> https://artiklid.elnet.ee/record=b2768217*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Structure formation in Ti-C-Ni-Mo composites during reactive sintering

Viljus, Mart; Pirso, Jüri; Juhani, Kristjan; Letunovitš, Sergei Materials science = Medžiagotyra 2012 / p. 62-65 : ill

Structure formation of Cr₃C₂ - base cermets during sintering

Pirso, Jüri; Viljus, Mart Proceedings of 2000 Powder Metallurgy World Congress : November 12-16, 2000, Kyoto, Japan. Part 2 2000 / p. 1265-1268 : ill

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](#)

Subsurface of Cr₃C₂-Ni cermets modified by wear [Electronic resource]

Antonov, Maksim; Hussainova, Irina Proceedings of the 10th International Conference of the European Ceramic Society 2008 / ? p. [CD-ROM] https://www.academia.edu/24587100/Subsurface_of_Cr_3_C_2_Ni_Cermets_Modified_by_Wear

Synthesis of nanocrystalline TiC powders by reactive milling

Viljus, Mart; Pirso, Jüri; Letunovitš, Sergei Nanopowders, Nanostuctured Materials and Coatings : Network for Nanostructured Materials of ACC : March 17, 2005, Tallinn, Estonia : book of abstracts 2005 / p. 28-30 : ill

TalTechi teadlasele õnnestus valmistada materjal, mida rohepöörde käigus on pikisilmi oodatud

geenius.ee 2024 [TalTechi teadlasele õnnestus valmistada materjal, mida rohepöörde käigus on pikisilmi oodatud](https://digikogu.taltech.ee/et/Item/3dad7b12-4a7a-4c9d-8162-30388c52bf5e) <https://digikogu.taltech.ee/et/Item/3dad7b12-4a7a-4c9d-8162-30388c52bf5e>

Technological peculiarities of chromium carbide-based iron alloy bonded cermet

Kolnes, Märt; Kübarsepp, Jakob; Viljus, Mart; Traksmäa, Rainer Materials Engineering 2017 : selected, peer reviewed papers from the 26th International Baltic Conference on Materials Engineering 2017, October 26-27, Kaunas, Lithuania 2017 / p. 82-86 : ill <https://doi.org/10.4028/www.scientific.net/SSP.267.82> [Conference proceedings at Scopus](#) [Article at Scopus](#)

The effect of fine erodent retained on the surface during erosion of metals, ceramics, plastic, rubber and hardmetal

Antonov, Maksim; Pirso, Jüri; Goljandin, Dmitri; Vallikivi, Ahto; Hussainova, Irina Wear 2016 / p. 53-68 : ill <https://doi.org/10.1016/j.wear.2016.02.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The effect of impact angle on erosion of cermets

Hussainova, Irina; Kübarsepp, Jakob Fundamentals of tribology 2001 / p. 537-542

The effect of test conditions on the erosion resistance of cermets

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

The effects of impact variables and abrasive particle properties on the erosion of cermets

Hussainova, Irina; Pirso, Jüri; Kübarsepp, Jakob Abstracts of papers from 2nd World Tribology Congress 2001 / p. 73

The effects of impact variables and abrasive particle properties on the erosion of cermets [Electronic resource]

Hussainova, Irina; Pirso, Jüri; Kübarsepp, Jakob WTC 2001 : 2nd World Tribology Congress : Vienna, Austria, 03-07 September 2001 2001 / [4] p. : ill. [CD-ROM]

The formation of reactive sintered (Ti, Mo)C-Ni cermet from nanocrystalline powders

Jõelet, Marek; Pirso, Jüri; Juhani, Kristjan; Viljus, Mart; Traksmäa, Rainer International journal of refractory metals and hard materials 2014 / p. 284-290 : ill <https://doi.org/10.1016/j.jirmhm.2013.12.016> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The formation of structure and change of properties during heat treatment of boron carbide cermets

Kommel, Lembit; Veinthal, Renno; Kimmari, Eduard Abstracts of International Conference Materials Engineering and Tribology 2002 / p. 56

The formation of wear resistant properties of boron carbide cermet

Kommel, Lembit; Kimmari, Eduard Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 165-168 : ill

The influence of binder phase status on the wear resistance of boron carbide cermet by friction

Kommel, Lembit; Kimmari, Eduard; Peetsalu, Priidu Materials Engineering & Balttrib 2001 : materials of the X-th International Baltic Conference : September 27-28, Jurmala, Latvia 2001 / p. 202-206 : ill

The influence of carbon and molybdenum in reactive sintered (Ti, Mo)C-NiCr cermets [Electronic resource]

Jõelet, Marek; Pirso, Jüri; Juhani, Kristjan; Viljus, Mart Euro PM2015 Congress & Exhibition : proceedings : 4-7 October 2015, Reims Congress Centre, Reims, France 2015 / [USB]

The influence of content and production parameters on the structure and mechanical properties of TiC-NiMo cemented carbides

Pirso, Jüri; Viljus, Mart Tallinna Tehnikaülikooli Toimetised 1994 / lk. 77-90: ill

The influence of Cr₃C₂ 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 influence of high energy milling and sintering parameters on reactive sintered (Ti, Mo)C-Ni cermets

Jõelet, Marek; Pirso, Jüri; Juhani, Kristjan; Viljus, Mart; Traksmäa, Rainer Journal of alloys and compounds 2015 / p. 381-386 : ill <https://doi.org/10.1016/j.jallcom.2015.02.071> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The influence of processing parameters on mechanical properties of spark plasma sintered chromium carbide based cermets

Juhani, Kristjan; Pirso, Jüri; Tarraste, Marek; Viljus, Mart; Letunovitš, Sergei Materials Engineering 2017 : selected, peer reviewed papers from the 26th International Baltic Conference on Materials Engineering 2017, October 26-27, Kaunas, Lithuania 2017 / p. 162-166 <https://doi.org/10.4028/www.scientific.net/SSP.267.162> [Conference proceedings at Scopus](#) [Article at Scopus](#)

The influence of reactive sintering parameters on the structure and properties of Cr₃C₂-Ni cermets

Viljus, Mart; Letunovitš, Sergei; Traksmäa, Rainer; Pirso, Jüri Medžiagotyra = Materials science 2002 / 4, p. 473-476 : ill

The influence of reactive sintering parameters on the structure and properties of Cr₃C₂-Ni cermets

Viljus, Mart; Letunovitš, Sergei; Traksmäa, Rainer; Pirso, Jüri Abstracts of International Conference Materials Engineering and Tribology 2002 / p. 15

The influence of Sinter/HIP sintering on the properties of chromium carbide based cermets

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart Proceedings of European Powder Metallurgy Congress : EURO PM2007 : Toulouse (France), 15-17 October 2007. Vol. 1 2007 / p. 209-213

The influence of sintering temperature of reactive sintered (Ti, Mo)C-Ni cermets

Jõelet, Marek; Pirso, Jüri; Juhani, Kristjan; Viljus, Mart Medžiagotyra = Materials science 2015 / p. 435-438 : ill <https://doi.org/10.5755/j01.ms.21.3.7179> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The influence of TiC powder to reactive sintered TiC-NiMo cermets microstructure and mechanical properties [Electronic resource]

Jõelet, Marek; Pirso, Jüri; Juhani, Kristjan; Viljus, Mart Proceedings of the 18th Plansee Seminar : International Conference on Refractory Metals and Hard Materials : Reutte/Austria, 3-7 June, 2013 2013 / p. HM 71/1-HM 71/7 [CD-ROM]

The microstructure and properties of fine-grained cermets
Viljus, Mart 2003

The wear resistance tests of cermets and relations between different types of wear

Joost, Renee; Letunoviš, Sergei; Pirso, Jüri; Juhani, Kristjan Proceedings of 14th Nordic Symposium on Tribology : NORDTRIB 2010 : 08.06-11.06.2010, Storforsen, Sweden 2010 / [6] p.: ill. [CD-ROM]

Thermal residual stresses in chromium carbide based cermets

Jasiuk, Iwona; Hussainova, Irina; Hamed, Elham; Yang, Ning; Antonov, Maksim Proceedings of the 8th International Congress on Thermal Stresses, 1-4 June 2009 : Thermal Stresses 2009 : Abstract book vol. 2 2009 / p. 483-486 : ill

Thermal shock behaviour of cermets

Antonov, Maksim; Pirso, Jüri; Hussainova, Irina; Klug, Markus Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts 2003 / p. 75

Thermal shock resistance of chromium carbide-based cermets

Antonov, Maksim; Pirso, Jüri Encyclopedia of thermal stresses 2014 / p. 5128-5135 : ill

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

Thermomechanical effects on the wear behavior of cermets : flash temperature

Hussainova, Irina Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 186-189 : ill

Thermophysical properties and thermal shock resistance of chromium carbide based cermets

Antonov, Maksim; Hussainova, Irina Proceedings of the Estonian Academy of Sciences. Engineering 2006 / 4, p. 358-367 : ill

Thermo-physical properties and thermal shock resistance of chromium carbide based cermets

Antonov, Maksim; Hussainova, Irina 15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 26-27 : ill

Three-body abrasive wear of cermets

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

Three-body abrasive wear of TiC-NiMo cermets

Pirso, Jüri; Viljus, Mart; Juhani, Kristjan; Kuningas, Marius Tribology international 2010 / 1/2, p. 340-346 : ill

3D printing of plain and gradient cermets with efficient use of raw materials

Antonov, Maksim; Ivanov, Roman; Holovenko, Yaroslav; Goljandin, Dmitri; Rahmani Ahranjani, Ramin; Kollo, Lauri; Hussainova, Irina Modern Materials and Manufacturing 2019 : 12th International DAAAM Baltic Conference and 27th International Baltic Conference BALTMATTRIB 2019. Selected, peer reviewed papers from the conference Modern Materials and Manufacturing 2019 (MMM 2019), April 24-26, 2019, Tallinn, Estonia 2019 / p. 239-245 : ill <https://doi.org/10.4028/www.scientific.net/KEM.799.239>
https://www.ester.ee/record=b5235278*est [Conference proceeding at Scopus](#) [Article at Scopus](#)

3D printing of plain and gradient cermets with efficient use of raw materials

Antonov, Maksim; Ivanov, Roman; Holovenko, Yaroslav; Goljandin, Dmitri; Rahmani Ahranjani, Ramin; Kollo, Lauri; Hussainova, Irina Cermets : aggregated book 2023 / p. 83-90 <https://doi.org/10.4028/b-j9Oly>

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

TiC-base cermets as wear resistant materials

Kübarsepp, Jakob; Klaasen, Heinrich; Pirso, Jüri; Klaasen, Heinrich vt.ka Reshetnjak, Heinrich; Reshetnjak, Heinrich vt.ka Klaasen, Heinrich 9th Nordic Symposium on Tribology NORDTRIB 2000 : Porvoo, Finland, 11-14 June 2000. Vol. 1 2000 / p. 206-

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

Tribological characterization of TiC-base cermets

Kübarsepp, Jakob; Pirso, Jüri; Klaasen, Heinrich Proceedings of 2000 Powder Metallurgy World Congress : November 12-16, 2000, Kyoto, Japan. Part 2 2000 / p. 1633-1636 : ill

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

Tribology of fine-grained cermets

Letunovitš, Sergei 2003 https://www.ester.ee/record=b1782627*est

TTÜ teadlaste loodud uudse materjali vastu purunevad ka soomustlābistavad kuulid : [TTÜ materjalitehnika instituudi teadlaste töödest]

Jaagant, Urmas Eesti Päevaleht 2014 / lk. 5 <https://epl.delfi.ee/artikkel/67597700/ttu-teadlaste-loodud-uudse-materjali-vastu-purunevad-ka-soomustlabistavad-kuulid>

Two body dry abrasive wear of TiC-NiMo cermets

Pirso, Jüri; Viljus, Mart; Juhani, Kristjan Tribology - materials, surfaces & interfaces 2007 / 2, p. 68-72

Two-body dry abrasive wear of cermets

Pirso, Jüri; Viljus, Mart; Juhani, Kristjan; Letunovitš, Sergei Wear 2009 / 1/2, p. 21-29 : ill

Two-body dry abrasive wear of Cr₃C₂-Ni cermets

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei Proceedings of the Estonian Academy of Sciences. Engineering 2006 / 4, p. 368-376 : ill

Two-body dry abrasive wear of Cr₃C₂-Ni cermets

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei 15th International Baltic Conference "Engineering Materials & Tribology. Baltattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 58-59 : ill

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 and friction in boron carbide cermet-steel sliding system [Electronic resource]

Kommel, Lembit; Hussainova, Irina; Kimmari, Eduard WTC 2001 : 2nd World Tribology Congress : Vienna, Austria, 03-07 September 2001 2001 / [4] p.: ill. [CD-ROM]

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 behavior of recycled hard particle reinforced NiCrBSi hardfacings deposited by plasma transferred arc (PTA) process

Zikin, Arkadi; Hussainova, Irina; Katsich, Christian; Kulu, Priit; Goljandin, Dmitri Engineering materials and tribology 2013 / p. 179-184 https://www.researchgate.net/publication/236332219_Wear_Behaviour_of_Recycled_Hard_Particle_Reinforced_NiCrBSi_Hardfacings_Deposited_by_Plasma_Transferred_Arc_PTA_Process

Wear behaviour of Cr₃C₂-Ni cermet reinforced hardfacings

Bendikiene, Regita; Ciuplys, Antanas; Sertvytis, Rolandas; Surženkov, Andrei; Tkachivskyi, Dmytro; Viljus, Mart; Traksmas, 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 behaviour, durability, and cyclic strength of TiC base cermets

Klaasen, Heinrich; Kübarsepp, Jakob; Preis, Irina Materials science and technology 2004 / August, 1006-1010 p. : ill

Wear characteristics of TiC-base cermets

Kübarsepp, Jakob; Klaasen, Heinrich; Pirso, Jüri Materials Engineering & Balttrib 2001 : materials of the X-th International Baltic Conference : September 27-28, Jurmala, Latvia 2001 / p. 207-211 : ill

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

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

Wear performance of TiC-base cermets

Roosaar, Tõnu; Kübarsepp, Jakob; Klaasen, Heinrich; Viljus, Mart 17th International Baltic Conference : Materials Engineering 2008 : November 6-7, Kaunas, Lithuania : abstracts of papers 2008 / p. 32

Wear performance of TiC-base cermets

Roosaar, Tõnu; Kübarsepp, Jakob; Klaasen, Heinrich; Viljus, Mart Materials science 2008 / p. 238-241 : ill

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 BALTTTRIB 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-metalsete komposiitide kulumiskindlus

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

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 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

Verification of new 1000 [degree] C tester designed for investigation of wear-corrosion properties of advanced materials for high temperature applications

Antonov, Maksim; Hussainova, Irina; Kimmari, Eduard; Juhani, Kristjan Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [2] 2008 / p. 395-399 : ill <http://innomet.ttu.ee/daaam08/online/Materials%20Engineering/Antonov.pdf>

Абразивная эрозия керметов

Kallas, Paul; Pirso, Jüri; Juriditski, B.J.; Mihhailov, B.G. Трение и износ в машинах. 14 1987 / с. 48-53

О закономерностях абразивной эрозии при повешенных скоростях струи

Tiidemann, Tiit; Uuemõis, Haljand; Kleis, Ilmar Износ, усталость и коррозия металлов : сборник статей. 6 1973 / с. 29-38 : илл https://www.ester.ee/record=b2190621*est <https://digikogu.taltech.ee/et/Item/b72113fb-37ed-41e2-b029-bf4661300cc1>

Проблемы легирования стальной связки керметов TiC-сталь

Kübarsepp, Jakob; Valdma, Leo Трение и износ в машинах 1980 / с. 55-62 https://www.ester.ee/record=b2191013*est <https://digikogu.taltech.ee/et/Item/ce30370b-afd1-4c7d-a563-4e4f7a1b178e>