

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; Traksmäa, 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

Letunovič, 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; Traksmäa, 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

Tsinjan, 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

Tsinjan, 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; Letunovitš, 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 Proceedings 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; Letunovits, 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; Letunovits, 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; Letunovits, 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; Letunovits, 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>