

## 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 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](https://www.researchgate.net/publication/286139638_Abrasive_impact_wear_of_WC-Co_and_TiC-NiMo_cermets)

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

Titaankarbiidsete Fe-baasil sideaineega 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.estor.ee/record=b5645217\\*est](https://www.estor.ee/record=b5645217*est)

## Brazing of TiC cermet to steel

Laansom, 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

## 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](https://www.researchgate.net/publication/260133663_Characterisation_of_corrosion_resistance_of_stainless_TiC-base_cermets)

## Characterisation of TiC powders milled by attritor technique

Letunovitš, Sergei; Kommel, Lembit; Viljus, Mart; Pirso, Jüri Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 153-156 : ill

## 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.surcoat.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 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

## 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.estor.ee/record=b5138030\\*est](https://www.estor.ee/record=b5138030*est)

## 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

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

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

## 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 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 SiO<sub>2</sub> 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. [II] 2010 / p. 510-515 : ill

**Effect of oxidation on abrasive wear behaviour of titanium carbide based composites in silica medium**

**Antonov, Maksim; Hussainova, Irina; Pirso, Jüri; Juhani, Kristjan; Viljus, Mart** Estonian journal of engineering 2010 / 4, p. 264-272 : ill

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

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

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

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

**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>

**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

**Influence of pressurized sintering on the performance of TiC-based cermets**

**Kübarsepp, Jakob; Klaasen, Heinrich; Tsinjan, Aleksi; 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](https://www.researchgate.net/publication/272047524_Influence_of_Pressurized_Sintering_on_Performance_of_TiC-Based_Cermets)

**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](#)

**Korrosionsbeständigkeit und Verschleissfestigkeit von Sinterlegierungen aus Titankarbid und Chromstahl**

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

**Mechanically activated synthesis of ZrC nanopowders to produce composites with TiC and Mo additives**

**Yung, Der-Liang; Kollo, Lauri; Hussainova, Irina; Zikin, Arkadi** ECOTRIB 2011 : 3rd European Conference on Tribology and 4th Vienna International Conference on Nano-Technology : June 7-9, 2011, Vienna, Austria. 2 2011 / p. 793-796

**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**

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

**Microtribological studies of different nanocomposite TiC/a-C:H coatings using a modified nanoidentation setup**

Schwaller, P.; Patscheider, J.; **Kollo, Lauri; Michler, J.** Tribology letters 2004 / 4, p. 757-763

**Oxidation of spark plasma sintered ZrC-Mo and ZrC-TiC composites**

**Yung, Der-Liang; Maaten, Birgit; Antonov, Maksim; Hussainova, Irina** International journal of refractory metals and hard materials 2017 / p. 244-251 : ill <https://doi.org/10.1016/j.ijrmhm.2017.03.019> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## 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; Traksmaa, Rainer Wear 2011 / p. 23-31 : ill

## Performance of TiC-base cermets sintered by different techniques

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

## Plasma-transferred arc-welded composite hardfacings with ZrB<sub>2</sub> and TiC reinforcements

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

## Porkohászati uton előállított TiC-acélötözetek korrozióállosaga ásványi savakban

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

## 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](https://www.researchgate.net/publication/287638623_Reactive_sintering_of_TiWC-Ni_and_TiC-FeNiSi_cermets_from_high-energy_milled_powders)

## Sintering parameters of TiC cermets with FeCr binder

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

## 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

## 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

## Synthesis of ZrC-TiC blend by novel combination of sol-gel method and carbothermal reduction

Umalas, Madis; Reed, Valter; Lõhmus, Ants; Hussainova, Irina; Juhani, Kristjan Engineering materials and tribology 2013 / p. 62-67 [https://www.researchgate.net/publication/265844548\\_Synthesis\\_of\\_ZrC-TiC\\_Blend\\_by\\_Novel\\_Combination\\_of\\_Sol-Gel\\_Method\\_and\\_Carbothermal\\_Reduction](https://www.researchgate.net/publication/265844548_Synthesis_of_ZrC-TiC_Blend_by_Novel_Combination_of_Sol-Gel_Method_and_Carbothermal_Reduction)

## Synthesis of TiC by mechanical activation of powder components

Viljus, Mart; Traksmaa, Rainer; Letunovitš, Sergei; Pirso, Jüri EURO PM2001 : [European Congress and Exhibition on Powder Metallurgy] : October 22-24, 2001, Nice, France. Vol. 1 : proceedings 2001 / p. 194-198 : ill

## Synthesis of TiC powder by mechanical activation

Viljus, Mart; Traksmaa, Rainer; Letunovitš, Sergei; Pirso, Jüri Materials Engineering & Balttrib 2001 : materials of the X-th International Baltic Conference : September 27-28, Jurmala, Latvia 2001 / p. 18-21 : ill

## TalTechi teadlasel õnnestus valmistada materjal, mida rohepöörde käigus on pikisilmil oodatud

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

## The oxidation of chromium and titanium carbide based hard metals

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

## Ti-C-acélötözetek korrozióálloságának vizsgálata ásványi savakban

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

## TiC-base cermet steel dual compounds produced by diffusion bonding

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

## Titanium and chromium carbide based cermets

Pirso, Jüri 1996 [http://www.esther.ee/record=b1070455\\*est](https://www.esther.ee/record=b1070455*est)

## Tribological characterization of TiC-base cermets



### **Особенности коррозии твердых сплавов TiC-сталь**

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

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

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

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

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

### **Проблема применения термически упрочченных карбидных композитов для распылителей мазутных форсунок**

**Valdma, Leo; Annika, Harri; Kübarsepp, Jakob; Kallas, Paul** Износостойкие спеченные материалы и покрытия 1988 / с. 3-7

### **Проблемы легирования стальной связки керметов TiC-сталь**

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

### **Прочность карбидотитановых сплавов, сцементированных сплавами железа**

**Kübarsepp, Jakob** Свойства и технология изготовления износостойких материалов 1982 / с. 11-20 : илл  
[https://www.estr.ee/record=b1309562\\*est](https://www.estr.ee/record=b1309562*est) <https://digikogu.taltech.ee/et/item/da5bb058-212f-443b-9de3-5673fdb01534>

### **Свойства безвольфрамовых твердых сплавов TiC-сталь**

**Kübarsepp, Jakob; Valdma, Leo** Пути экономии вольфрамосодержащих инструментальных материалов : сборник тезисов докладов научно-технического семинара 1979 / с. 30-32 : табл [https://www.estr.ee/record=b1275894\\*est](https://www.estr.ee/record=b1275894*est)

### **Свойства и области применения спеченных твердых сплавов TiC-сталь**

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

### **Свойства спеченных сплавов сталь-карбид титана**

**Kübarsepp, Jakob; Arensburger, Daniil** Направления развития инструментального производства в X пятилетке : сборник тезисов докладов научно-технического семинара 1978 / с. 149 [https://www.estr.ee/record=b1308562\\*est](https://www.estr.ee/record=b1308562*est)

### **Специальные стальные связки для карбида-титановых термообрабатываемых керметов**

**Valdma, Leo; Kübarsepp, Jakob** V Международная конференция по порошковой металлургии в ЧССР. Сентябрь 1978 : сборник трудов 1978 / с. 127-142

### **Условия размола порошковых смесей сталь - карбид титана**

**Arensburger, Daniil; Kübarsepp, Jakob** Порошковая металлургия : сборник статей. 2 1977 / с. 3-10 : илл  
[https://www.estr.ee/record=b2111366\\*est](https://www.estr.ee/record=b2111366*est) <https://digikogu.taltech.ee/et/item/70a3ad25-126c-4b5f-b887-e5dc1aa558b3>