

#### **Abrasive impact wear and surface fatigue wear behaviour of Fe-Cr-C PTA overlays**

**Veinthal, Renno; Sergejev, Fjodor; Zikin, Arkadi; Tarbe, Riho;** Hornung, J. 19th International Conference on Wear of Materials : Portland, Oregon, USA, 14-18 April 2013 : conference abstracts 2013 / [p. 98]

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**Veinthal, Renno; Sergejev, Fjodor; Zikin, Arkadi; Tarbe, Riho;** Hornung, Johann Wear 2013 / p. 102-108

<https://www.sciencedirect.com/science/article/pii/S0043164813000999> <https://doi.org/10.1016/j.wear.2013.01.077> [Journal metrics at Scopus](#)  
[Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Abrasive wear resistance of HVOF sprayed and PTA-welded hardmetal hard phase reinforced metal-matrix based coatings**

**Tarbe, Riho; Kulu, Priit; Zikin, Arkadi; Surženkov, Andrei** Engineering materials & tribology XXII 2014 / p. 3-7

<https://doi.org/10.4028/www.scientific.net/KEM.604.3> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

#### **Abrasive wear resistance of recycled hardmetal reinforced thick coating**

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

#### **Abrasive wear resistance of recycled hardmetal reinforced thick coatings**

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

#### **Advanced chromium carbide based hardfacings**

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

#### **Advanced multiphase tribo-functional PTA hardfacings = Mitmeaasilised kulumiskindlad PTA-keevispindad**

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

#### **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>

#### **Chemical pre-treatment of mechanically milled recycled hardmetal powders**

**Zikin, Arkadi; Yung, Der-Liang; Hussainova, Irina; Ilo, S.** Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 777-782 : ill

#### **Coatings and surface engineering. Industry oriented research**

**Veinthal, Renno; Kulu, Priit; Zikin, Arkadi; Sarjas, Heikki; Antonov, Maksim; Podgurski, Vitali; Adoberg, Eron** Estonian

journal of engineering 2012 / p. 176-184 : ill [https://kirj.ee/public/Engineering/2012/issue\\_3/Eng-2012-3-176-184.pdf](https://kirj.ee/public/Engineering/2012/issue_3/Eng-2012-3-176-184.pdf)

#### **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

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

**Antonov, Maksim; Adoberg, Eron; Hussainova, Irina; Goljandin, Dmitri; Zikin, Arkadi** ECOTRIB 2011 : 3rd European

Conference on Tribology and 4th Vienna International Conference on Nano-Technology : June 7-9, 2011, Vienna, Austria. 1 2011 / p. 159-164

#### **Erosive wear of advanced composites based on WC**

**Hussainova, Irina; Antonov, Maksim; Zikin, Arkadi** Tribology international 2012 / p. 254-260 : ill

<https://www.sciencedirect.com/science/article/abs/pii/S0301679X11001630>

#### **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](#)

#### **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

### **Mechanically activated synthesized zirconium carbide substrate to make ZrC-Mo cermets**

**Yung, Der-Liang; Kollo, Lauri; Hussainova, Irina; Zikin, Arkadi** Proceedings of EURO PM 2011 Congress & Exhibition : October 9-12, 2011, Barcelona, Spain 2011 / [6] p. : ill  
[https://www.researchgate.net/publication/250242216\\_Mechanically\\_activated\\_synthesized\\_zirconium\\_carbide\\_substrate\\_to\\_make\\_ZrC-Mo\\_cermets](https://www.researchgate.net/publication/250242216_Mechanically_activated_synthesized_zirconium_carbide_substrate_to_make_ZrC-Mo_cermets)

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

**Zikin, Arkadi; Hussainova, Irina; Winkelmann, Horst; Kulu, Priit; Badisch, Ewald** International heat treatment and surface engineering 2012 / p. 88-92  
[https://www.researchgate.net/publication/227944686\\_Plasma\\_transferred\\_arc\\_hardfacings\\_reinforced\\_by\\_chromium\\_carbide\\_based\\_cermet\\_particles](https://www.researchgate.net/publication/227944686_Plasma_transferred_arc_hardfacings_reinforced_by_chromium_carbide_based_cermet_particles)

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

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

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

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

### **Processing of recycled hard particle powders by PTA-technology**

**Zikin, Arkadi; Ilo, S.; Kulu, Priit; Katsich, Christian; Badisch, Ewald; Hussainova, Irina** 20th International Baltic Conference Materials Engineering 2011, October 27-28, Kaunas, Lithuania : book of abstracts 2011 / p. 43

### **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](https://www.researchgate.net/publication/234110368_Reactive_Sintering_of_ZrC-TiC_Composites)

### **Recycled hardmetal-based powder composite coatings : optimisation of composition, structure and properties**

**Kulu, Priit; Käerdi, Helmo; Surženkov, Andrei; Tarbe, Riho; Veinthal, Renno; Goljandin, Dmitri; Zikin, Arkadi** International journal of materials & product technology 2014 / p. 180-202 : ill <https://doi.org/10.1504/IJMP.2014.064038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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](#)

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

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

### **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](#)

### **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](https://www.researchgate.net/publication/236332219_Wear_Behaviour_of_Recycled_Hard_Particle_Reinforced_NiCrBSi_Hardfacings_Deposited_by_Plasma_Transferred_Arc_PTA_Process)

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

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