

#### **A novel alumina – nanocarbon hybrid material**

**Ivanov, Roman**; Anoshkin, Ilya; Nasibulin, Albert; **Hussainova, Irina**; Kauppinen, Esko NT13: Fourteenth International Conference on the Science and Applications of Nanotubes : 24-28 June, 2013, Espoo, Finland 2013 / p. 309

#### **Abrasion of WC based hardmetals**

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

#### **Abrasive wear of Cr<sub>3</sub>C<sub>2</sub> base cermets**

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

#### **Abrasive wear of Cr<sub>3</sub>C<sub>2</sub> 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]

#### **Additive manufacturing of novel ceramic-based composite scaffolds for bone tissue engineering = Uudsete keraamikali põhinevate komposiitkarkasside kihtlisandustehnoloogia luukoetehnika**

**Kamboj, Nikhil Kumar** 2020 [https://www.ester.ee/record=b5379547\\*est](https://www.ester.ee/record=b5379547*est) <https://digikogu.taltech.ee/et/Item/92f8dc95-1820-45b0-bbdc-4193e44ec978>

#### **Additive manufacturing of silicon-wollastonite/bioactive glass based biomaterials by Selective Laser Melting**

**Kamboj, Nikhil Kumar**; Rodriguez Barbero, M. A.; Rodrigo, C.; Kazantseva, Jekaterina; **Hussainova, Irina** 44th International Conference & Exposition on Advanced Ceramics and Composites, January 26–31, 2020, Daytona Beach, Florida : Abstract book 2020 / art. ICACC-S5-028-2020 ; p. 133 [https://ceramics.org/wp-content/uploads/2018/09/ICACC20\\_Abstracts\\_WebFinal.pdf](https://ceramics.org/wp-content/uploads/2018/09/ICACC20_Abstracts_WebFinal.pdf)

#### **Additively manufactured mesostructured MoSi<sub>2</sub>-Si<sub>3</sub>N<sub>4</sub> ceramic lattice**

**Minasyan, Tatevik**; **Liu, Le**; **Holovenko, Yaroslav**; **Aydinyan, Sofiya**; **Hussainova, Irina** Ceramics international 2019 / p. 9926-9933 <https://doi.org/10.1016/j.ceramint.2019.02.035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Adhesion of AlCrN coating deposited on TiB<sub>2</sub>/Ti composites sintered by SPS dedicated for high temperature tribological applications**

Michalczewski, Remigiusz; Kalbarczyk, M.; Slomka, Z.; **Hussainova, Irina**; **Liu, Le**; **Antonov, Maksim** IOP conference series : materials science and engineering 2021 / art. 012010, 9 p <https://doi.org/10.1088/1757-899X/1140/1/012010>

#### **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

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

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

#### **Advanced multifunctional materials and their applications**

**Antonov, Maksim**; **Hussainova, Irina**; **Kers, Jaan**; **Kulu, Priit**; **Kübarsepp, Jakob**; **Veinthal, Renno** Research in Estonia : present and future 2011 / p. 146-167

#### **Advanced multiphase tribo-functional PTA hardfacings = Mitmeefaasilised kulumiskindlad PTA-keevispindid**

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

#### **AFM characterization of the surface morphology of the severe plastic deformed copper [Electronic resource]**

**Hussainova, Irina**; Lõhmus, Rünno; **Kommel, Lembit**; Siimon, H. Proceedings of Material Research Society Spring Meeting : March 28 - April 1, 2005, San Francisco, CA, USA 2005 / [CD-ROM]

#### **Alkoxide-based precursors for direct drawing of metal oxide micro- and nanofibres**

Tätte, Tanel; **Hussainov, Medhat**; Gurauskis, Jonas; Mändar, Hugo; Kelp, Glen; Rand, R.; Paalo, Madis; Hanschmid, Kelli; **Hussainova, Irina** Technical proceedings of the 2010 NSTI Nanotechnology Conference & Expo : Nanotech 2010. Vol.2, Nanotechnology 2010: Electronics, Devices, Fabrication, MEMS, Fluidics and Computational 2010 / p. 245-248 : ill [https://www.researchgate.net/publication/231121928\\_Alkoxide-based\\_precursors\\_for\\_direct\\_drawing\\_of\\_metal\\_oxide\\_micro-\\_and\\_nanofibres](https://www.researchgate.net/publication/231121928_Alkoxide-based_precursors_for_direct_drawing_of_metal_oxide_micro-_and_nanofibres)

#### **Alumina/graphene/Cu hybrids as highly selective sensor for simultaneous determination of epinephrine, acetaminophen and tryptophan in human urine**

**Taleb, Masoud**; **Ivanov, Roman**; **Bereznev, Sergei**; Kazemi, Sayed Habib; **Hussainova, Irina** Journal of electroanalytical chemistry 2018 / p. 184-192 : ill <https://doi.org/10.1016/j.jelechem.2018.06.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Alumina-graphene hybrid materials for electrochemical sensing of bio-analytes = Alumiiniumoksiid-grafeenhübriidmaterjalid biovedelike elektrokeemiliseks tuvastamiseks**

**Taleb, Masoud** 2018 <https://digi.lib.ttu.ee/?11202>

**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]

**Aluminate-based nanostructured luminescent materials : design of processing and functional properties**

**Rojas Hernandez, Rocio Estefania**; Rubio-Marcos, Fernando; Fernandez, Jose Francisco; **Hussainova, Irina** Materials 2021 / art. 4591 <https://doi.org/10.3390/ma14164591> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Anisotropic thermal conduction in hierarchically structured composite using graphene-augmented alumina nanofibers**

**Saffarshamshirgar, Ali**; **Ivanov, Roman**; Gasik, Michael; **Hussainova, Irina** XVI Conference and Exhibition Of The European Ceramic Society : abstract book 2019 / p. 167

**Application of nanoindentation for constituent phases testing in ceramic-metal composites**

**Hussainova, Irina**; Jasiuk, Iwona; **Hussainov, Medhat** Technical proceedings of the 2010 NSTI Nanotechnology Conference & Expo - Nanotech 2010. Vol. 1, Nanotechnology 2010 : Advanced materials, CNTs, Particles, Films and Composites 2010 / p. 152-155 : ill

**Assessment of cermets performance in aggressive media**

**Antonov, Maksim** 2006 [http://www.ester.ee/record=b2208731\\*est](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 gradient and nanogradient PVD coatings behaviour under erosive, abrasive and impact wear conditions**

**Antonov, Maksim**; **Hussainova, Irina**; **Sergejev, Fjodor**; **Kulu, Priit**; **Gregor, Andre** Wear 2009 / p. 898-906 : ill

**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

**Assessment of the wear resistance of multiphase materials**

**Hussainova, Irina**; **Kübarsepp, Jakob** Advances in Powder Metallurgy and Particulate Materials : Hard Metals/Refractory Metals/Composites. Vol. 9 2004 / p. 16-27

**Assessment of the wear resistance of multiphase materials [Electronic resource]**

**Hussainova, Irina**; **Kübarsepp, Jakob** Advances in Powder Metallurgy & Particulate Materials - 2004 : proceedings of the 2004 International Conference on Powder Metallurgy & Particulate Materials, June 13-17, Chicago, IL 2004 / p. 16-27. [CD-ROM]

**Atomic layer deposition for hard nanocoatings**

Jõgiaas, Taivo; **Kollo, Lauri**; **Hussainova, Irina** Baltic ALD 2014 : 12th International Baltic Conference on Atomic Layer Deposition : May 12-13, 2014, Helsinki, Finland 2014 / p. 91-92

**Atomic layer deposition of alumina on g-Al<sub>2</sub>O<sub>3</sub> nanofibres**

Jõgiaas, Taivo; Arroval, Tõnis; **Kollo, Lauri**; **Hussainova, Irina** Physica status solidi (a) : applications and materials science 2014 / p. 403-408 : ill

**Atomic mechanism of the destruction of spherical nanocrystal under three-dimensional dilation**

Ogorodnikov, K.; Maliszewski, K.; **Hussainova, Irina**; Siimon, H. Book of abstracts : Nano Tribo Workshop : France, 2005 2005 / p. 41

**Bioactive ceramic scaffolds for bone tissue engineering by powder bed selective laser processing : a review**

**Kamboj, Nikhil Kumar**; Ressler, Antonia; **Hussainova, Irina** Materials 2021 / art. 5338 <https://doi.org/10.3390/ma14185338> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Biobearings : where mechanics meets biology**

**Hussainova, Irina**; Ghaemi, Hossein Proceedings of the Estonian Academy of Sciences 2008 / 4, p. 232-240 : ill

## **Bioceramic scaffolds by additive manufacturing for controlled delivery of the antibiotic vancomycin**

**Kamboj, Nikhil Kumar**; Rodriguez, Miguel Angel; **Rahmani Ahranjani, Ramin**; **Prashanth, Konda Gokuldoss**; **Hussainova, Irina** Proceedings of the Estonian Academy of Sciences 2019 / p. 185–190 : ill <https://doi.org/10.3176/proc.2019.2.10>  
[http://www.kirj.ee/public/proceedings\\_pdf/2019/issue\\_2/proc-2019-2-185-190.pdf](http://www.kirj.ee/public/proceedings_pdf/2019/issue_2/proc-2019-2-185-190.pdf) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Bioinspired and multifunctional tribological materials for sliding, erosive, machining, and energy-absorbing conditions : A review**

**Kumar, Rahul, 1993-**; **Rezapourian, Mansoureh**; **Rahmani Ahranjani, Ramin**; **Maurya, Himanshu Singh**; **Kamboj, Nikhil Kumar**; **Hussainova, Irina** Biomimetics 2024 / art. 209 <https://doi.org/10.3390/biomimetics9040209>

## **Bio-inspired TiB<sub>2</sub>-TiB-TiN lattices by selective laser melting**

**Liu, Le**; **Minasyan, Tatevik**; **Kamboj, Nikhil**; **Aydinyan, Sofiya**; **Hussainova, Irina** Materials Letters 2020 / art. 128337 <https://doi.org/10.1016/j.matlet.2020.128337> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Biomechanical Features of Graphene-Augmented Inorganic Nanofibrous Scaffolds and Their Physical Interaction with Viruse**

**Gasik, Michael**; **Ivanov, Roman**; **Kazantseva, Jekaterina**; **Bilotsky, Yevgen**; **Hussainova, Irina** Materials 2021 / art. 164 <https://doi.org/10.3390/ma14010164> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Biomimetic design of implants for long bone critical-sized defects**

**Rezapourianghahfarokhi, Mansoureh**; **Kamboj, Nikhil Kumar**; **Jasiuk, Iwona**; **Hussainova, Irina** Journal of the mechanical behavior of biomedical materials 2022 / art. 105370 <https://doi.org/10.1016/j.jmbbm.2022.105370> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Biomimicry and novel structures : advancing the design paradigm of bone implants = Biomimikri ja uudsed struktuurid : luuimplantaatide disainiparadigma edendamine**

**Rezapourianghahfarokhi, Mansoureh** 2024 [https://www.ester.ee/record=b5667691\\*est](https://www.ester.ee/record=b5667691*est) <https://digikogu.taltech.ee/et/Item/7c3aec59-9566-41cb-b59d-b896fa72100e> <https://doi.org/10.23658/taltech.9/2024>

## **Biotribology**

**Hussainova, Irina** 2007

## **Boosting phosphorescence efficiency by crystal anisotropy in SrAl<sub>2</sub>O<sub>4</sub>:Eu,Dy textured ceramic layers**

**Rojas Hernandez, Rocio Estefania**; **Rubio-Marcos, Fernando**; **Serrano, Aida**; **Hussainova, Irina**; **Fernandez, Jose Francisco** Journal of the European Ceramic Society 2020 / p. 1677–1683 : ill <https://doi.org/10.1016/j.jeurceramsoc.2019.11.019> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Cermets surface transformation under erosive and abrasive wear**

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

## **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>

## **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 the viscoplastic behavior of nanocrystalline metals at HCV deformation**

**Kommel, Lembit**; **Hussainova, Irina**; **Traksmaa, Rainer** Reviews on advanced materials science 2005 / p. 447-453

## **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

## **Chemical vapour deposition growth of graphene and carbon nanotubes on alumina**

**Ivanov, Roman**; **Anoshkin, Ilya**; **Hussainova, Irina** TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05.

**Chemical vapour deposition of graphene coating onto ceramic nanofibers substrates and applications thereof =**

**Grafeenpinde keemiline aursadestus keraamilistele nanokiududele ja nende kasutus**

**Ivanov, Roman** 2017 <https://digi.lib.ttu.ee/i/29128>

**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

**Combined sol-gel and carbothermal synthesis of ZrC-TiC powders for composites**

**Umalas, Madis; Hussainova, Irina; Reedo, Valter; Yung, Der-Liang** Materials chemistry and physics 2015 / p. 301-306 : ill  
<http://dx.doi.org/10.1016/j.matchemphys.2015.01.017>

**Combustion synthesis of MoSi<sub>2</sub> based composite and selective laser sintering thereof**

**Minasyan, Tatevik; Aghayan, Marina; Liu, Le; Aydinyan, Sofiya; Kollo, Lauri; Hussainova, Irina; Rodriguez, Miguel Angel** Journal of the European Ceramic Society 2018 / p. 3814-3821 : ill <https://doi.org/10.1016/j.jeurceramsoc.2018.04.043> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Combustion synthesis of TiC-ZrC composite powder : role of mechanical activation**

**Hussainova, Irina; Manaseryan, L.; Khachatryan, H.; Hobosyan, M.; Kharatyan, Suren** World PM2010 proceedings. Vol. 2, Sintering, Secondary and Finishing Operations, Full Density and Alternative Consolidation 2010 / p. 181-188

**Comparing tungsten carbide based composites reinforced by alumina nanofibers or zirconia**

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

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

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

**Correlation between solid particle erosion of cermets and particle impact dynamics**

**Hussainova, Irina; Schade, Klaus-Peter** Tribology international 2008 / 4, p. 323-330 : ill  
<https://www.sciencedirect.com/science/article/abs/pii/S0301679X07001399>

**Cost-effective screen printing approach for Ce/Nd-doped ZnAl<sub>2</sub>O<sub>4</sub> films: tuning crystallinity induced by the substrate**

**Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Necib, Jallouli; Danilson, Mati; Fernandez, Jose Francisco; Hussainova, Irina** Physical chemistry chemical physics 2023 / p. 15829-15838 <https://doi.org/10.1039/D3CP02005C>

**Coupled thermal analysis of novel alumina nanofibers with ultrahigh aspect ratio**

**Aghayan, Marina; Hussainova, Irina; Gasik, Michael; Kutuzov, Michael; Friman, Michael** Thermochemica acta 2013 / p. 140-144 : ill

**Crack formation during post-treatment of nano- and microfibres prepared by sol-gel technique**

**Tätte, Tanel; Kolesnikova, Anna; Hussainov, Medhat; Talviste, R.; Löhmus, Rünno; Romanov, Alexey; Hussainova, Irina; Part, Marko; Löhmus, Ants** Journal of nanoscience and nanotechnology 2010 / 9, p. 6009-6016 <https://pubmed.ncbi.nlm.nih.gov/21133140/>

**Critical radius in the effect of transformation toughening of zirconia doped ceramics and cermets**

**Freidin, Alexander; Filippov, Roman; Hussainova, Irina; Vilchevskaya, Elena** Engineering materials and tribology 2013 / p. 68-73

**Critical radius of zirconia inclusions in transformation toughening of ceramics**

**Filippov, Roman; Freidin, Alexander; Hussainova, Irina; Vilchevskaya, Elena** Physical mesomechanics 2015 / p. 33-42 : ill  
<http://dx.doi.org/10.1134/S1029959915010051>

**CVD nanocrystalline multilayer graphene coated 3D-printed alumina lattices**

**Ramírez, Cristina; Shamshirgar, Ali Saffar; Perez-Coll, Domingo; Osendi, María Isabel; Miranzo, Pilar; Tewari, Girish C.; Karppinen, Maarit; Hussainova, Irina; Belmonte, Manuel** Carbon 2023 / p. 36-46 <https://doi.org/10.1016/j.carbon.2022.10.085>

**Deep-ultraviolet emitter : rare-earth-free ZnAl<sub>2</sub>O<sub>4</sub> nanofibers via a simple wet chemical route**

**Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Romet, Ivo; Del Campo, Adolfo; Gorni, Giulio; Hussainova, Irina; Fernandez, Jose Francisco; Nagirnyi, Vitali** Inorganic Chemistry 2022 / p. 11886-11896 <https://doi.org/10.1021/acs.inorgchem.2c01646> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Densification and characterization of spark plasma sintered ZrC-ZrO<sub>2</sub> composites**

**Hussainova, Irina; Voltšihhin, Nikolai; Cura, M. Erkin; Hannula, Simo-Pekka** Materials science and engineering : A - structural materials: properties, microstructure and processing 2014 / p. 75-81 : ill

### **Densification and microstructure development in zirconia toughened hardmetals**

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

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

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

### **Deposition of iron oxide nanoparticles on mesoporous alumina network by wet-combustion technology**

**Kamboj, Nikhil Kumar; Saffarshamshirgar, Ali;** Shirshneva-Vaschenko, Elena; **Hussainova, Irina** Materials chemistry and physics 2019 / p. 340-346 : ill <https://doi.org/10.1016/j.matchemphys.2018.12.095> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Design and technology of oxides-containing ceramic-based composites = Oksiide sisaldava komposiitkeraamika tehnoloogia**

**Voltšihhin, Nikolai** 2014 [https://www.ester.ee/record=b4438763\\*est](https://www.ester.ee/record=b4438763*est)

### **Development of solid lubricated composites for high-temperature tribological applications = Tahkmäärdega komposiitide väljatöötamine kõrgtemperatuurseteks triborakendusteks**

**Kumar, Rahul,** 1993- 2022 <https://doi.org/10.23658/taltech.75/2022> <https://digikogu.taltech.ee/et/Item/b117812c-4248-4542-ba39-fcbfe5349f4e> [https://www.ester.ee/record=b5528171\\*est](https://www.ester.ee/record=b5528171*est)

### **Direct CVD growth of multi-layered graphene closed shells around alumina nanofibers**

**Ivanov, Roman; Mikli, Valdek; Kübarsepp, Jakob; Hussainova, Irina** Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATTRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 77-80 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.77>

### **Directional conductivity in layered alumina**

**Hussainova, Irina; Saffarshamshirgar, Ali; Ivanov, Roman; Volobujeva, Olga;** Romanov, Alexey; Gasik, Michael Current applied physics 2022 / p. 68-73 : ill <https://doi.org/10.1016/j.cap.2020.06.009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Dynamic coefficients in impact mechanics**

**Hussainova, Irina;** Schade, Klaus-Peter; **Tisler, Sergei** Proceedings of the Estonian Academy of Sciences. Engineering 2006 / 1, p. 26-39 : ill

### **Effect of annealing temperature of brownish-red pigment based on iron oxide extracted by hydrothermal route from mill-scale steel slag**

Eticha, Zekarias G.; **Rojas Hernandez, Rocio Estefania; Hussainova, Irina** Journal of Sustainable Metallurgy 2022 / p. 218-227 <https://doi.org/10.1007/s40831-021-00470-z> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Effect of atomic layer deposited aluminium oxide on mechanical properties of porous silicon carbide**

Jõgiaas, Taivo; **Kollo, Lauri;** Kozlova, Jekaterina; Tamm, Aile; **Hussainova, Irina;** Kukli, Kaupo Ceramics international 2015 / p. 7519-7528 : ill <http://dx.doi.org/10.1016/j.ceramint.2015.02.074>

### **Effect of atomic oxygen irradiation on the structural and tribological properties of the MoS<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub>/PI composites**

Zhao, Gai; Wang, Qihua; **Hussainova, Irina;** Ding, Qingjun Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATTRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 239-243 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.239>

### **Effect of basalt addition on tribological performance of FeCrSiB HVOF coatings**

**Antonov, Maksim; Surženkov, Andrei; Hussainova, Irina; Goljandin, Dmitri; Mikli, Valdek** Estonian journal of engineering 2012 / p. 211-220 : ill [https://artiklid.elnet.ee/record=b2527729\\*est](https://artiklid.elnet.ee/record=b2527729*est)

### **Effect of basalt and silica additives on erosive wear resistance of cast ceramics**

**Baroninš, Janis; Antonov, Maksim; Ivanov, Roman;** Shuliak, Volodymyr; **Hussainova, Irina** Proceedings of the Estonian Academy of Sciences 2016 / p. 144-151 : ill <http://dx.doi.org/10.3176/proc.2016.2.05> [https://artiklid.elnet.ee/record=b2768221\\*est](https://artiklid.elnet.ee/record=b2768221*est)

### **Effect of carbon content on sinterability and properties of ZrO<sub>2</sub> 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>

**Effect of fly-ash cenospheres on properties of clay-ceramic syntactic foams**

Rugele, Kristine; Lehmhus, Dirk; **Hussainova, Irina**; Peculevica, Julite; Lisnanskis, Marks; Shishkin, Andrei Materials 2017 / art. 828, p. 1-17 : ill <http://dx.doi.org/10.3390/ma10070828>

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

**Yung, Der-Liang; Dong, Minjie; Hussainova, Irina** Engineering materials & tribology XXII 2014 / p. 106-109

**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, Jaroslaw; **Liu, Le; Antonov, Maksim; Hussainova, Irina** Quarterly tribologia 2022 / p. 43-55 <https://doi.org/10.5604/01.3001.0015.8756>

**Effect of loading system inertia on tribological behaviour of ceramic–ceramic, ceramic–metal and metal–metal dry sliding contacts**

**Antonov, Maksim; Hussainova, Irina; Adoberg, Eron** Tribology international 2013 / p. 207-214 : ill

**Effect of loading system rigidity and inertia on friction coefficient and wear rate of ceramic-ceramic sliding contacts**

**Antonov, Maksim; Adoberg, Eron; Hussainova, Irina** Proceedings of the 13th International Conference on Metrology and Properties of Engineering Surfaces : 12-14 April 2011, London 2011 / p. 151-155 : ill

**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. [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 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 erosive wear behaviour of boiler steels**

**Antonov, Maksim; Veinthal, Renno; Huttunen-Saarivirta, E.; Hussainova, Irina; Vallikivi, Ahto; Lelis, Martynas; Priss, Jelena** Tribology international 2013 / p. 35-44 : ill

**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

**Effect of SiO2 and PTFE additives on dry sliding of NiP electroless coating**

Gutsev, D.; **Antonov, Maksim; Hussainova, Irina**; Grigoriev, A.Y. Tribology international 2013 / p. 295-302 : ill

**Effect of solid lubricants on wear of PVD-coated spark plasma-sintered TiB2/Ti composites**

Luszcz, Maciej; Michalczewski, Remigiusz; Kalbarczyk, Marek; Osuch-Słomka, Edyta; **Liu, Le; Antonov, Maksim; Hussainova, Irina** Modern materials and manufacturing 2023 2024 / art. 040010 <https://doi.org/10.1063/5.0190460>

**Effect of surface features stiffness on tribological performance of 3D printed light-weight Ti6Al4V alloy**

**Antonov, Maksim; Pohlak, Meelis; Ivanov, Roman; Hussainova, Irina** Modern materials and manufacturing 2023 2024 / art. 040015 <https://doi.org/10.1063/5.0189279>

**Effect of temperature and load on three-body abrasion of cermets and steel**

**Antonov, Maksim; Hussainova, Irina; Veinthal, Renno; Pirso, Jüri** Tribology international 2012 / p. 261-268 : ill  
<https://www.sciencedirect.com/science/article/pii/S0301679X11002015>

**The effect of temperature and sliding speed on friction and wear of Si3N4, Al2O3, and ZrO2 balls tested against AlCrN**

#### **PVD coating**

**Antonov, Maksim; Afshari, Hossein; Baroninš, Janis; Adoberg, Eron; Raadik, Taavi; Hussainova, Irina** Tribology international 2018 / p. 500-514 : ill <https://doi.org/10.1016/j.triboint.2017.05.035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Effect of temperature on sliding and erosive wear of fiber reinforced polyimide hybrids**

**Zhao, Gai; Hussainova, Irina; Antonov, Maksim; Wang, Qihua; Wang, Tingmei; Yung, Der-Liang** Tribology international 2015 / p. 525-533 : ill <http://dx.doi.org/10.1016/j.triboint.2014.01.019>

#### **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

#### **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 / p. 177-185 : ill  
<https://www.sciencedirect.com/science/article/pii/S0043164809001446>

#### **Effect of TiB<sub>2</sub> additives on wear behavior of NiCrBSi-based plasma-sprayed coatings**

**Umanskyi, Oleksandr; Storozhenko, Maryna; Hussainova, Irina; Terentjev, Oleksandr; Kovalchenko, Andrey; Antonov, Maksim** Materials science = Medžiagotyra 2016 / p. 15-19 : ill <http://dx.doi.org/10.5755/j01.ms.22.1.7307>

#### **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

#### **Elaboration of method for preparation of IVB group metal carbides nanocomposites**

**Umalas, Madis; Reedo, Valter; Lõhmus, Ants; Hussainova, Irina** Functional Materials & Nanotechnologies : Riga, 5-8 April 2011 2011 / [1] p

#### **Elaboration of sol-gel derived TiC-CNTs composite**

**Hussainova, Irina; Umalas, Madis; Lõhmus, Ants; Voltšihhin, Nikolai** 38th International Conference & Exposition on Advanced Ceramics and Composites : abstract book : January 26-31, 2014, Daytona Beach, Florida 2014 / p. 116

#### **Elastic models of defects in two-dimensional crystals**

**Kolesnikova, Anna; Orlova, T.; Hussainova, Irina; Romanov, Alexey** Physics of the solid state 2014 / p. 2573-2579 : ill

#### **Electrochemical behaviour of TiCN and TiAlN gradient coatings prepared by lateral rotating cathode arc PVD technology**

**Baroninš, Janis; Podgurski, Vitali; Antonov, Maksim; Bereznev, Sergei; Hussainova, Irina** Engineering materials and tribology XXV 2017 / p. 414-418 <http://dx.doi.org/10.4028/www.scientific.net/KEM.721.414>

#### **Electroconductive composite of zirconia and hybrid graphene/alumina nanofibers**

**Hussainova, Irina; Drozdova, Maria; Perez-Coll, Domingo** Journal of the European Ceramic Society 2017 / p. 3713-3719 : ill  
<https://doi.org/10.1016/j.jeurceramsoc.2016.12.033>

#### **Electroconductive oxide ceramics with graphene-encapsulated fillers**

**Hussainova, Irina; Drozdova, Maria; Ivanov, Roman; Kale, Sudhir S.; Jasiuk, Iwona** Proceedings of the 42nd international conference on advanced ceramics and composites 2019 / p. 251-258 <https://doi.org/10.1002/9781119543343.ch25> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

#### **Electroconductive oxide ceramics with hybrid graphenated nanofibers = Elektrijuhtiva oksiid-grafeenkiudkeraamika tehnoloogia ja püsisus**

**Drozdova, Maria** 2017 <https://digi.lib.ttu.ee/i/?9119> [http://www.ester.ee/record=b4748247\\*est](http://www.ester.ee/record=b4748247*est)

#### **Electromagnetic shielding properties of ceramic spheres coated with paramagnetic metal**

**Koppel, Tarmo; Shiskin, A.; Hussainova, Irina; Haldre, Heldur; Tint, Piia** Agronomy research 2016 / p. 1015-1022 : ill  
[http://ise.elnet.ee/record=b2891940~S1\\*est](http://ise.elnet.ee/record=b2891940~S1*est)

#### **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

#### **Encapsulated whiskers as electroconductive fillers for ceramics**

**Hussainova, Irina; Ivanov, Roman; Kale, Sudhir S.; Jasiuk, Iwona** Short fibre reinforced cementitious composites and ceramics

## **Engineering materials and tribology**

2013

**Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia**

2016 <http://dx.doi.org/10.4028/www.scientific.net/KEM.674>

## **Enhanced optical and thermal conductivity properties of barium titanate ceramic via strontium doping for thermo-optical applications**

Tihtih, Mohammed; Ibrahim, Jamal Eldin F. M.; Basyooni, Mohamed A.; En-nadir, Redouane; Belaid, Walid; Abdelfattah, Mohamed M.; **Hussainova, Irina**; Pszota, Gabor; Kocserha, Istvan Optical and Quantum Electronics 2023 / art. 226, 20 p. : ill

<https://doi.org/10.1007/s11082-022-04516-8>

## **Enhancing NIR emission in ZnAl<sub>2</sub>O<sub>4</sub>:Nd,Ce nanofibers by co-doping with Ce and Nd: a promising biomarker material with low cytotoxicity**

**Rojas Hernandez, Rocio Estefania**; Rubio-Marcos, Fernando; Gorni, Giulio; Marini, Carlo; **Danilson, Mati**; Pascual, Laura; Ichikawa, Rodrigo Uchida; **Hussainova, Irina**; Fernandez, Jose Francisco Journal of materials chemistry C 2021 / p. 657-670 : ill

<https://doi.org/10.1039/D0TC04752J> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

## **Erosion of Cr<sub>3</sub>C<sub>2</sub>-based cermets at room and elevated temperatures**

**Antonov, Maksim**; **Hussainova, Irina** Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 137-140 : ill

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

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

## **Erosion-corrosion of Cr<sub>3</sub>C<sub>2</sub>-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 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>

## **Estimation of buttons resistance to rock drilling using laboratory surface fatigue test**

**Antonov, Maksim**; Karlsson, L.; **Sergejev, Fjodor**; **Hussainova, Irina** Proceedings of 37th Leeds-Lyon symposium on Tribology : Leeds, 7th-10th September 2010 2010 / [1] p

## **Evolution of Dirac cone in disclinated graphene**

Rozhkov, M. A.; Kolesnikova, A. L.; **Hussainova, Irina** Reviews on advanced materials science 2018 / p. 137-142 : ill

<https://doi.org/10.1515/rams-2018-0057> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Experimental and theoretical determination of restitution coefficient**

**Kleis, Ilmar**; **Hussainova, Irina**; Štšeglov, Igor International DAAAM : [DAAAM National Estonia] : proceedings of the 1st International Conference, 25-27th September 1997, Tallinn, Estonia 1997 / p. 178-181: ill

## **Experimental and theoretical investigation of particle-wall collision**

**Kleis, Ilmar**; **Hussainova, Irina**; Štšeglov, Igor OST-97 Symposium on Machine Design, Tallinn, Estonia, May 22-23, 1997 : proceedings 1997 / p. 208-213 [https://www.ester.ee/record=b1083704\\*est](https://www.ester.ee/record=b1083704*est)

## **Experimental setup for testing and mapping of high temperature abrasion and oxidation synergy**

**Antonov, Maksim**; **Hussainova, Irina** Wear 2009 / 11, p. 1798-1803 : ill

## **Fabrication of alumina nanocomposites reinforced by a novel type of alumina nanofiber and graphene coated alumina nanofiber**

**Drozdova, Maria**; **Ivanov, Roman**; **Aghayan, Marina**; **Hussainova, Irina**; **Dong, Minjie**; Rodriguez, Miguel Angel Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 337-341 : ill

## **Fabrication of Cu-Mo composites combining SHS and SLS technologies : poster presentation**

**Aydinyan, Sofiya**; **Minasyan, Tatevik**; Kirakosyan, Hasmik; **Aghayan, Marina**; **Hussainova, Irina**; Kharatyan, Suren ECerS 2017

: 15th Conference & Exhibition of the European Ceramic Society, July 9–13, 2017, Budapest, Hungary : Book of abstracts 2017 / p. 48 <https://static.akcongress.com/downloads/ecers/ecers2017-abstract-book.pdf>

#### **Fabrication of NiO/NiAl<sub>2</sub>O<sub>4</sub> nanofibers by combustion method**

**Aghayan, Marina; Hussainova, Irina** Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 31-34 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.31>

#### **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>

#### **Features of cermets wear resistance**

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

#### **A few-layered graphene on alumina nanofibers for electrochemical energy conversion**

**Hussainova, Irina; Ivanov, Roman; Stamatin, Serban; Anoshkin, Ilya; Skou, Eivind; Nasibulin, Albert** Carbon 2015 / p. 157-164 : ill <https://doi.org/10.1016/j.carbon.2015.03.004>

#### **Fibrous alumina-based Ni-CeO<sub>2</sub> catalyst : synthesis, structure and properties in propane pre-reforming**

Potemkin, D. I.; **Aghayan, Marina; Kamboj, Nikhil Kumar; Hussainova, Irina** Materials letters 2018 / p. 35-37 : ill <https://doi.org/10.1016/j.matlet.2017.12.039> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Fibrous alumina-based Ni-MO<sub>x</sub> (M= Mg, Cr, Ce) catalysts for propane pre-reforming**

Uskov, S. I.; Potemkin, D. I.; **Kamboj, Nikhil Kumar; Snytnikov, P.V.; Hussainova, Irina** Materials letters 2019 / art. 126741, 4 p. : ill <https://doi.org/10.1016/j.matlet.2019.126741> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Friction and wear of fiber reinforced polyimide composites**

**Zhao, Gai; Hussainova, Irina; Antonov, Maksim;** Wang, Qihua; Wang, Tingmei; **Veinthal, Renno** 19th International Conference on Wear of Materials : Portland, Oregon, USA, 14-18 April 2013 : conference abstracts 2013 / [p. 92]

#### **Friction and wear of fiber reinforced polyimide composites**

**Zhao, Gai; Hussainova, Irina; Antonov, Maksim;** Wang, Qihua; Wang, Tingmei Wear 2013 / p. 122-129 : ill

#### **Friction studies of metal surfaces with various 3D printed patterns tested in dry sliding conditions**

Holovenko, Yaroslav; **Antonov, Maksim; Kollo, Lauri; Hussainova, Irina** Proceedings of the Institution of Mechanical Engineers. Part J, Journal of engineering tribology 2018 / p. 43-53 <https://doi.org/10.1177/1350650117738920> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Functionalization of alumina nanofibers with metal oxides = Alumiiniumoksiidnanokiudude funktsionaliseerimine metalloksiididega**

**Aghayan, Marina** 2016 [http://www.ester.ee/record=b4560629\\*est](http://www.ester.ee/record=b4560629*est)

#### **Functionalization of gamma-alumina nanofibers by alpha-alumina via solution combustion synthesis**

**Aghayan, Marina; Voltšihhin, Nikolai;** Rodriguez, Miguel Angel; Rubio-Marcos, Fernando; **Dong, Minjie; Hussainova, Irina** Ceramics international 2014 / p. 12603-12607 : ill

#### **Functionality and activity of Sol–Gel-Prepared Co and Fe co-Doped Lead-Free BTO for thermo-optical applications**

Tihti, Mohammed; Ibrahim, Jamal Eldin F. M.; Basyooni, Mohamed A.; En-nadir, Redouane; **Hussainova, Irina;** Kocserha, Istvan ACS omega 2023 / p. 5003–5016 : ill <https://doi.org/10.1021/acsomega.2c07660>

#### **Functionally graded tunable microwave absorber with graphene-augmented alumina nanofibers**

Shamshirgar, Ali Saffar; **Rojas Hernandez, Rocio Estefania;** Tewari, Girish C.; Fernandez, Jose Francisco; **Ivanov, Roman;** Karppinen, Maarit; **Hussainova, Irina** ACS applied materials & interfaces 2021 / p. 21613-21625 <https://doi.org/10.1021/acsami.1c02899> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Functionally gradient Ti<sub>6</sub>Al<sub>4</sub>V-TiB composite produced by spark plasma sintering**

**Liu, Le; Ivanov, Roman; Kumar, Rahul, 1993-; Minasyan, Tatevik; Antonov, Maksim; Hussainova, Irina** IOP conference series : materials science and engineering 2021 / art. 012004, 6 p. : ill <https://doi.org/10.1088/1757-899X/1140/1/012004>

#### **Graphene augmented nanofibers and their versatile applications**

**Hussainova, Irina; Ivanov, Roman** Reviews on advanced materials and technologies 2020 / p. 9–25 <https://reviewsamt.com/issues/4>

#### **Graphene coated alumina nanofibers as zirconia reinforcement**

**Ivanov, Roman; Hussainova, Irina; Aghayan, Marina; Petrov, Mihail** Proceedings of the 9th International Conference of

**Graphene covered alumina nanofibers as toughening agent in alumina ceramics**

**Hussainova, Irina; Drozdova, Maria; Aghayan, Marina; Ivanov, Roman; Perez-Coll, Domingo** 13th International Ceramics Congress. Part B 2014 / p. 49-53

**Graphene-augmented nanofiber scaffolds demonstrate new features in cells behaviour**

**Kazantseva, Jekaterina; Ivanov, Roman; Gasik, Michael; Neumann, Toomas; Hussainova, Irina** Scientific reports 2016 / art. 30150, p. 1-8 : ill <http://dx.doi.org/10.1038/srep30150>

**Graphene-augmented nanofiber scaffolds trigger gene expression switching of four cancer cell types**

**Kazantseva, Jekaterina; Ivanov, Roman; Gasik, Michael; Neuman, Toomas; Hussainova, Irina** ACS biomaterials science & engineering 2018 / p. 1622-1629 : ill <https://doi.org/10.1021/acsbiomaterials.8b00228> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Graphene-ceramic hybrid nanofibers for ultrasensitive electrochemical determination of ascorbic acid**

**Taleb, Masoud; Ivanov, Roman; Bereznev, Sergei; Kazemi, Sayed Habib; Hussainova, Irina** Microchimica acta 2017 / p. 897-905 : ill <https://doi.org/10.1007/s00604-017-2085-7>

**Graphene-encapsulated aluminium oxide nanofibers as a novel type of nanofillers for electroconductive ceramics**

**Ivanov, Roman; Hussainova, Irina; Aghayan, Marina; Drozdova, Maria; Perez-Coll, Domingo; Rodriguez, Miguel Angel; Rubio-Marcos, Fernando** Journal of the European Ceramic Society 2015 / p. 4017-4021 : ill <http://dx.doi.org/10.1016/j.jeurceramsoc.2015.06.011>

**Hierarchically structured functional ceramic composites with graphene augmented nanofibers = Hierarhiliselt struktureeritud funktsionaalsed keraamilised komposiidid grafeenlisandiga nanokiududega**

**Saffarshamshirgar, Ali** 2021 [https://www.ester.ee/record=b5453046\\*est](https://www.ester.ee/record=b5453046*est) <https://digikogu.taltech.ee/et/Item/13881820-10e9-4116-bf2c-440a4c2f7b9b> <https://doi.org/10.23658/taltech.42/2021>

**High pressure high temperature consolidation of ZrC based ceramic composites**

**Minasyan, Tatevik; Aydinyan, Sofiya; Liu, Lei; Cygan, Slawomir; Hussainova, Irina** [2018 World Congress on Powder Metallurgy (WORLDPM2018), Beijing, China, 16-18 September 2018 2018 / p. [515–518] : [USB]

**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 wear of cermet particle reinforced NiCrBSi hardfacing**

**Zikin, Arkadi; Antonov, Maksim; Hussainova, Irina** Tribology international 2013 / p. 45-55 : ill

**Highly textured zinc aluminate: Nd, Ce films over sapphire for NIR emitting applications**

**Rojas Hernandez, Rocio Estefanía; Rubio-Marcos, Fernando; Serrano, Aida; Roman-Sanchez, Sara; Fernandez, Jose Francisco; Hussainova, Irina** Ceramics international 2023 <https://doi.org/10.1016/j.ceramint.2022.12.190>

**High-temperature erosion of Cr<sub>3</sub>C<sub>2</sub>-based cermets**

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

**High-temperature erosion of Cr<sub>3</sub>C<sub>2</sub>-based cermets [Electronic resource]**

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

**High-temperature wear performance of hBN-added Ni-W composites produced from combustion-synthesized powders**

**Kumar, Rahul, 1993-; Aydinyan, Sofiya; Ivanov, Roman; Liu, Le; Antonov, Maksim; Hussainova, Irina** Materials 2022 / art. 1252 <https://doi.org/10.3390/ma15031252> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Homogeneous deposition of copper oxide on mesoporous 1D alumina nanofibres by combustion approach**

**Kirakosyan, Khachatur; Aghayan, Marina; Rodriguez, Miguel Angel; Taleb, Masoud; Hussainova, Irina** Proceedings of the Estonian Academy of Sciences 2016 / p. 97-100 : ill [https://artiklid.elnet.ee/record=b2768206\\*est](https://artiklid.elnet.ee/record=b2768206*est)

**Hot sliding wear of 88 wt.% TiB-Ti composites from SHS produced powders**

**Kumar, Rahul, 1993-; Liu, Le; Antonov, Maksim; Ivanov, Roman; Hussainova, Irina** Materials 2021 / art. 1242, 14 p.: ill <https://doi.org/10.3390/ma14051242> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Hybrid graphene/alumina nanofibers for electroconductive zirconia**

**Drozdova, Maria; Perez-Coll, Domingo; Aghayan, Marina; Ivanov, Roman; Rodriguez, Miguel Angel; Hussainova, Irina** Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 15-20 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.15>

### **Hybrid graphene-ceramic nanofibre network for spontaneous neural differentiation of stem cells**

Kazantseva, Jekaterina; **Hussainova, Irina; Ivanov, Roman**; Neumann, Toomas; Gasik, Michael Interface focus 2018 / 6 p. : ill  
<https://doi.org/10.1098/rsfs.2017.0037> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Hybrid syntactic foams of metal - fly ash cenosphere - clay**

Shishkin, Andrei; Mironovs, Viktors; Zemchenkov, Vjacheslav; **Antonov, Maksim; Hussainova, Irina** Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 35-40 : ill  
<http://dx.doi.org/10.4028/www.scientific.net/KEM.674.35>

### **Impact between spherical glass particles and different target surfaces**

**Kleis, Ilmar; Hussainova, Irina; Štšeglov, Igor** Proceedings of the Estonian Academy of Sciences. Engineering 1998 / 1, p. 18-25: ill

### **Impact damage and impact transitions in glass**

**Hussainova, Irina; Pappel, Toivo** OST-99 Symposium on Machine Design : Stockholm, 30th Sept. - 1st Oct., 1999 : proceedings 1999 / p. 59-64: ill

### **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

### **In situ Mo(Si,Al)2-based composite through selective laser melting of a MoSi2-30 wt.% AlSi10Mg mixture**

**Minasyan, Tatevik; Aydinyan, Sofiya**; Toyserkani, Ehsan; **Hussainova, Irina** Materials 2020 / art. 3720 ; 13 p  
<https://doi.org/10.3390/ma13173720> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Influence of Cr, Ti and Zr oxides formation on high temperature sliding of NiAl-based plasma spray coatings**

Poliarus, Olena; Umanskyi, Oleksandr; Ukrainets, Maksym; Kostenko, Oleksii; **Antonov, Maksim; Hussainova, Irina** Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 308-312 : ill  
<http://dx.doi.org/10.4028/www.scientific.net/KEM.674.308>

### **Influence of interphases on the mechanical properties of alumina nanofibers reinforced alumina nanocomposite**

**Aghayan, Marina; Hussainova, Irina**; Gasik, Michael; **Kollo, Lauri** Proceedings of the 1st ISN2A, 1st International Symposium on Nanoparticles/Nanomaterials and Applications : Caparica - Almada, Portugal, 20th-22th January 2014 2014 / p. 97

### **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

### **The influence of thermal dilution on the microstructure evolution of some combustion-synthesized refractory ceramic composites**

**Aydinyan, Sofiya**; Kharatyan, Suren; **Hussainova, Irina** Crystals 2022 / art. 59 <https://doi.org/10.3390/cryst12010059> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **In-situ study of TiO2 thin-films mechanical behavior under loading**

Löhmus, Rünno; **Hussainova, Irina**; Leinberg, Silver; Aarik, Jaan; Tarre, Aivar; Löhmus, Ants Proceedings of Material Research Society Spring Meeting : April 9-13, 2007, San Francisco, CA, USA 2007 / ? p

### **Intermediate and low radiofrequency electromagnetic field transmission properties in case of common building materials [Online resource]**

**Koppel, Tarmo**; Shishkin, Andrei; Toropovs, Nikolajs; Haldre, Heldur; **Hussainova, Irina**; Mironovs, Viktors; **Tint, Piia** 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTU CON) : October 13, 14, 2016 : conference proceedings 2016 / [6] p. : ill <https://doi.org/10.1109/RTU CON.2016.7763144>

### **Introduction to nanomaterials and nanotechnology**

Pokropivny, Vladimir; Löhmus, Rünno; **Hussainova, Irina**; Pokropivny, Alex; Vlassov, Sergei 2007  
[https://www.eester.ee/record=b2310170\\*est](https://www.eester.ee/record=b2310170*est)

### **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 nickel and copper microfoils defect formation under the stress**

Leinberg, Silver; Lõhmus, Rünno; **Hussainova, Irina; Nisumaa, Reet** 15th International Baltic Conference "Engineering Materials & Tribology, Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 42-43 : ill

**Investigation of particle - wall impact process**

**Kleis, Ilmar; Hussainova, Irina** Wear 1999 / p. 168-173 : ill

**Investigation of particle impact process**

**Kleis, Ilmar; Pappel, Toivo; Hussainova, Irina; Štšeglov, Igor** Journal of friction and wear 1997 / p. 730-735

**Investigation of particle-wall collision**

**Kleis, Ilmar; Frishman, Feliks; Hussainova, Irina** OST-96 Symposium on Machine Design, [Stockholm], May 13-14, 1996 : program, abstracts 1996 / [1] p

**Investigation of particle-wall collision**

**Kleis, Ilmar; Frishman, Feliks; Hussainova, Irina; Štšeglov, Igor** OST-96 Symposium on Machine Design, [Stockholm], May 13-14, 1996 : proceedings 1996 / p. 16-22: ill

**Investigation of particle-wall collision**

**Hussainova, Irina** Proceedings of the Second National DAAAM Conference in Estonia : Science'96 1997 / p. 13-19: ill

**Investigation of particle-wall collision and erosion prediction**

**Hussainova, Irina** 1999 [http://www.ester.ee/record=b1371968\\*est](http://www.ester.ee/record=b1371968*est)

**Investigation of particle-wall collision and erosion prediction**

**Hussainova, Irina** 1999 [http://www.ester.ee/record=b1055069\\*est](http://www.ester.ee/record=b1055069*est)

**Investigation of the oblique impact of a hard particles against a solid targets**

**Kleis, Ilmar; Hussainova, Irina** OST-98 Symposium on Machine Design, Oulanka, Finland, October 1-3, 1998 : proceedings 1998 / p. 57-65: ill

**Investigation of the surface fatigue of carbide composites and PVD hard coatings**

**Sergejev, Fjodor; Antonov, Maksim; Gregor, Andre; Hussainova, Irina; Kulu, Priit; Kübarsepp, Jakob** Proceedings of the 6th International Conference of DAAAM Baltic "Industrial Engineering" : 24-26th April 2008, Tallinn, Estonia. [2] 2008 / p. 543-548 : ill

**Isothermal oxidation of SLM fabricated Mo(Si<sub>1-x</sub>Al<sub>x</sub>)<sub>2</sub>-based composite**

**Minasyan, Tatevik; Liu, Le; Toyserkani, Ehsan; Hussainova, Irina** IOP conference series : materials science and engineering 2021 / art. 012003, 8 p.: ill <https://doi.org/10.1088/1757-899X/1140/1/012003>

**Laser powder-bed fusion of ceramic particulate reinforced aluminum alloys: a review**

**Minasyan, Tatevik; Hussainova, Irina** Materials 2022 / art. 2467 <https://doi.org/10.3390/ma15072467> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Laser powder-bed fusion of Mo(Si,Al)<sub>2</sub> – based composite for elevated temperature applications**

**Minasyan, Tatevik; Ivanov, Roman; Toyserkani, Ehsan; Hussainova, Irina** Journal of alloys and compounds 2021 / art. 161034 <https://doi.org/10.1016/j.jallcom.2021.161034> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Lattice of MoSi<sub>2</sub>/Si<sub>3</sub>N<sub>4</sub> by selective laser melting**

**Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya; Kollo, Lauri; Aghayan, Marina; Hussainova, Irina** European Powder Metallurgy Association : proceedings : 14 – 18 October 2018, Bilbao, Spain 2018 / art. 3993050 [USB] <https://www.epma.com/publications/euro-pm-proceedings/product/euro-pm2018-proceedings-usb>

**Layered functionally graded alumina ceramic composites**

**Drozdova, Maria; Ivanov, Roman; Rodriguez, Miguel Angel; Hussainova, Irina** ECerS 2017 : 15th Conference & Exhibition of the European Ceramic Society, July 9–13, 2017, Budapest, Hungary : Book of abstracts 2017 / p. 227 <https://static.akcongress.com/downloads/ecers/ecers2017-abstract-book.pdf>

**Layered structure of alumina/graphene-augmented-inorganic-nanofibers with directional electrical conductivity**

**Saffarshamshirgar, Ali; Rojas Hernandez, Rocio Estefania; Mikli, Valdek; Karppinen, Maarit; Hussainova, Irina** Carbon 2020 / p. 634-645 <https://doi.org/10.1016/j.carbon.2020.06.038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Low temperature, spark plasma sintering behavior of zirconia added by a novel type of alumina nanofibers**

**Voltšihin, Nikolai; Rodriguez, Miguel Angel; Hussainova, Irina; Aghayan, Marina** Ceramics international 2014 / p. 7235-7244 : ill

### **Macroporous silicon-wollastonite scaffold with Sr/Se/Zn/Mg-substituted hydroxyapatite/chitosan hydrogel**

Ressler, Antonia; **Kamboj, Nikhil Kumar**; Ledinski, Maja; Rogina, Anamarija; Urlic, Inga; **Hussainova, Irina**; Ivankovic, Hrvoje; Ivankovic, Marica Open Ceramics 2022 / art. 100306 <https://doi.org/10.1016/j.oceram.2022.100306> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Manufacturing of silicon – Bioactive glass scaffolds by selective laser melting for bone tissue engineering**

Rodrigo-Vazquez, C. Sara; **Kamboj, Nikhil Kumar**; Aghayan, Marina; Saez, Ada; De Aza, Antonio de; Rodriguez, Miguel Angel; **Hussainova, Irina** Ceramics international 2020 / p. 26936-26944 : ill <https://doi.org/10.1016/j.ceramint.2020.07.171> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Mapping of impact-abrasive wear performance of WC-Co cemented carbides**

**Antonov, Maksim**; **Veinthal, Renno**; **Yung, Der-Liang**; **Katušin, Dmitri**; **Hussainova, Irina** Wear 2015 / p. 971-978 : ill <http://dx.doi.org/10.1016/j.wear.2015.02.031>

### **Mechanical behaviour of nanostructured copper produced by SPD method**

**Hussainova, Irina**; **Kommel, Lembit**; Löhmus, Rünno; Löhmus, Ants Proceedings of International Conference on Modern Materials Science > September 26-30, 2005, Kiev, Ukraine 2005 / ? p

### **Mechanical characterization and modeling of chromium carbide based composites**

Jasiuk, Iwona; **Hussainova, Irina**; Hamed, Elham Proceedings of 16th International Conference on Mechanics of Composite Materials : MCM 2010 : May 24-28, Riga, Latvia 2010

### **Mechanical characterization and wear performance of WC–ZrO<sub>2</sub>–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**; **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 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 of aluminum, zirconium, hafnium and tantalum oxides and their nanolaminates grown by atomic layer deposition**

Jõgiaas, Taivo; Zabels, Roberts; Tamm, Aile; Merisalu, Maido; **Hussainova, Irina** Surface and coatings technology 2015 / p. 36-42 : ill <http://dx.doi.org/10.1016/j.surfcoat.2015.10.008>

### **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]

### **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)

### **Mesoporous fibrous silicon nitride by catalytic nitridation of silicon**

**Minasyan, Tatevik**; **Liu, Le**; Aghayan, Marina; Rodriguez, Miguel Angel; **Aydinyan, Sofiya**; **Hussainova, Irina** Progress in natural science: materials international 2019 / p. 190-197 : ill <https://doi.org/10.1016/j.pnsc.2019.03.017> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Mesoporous fibrous silicon nitride by catalytic nitridation of silicon and selective laser melting**

**Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya; Hussainova, Irina** XVI Conference and Exhibition Of The European Ceramic Society : abstract book 2019 / p. 80

**Metal powder/fly ash cenosphere/modified clay composite**

**Šiškins, Andrejs; Mironovs, Viktors; Zemčenkova, Vjačeslavs; Hussainova, Irina** Euro PM2014 proceedings : PM Functional Materials 2014

**Metal-coated cenospheres obtained via magnetron sputter coating : a new precursor for syntactic foams**

**Shishkin, A.; Hussainova, Irina; Kozlov, V.; Lisnanskis, M.; Leroy, P.; Lehmus, D.** JOM : the journal of the minerals, metals & materials society 2018 / p. 1319-1325 : ill <https://doi.org/10.1007/s11837-018-2886-0> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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

**Micro-scale studies of wear of composite materials**

**Hussainova, Irina** The 4th Nordic-Baltic SPM Workshop, Tartu, Estonia, May 29-31, 2002 : abstract book 2002 / p. 27-28

**Microscopic characterization of surface morphology of nanostructured copper**

**Hussainova, Irina; Kommel, Lembit; Lõhmus, Rünno; Volobujeva, Olga** Reviews on advanced materials science 2005 / p. 266-271 : ill

**Microscopic study of structural features of nanocrystalline copper [Electronic resource]**

**Lõhmus, Rünno; Hussainova, Irina; Vesi, U.; Nisumaa, Reet** Proceedings of NeNaMat Conference Nano 05 : November 8-11, Brno, Czech Republic 2005 / ? p. [CD-ROM]

**Microstructural aspects of ceramic-metal composites performance in erosive media**

**Hussainova, Irina; Antonov, Maksim; Volobujeva, Olga** Advances in science and technology 2006 / 11th International Ceramic Congress, p. 132-141 : ill

**Microstructural aspects of erosive wear of particulate reinforced composites**

**Hussainova, Irina; Pirso, Jüri** Book of the abstracts of 2003 International Conference on Powder Metallurgy & Particulate Materials : Las Vegas, USA, 2003 2003 / p. 122

**Microstructural aspects of erosive wear of particulate reinforced composites [Electronic resource]**

**Hussainova, Irina; Pirso, Jüri** Proceedings of 2003 International Conference on Powder Metallurgy & Particulate Materials : PM2TEC2003 : Las Vegas, USA, 2003 2003 / [CD-ROM]

**Microstructural aspects of wear of nonhomogeneous materials**

**Hussainova, Irina** Abstracts of 1st ESF Nanotribology Workshop, Portovenere, Italy, 2002 2002 / p. 43

**Microstructural design of ceramic-metal composites for tribological applications**

**Hussainova, Irina** Abstract book of the 5th Asian-Australian Conference on Composite Materials : ACCM-5 : 27-30 November, 2006, Hong-Kong 2006 / p. 16-17

**Microstructural design of ceramic-metal composites for tribological applications**

**Hussainova, Irina** Advances in composite materials and structures 2007 / p. 125-128 : ill

**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](https://artiklid.elnet.ee/record=b1012788*est)

**Microstructural evolution and mechanical properties of nanostructured copper**

**Kommel, Lembit; Hussainova, Irina; Volobujeva, Olga; Lõhmus, Rünno** Proceedings of the Estonian Academy of Sciences. Engineering 2005 / 3, p. 187-197 : ill

**Microstructural investigation of ni-based high temperature self-lubricating laser claddings containing sulfides of nickel, copper or bismuth**

**Kumar, Rahul, 1993-; Torres, Hector; Rodríguez Ripoll, Manel; Antonov, Maksim; Hussainova, Irina** Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 31 l. [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

**Microstructure and erosive wear in ceramic-based composites**

**Hussainova, Irina** Wear 2005 / p. 357-365 : ill

#### **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

#### **Microstructure and high temperature tribological behaviour of self-lubricating Ti-TiBx composite doped with Ni-Bi**

**Kumar, Rahul, 1993-; Torres, Hector; Aydinyan, Sofiya; Antonov, Maksim; Varga, Markus; Rodriguez Ripoll, Manel; Hussainova, Irina** Surface and coatings technology 2022 / art. 128827 <https://doi.org/10.1016/j.surfcoat.2022.128827> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Microstructure and mechanical characterization of WC-based composites doped by zirconia**

**Hussainova, Irina; Kimmari, Eduard; Kollo, Lauri; Jasiuk, Iwona** Proceedings of 16th International Conference on Mechanics of Composite Materials : MCM 2010 : May 24-28, Riga, Latvia 2010

#### **Microstructure and properties development of copper during severe plastic deformation**

**Kommel, Lembit; Hussainova, Irina; Volobujeva, Olga** Materials & design 2007 / 7, p. 2121-2128 : ill <https://www.sciencedirect.com/science/article/pii/S0261306906001713>

#### **Microstructure and properties development of copper during severe plastic deformation [Electronic resource]**

**Hussainova, Irina; Kommel, Lembit** Nanotechnology in Northern Europe : Congress : Finland, 2005 2005 / p. 54 [CD-ROM]

#### **Microwave reflectance and transmittance properties of conductive composite materials**

**Shishkin, Andrei; Koppel, Tarmo; Mironov, Viktor; Hussainova, Irina; Locs, Janis; Haldre, Heldur** Energy procedia 2017 / p. 354-361 : ill <https://doi.org/10.1016/j.egypro.2017.04.006>

#### **Microwave synthesis of B4C nanopowder for subsequent spark plasma sintering**

**Davtyan, D.; Mnatsakanyan, R.A.; Liu, Le; Aydinyan, Sofiya; Hussainova, Irina** Journal of materials research and technology 2019 / p. 5823-5832 : ill <https://doi.org/10.1016/j.jmrt.2019.09.052> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Mikro- ja nanotehnoloogiliste uurimismeetodite arendamine tööstuslike materjalide väljatöötamiseks : kommentaar Eesti Vabariigi teaduse aastapreemia pälvinud tööde tsüklile**

**Kübarsepp, Jakob; Lõhmus, Ants; Hussainova, Irina; Lõhmus, Rünno** Tallinna Tehnikaülikooli aastaraamat 2005 2006 / lk. 269-284

#### **Mixed interatomic potentials for simulation of nanofriction and interface phenomena in ceramics**

**Pokropivny, Vladimir; Lõhmus, Ants; Hussainova, Irina** 15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 7-10 : ill

#### **Mo-Cu pseudoalloys by combustion synthesis and spark plasma sintering**

**Minasyan, Tatevik; Kirakosyan, Hasmik; Aydinyan, Sofiya; Liu, Lei; Kharatyan, Suren; Hussainova, Irina** Journal of materials science 2018 / p. 16598-16608 <https://doi.org/10.1007/s10853-018-2787-1> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **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 [https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est) <https://doi.org/10.4028/www.scientific.net/KEM.799>

#### **Modern Materials and Manufacturing (MMM 2021), 27th-29th April 2021, Tallinn, Estonia**

2021 <https://iopscience.iop.org/issue/1757-899X/1140/1>

#### **Modified simulation of the oblique impact of a hard particle against a ductile solid**

**Hussainova, Irina** OST-99 Symposium on Machine Design : Stockholm, 30th Sept. - 1st Oct., 1999 : proceedings 1999 / p. 49-58: ill

#### **Mo(Si,Al)2 by laser powder bed fusion of AlSi10Mg and combustion synthesized MoSi2**

**Minasyan, Tatevik; Ivanov, Roman; Toyserkani, Ehsan; Hussainova, Irina** Materials letters 2022 / art. 131041 <https://doi.org/10.1016/j.matlet.2021.131041> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Mo(Si1-x,Alx)2-based composite by reactive laser powder-bed fusion**

**Minasyan, Tatevik; Aydinyan, Sofiya; Liu, Le; Volobujeva, Olga; Toyserkani, Ehsan; Hussainova, Irina** Materials letters 2020 / art. 128776, 5 p. : ill <https://doi.org/10.1016/j.matlet.2020.128776> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **MoSi2 based composites by selective laser melting**

**Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya; Hussainova, Irina** APICAM2019 program : [abstracts] 2019 / p. [218] <https://www.apicam2019.com.au/LiteratureRetrieve.aspx?ID=200067>

**MoSi<sub>2</sub> based composites preparation by combustion synthesis with subsequent selective laser sintering [Online resource]**

**Minasyan, Tatevik**; Rodriguez, Miguel Angel; **Liu, Le**; **Aghayan, Marina**; **Kollo, Lauri**; **Hussainova, Irina** Abstracts : 14th International Ceramics Congress 2018 / CB-10.2:L07 [http://2018.cimtec-congress.org/abstracts\\_focused\\_session\\_cb-10](http://2018.cimtec-congress.org/abstracts_focused_session_cb-10)

**MoSi<sub>2</sub>-based composites by selective laser melting = Selektiivse lasersulatuse teel valmistatud MoSi<sub>2</sub> baasil komposiidid**

**Minasyan, Tatevik** 2020 [https://www.ester.ee/record=b5388072\\*est](https://www.ester.ee/record=b5388072*est) <https://digikogu.taltech.ee/et/Item/26aa1fe6-b853-43b8-887a-51b6efa0b5ef>

**A multifunctional strontium/silver-co-substituted hydroxyapatite derived from biogenic source as antibacterial biomaterial**

Ressler, Antonia; Ivanković, Tomislav; Polak, Bruno; Ivanišević, Irena; Kovačić, Marin; Urlić, Inga; **Hussainova, Irina**; Ivanković, Hrvoje Ceramics International 2022 / p. 18361 - 18373 <https://doi.org/10.1016/j.ceramint.2022.03.095> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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 analysis and micromechanical modeling of chromium carbide based composites**

**Hussainova, Irina**; Hamed, Elham; Jasiuk, Iwona Nanomeasure 2010 : June 3-4, 2010, Krakow, Poland : abstract book 2010

**Nanoindentation of Cr<sub>3</sub>C<sub>2</sub>-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]

**Nanoindentation testing and modeling of chromium carbide based composites**

**Hussainova, Irina**; Hamed, Elham; Jasiuk, Iwona Mechanics of composite materials 2011 / p. 667-678 : ill

**Nanoscale dissipation of radiation energy in solid target**

**Hussainova, Irina**; Saal, K.; Löhmus, Ants; Kink, I. Abstracts of 1st ESF Nanotribology Workshop : Turkey, 2003 2003 / p. 30

**Nanostructural evolution in mesoporous networks using in situ high-speed temperature scanner**

**Kamboj, Nikhil Kumar**; **Aghayan, Marina**; Rubio-Marcos, Fernando; Nazaretyan, Khachatur; Rodriguez, Miguel Angel; Kharatyan, Suren; **Hussainova, Irina** Ceramics International 2018 / p. 12265-12272 : ill <https://doi.org/10.1016/j.ceramint.2018.04.010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**NeTTUN project : how to increase the lifetime of TBM drag bits?**

Fridrici, V.; Antonov, Maksim; Katušin, Dmitri; Yung, Der-Liang; Veinthal, Renno; **Hussainova, Irina** 2nd Eastern European Tunnelling Conference "Tunneling in a Challenging Environment", Making tunneling business in difficult times : EETC 2014, Athens, Greece, 28 September - 1 October 2014 2014

**New high frequency surface fatigue wear tester : design and first results**

**Antonov, Maksim**; Kulu, Priit; Sergejev, Fjodor; **Hussainova, Irina**; **Veinthal, Renno** Proceedings of Nordtrib 2008 : 13th Nordic Symposium on Tribology : Tampere, Finland, 10-13 June, 2008 2008 / p. NT2008-87-24

**New methodology for the antifungal testing of surfactant-free silver metal nanoparticles for applications in green housing**

**Küünal, Siim**; **Kutti, Sander**; **Rauwel, Protima**; Wragg, David; **Hussainova, Irina**; **Rauwel, Erwan** Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 133-138 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.133>

**Non-equilibrium grain boundaries with excess energy in graphene**

Romanov, A. E.; Kolesnikova, A. L.; Orlova, T. S.; **Hussainova, Irina**; Bougrov, V. E.; Valiev, R. Z. Carbon 2015 / p. 223-231 : ill <http://dx.doi.org/10.1016/j.carbon.2014.09.053>

**Novel alumina-nanocarbon hybrids**

**Hussainova, Irina**; Anoshkin, Ilya; **Ivanov, Roman**; **Kübarsepp, Jakob** 38th International Conference & Exposition on Advanced Ceramics and Composites : abstract book : January 26-31, 2014, Daytona Beach, Florida 2014 / p. 117

**Novel approach for the preparation of shapes from TiB<sub>2</sub>-Si<sub>3</sub>N<sub>4</sub> composite by selective laser melting**

**Liu, Le**; **Minasyan, Tatevik**; **Aydinyan, Sofiya**; **Hussainova, Irina** Proceedings of the Euro PM 2018 Congress : Bilbao, Spain. 14-18 October 2018 2018 <https://www.epma.com/publications/euro-pm-proceedings/product/euro-pm2018-am-special-materials>

**Novel approach for the synthesis and sintering of TiB<sub>2</sub>-Si<sub>3</sub>N<sub>4</sub> ceramic composite**

**Liu, Le**; **Minasyan, Tatevik**; **Aydinyan, Sofiya**; **Hussainova, Irina** European Powder Metallurgy Association : proceedings : 14 - 18 October 2018, Bilbao, Spain 2018 / art. 3987173 [USB] <https://www.epma.com/publications/euro-pm-proceedings/product/euro-pm2018->

**A novel approach to fabricate Si<sub>3</sub>N<sub>4</sub> by selective laser melting**

**Minasyan, Tatevik; Liu, Le; Aghayan, Marina; Kollo, Lauri; Kamboj, Nikhil Kumar; Aydinyan, Sofiya; Hussainova, Irina** Ceramics international 2018 / p. 13689-13694 : ill <https://doi.org/10.1016/j.ceramint.2018.04.208> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A novel route for the preparation of TiB<sub>2</sub>/TiN composites by selective laser sintering [Online resource]**

**Liu, Le; Minasyan, Tatevik; Aydinyan, Sofiya; Hussainova, Irina** Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fmtdk.ut.ee/teesid-2018/>

**Novel silicon-wollastonite based scaffolds for bone tissue engineering produced by selective laser melting**

**Kamboj, Nikhil Kumar; Aghayan, Marina; Rodrigo-Vazquez, Sara; Rodriguez, Miguel Angel; Hussainova, Irina** Ceramics International 2019 / p. 24691-24701 : ill <https://doi.org/10.1016/j.ceramint.2019.08.208> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Numerical study on the effect of geometry on mechanical behavior of triply periodic minimal surfaces**

**Rezapourianghahfarokhi, Mansoureh; Kamboj, Nikhil Kumar; Hussainova, Irina** IOP conference series : materials science and engineering 2021 / art. 012038 <https://doi.org/10.1088/1757-899X/1140/1/012038>

**On micromechanical problems of erosive wear of particle reinforced composites**

**Hussainova, Irina** Proceedings of the Estonian Academy of Sciences. Engineering 2005 / 1, p. 46-58 : ill

**Optimal mechanical properties of Hydroxyapatite gradient Voronoi porous scaffolds for bone applications — a numerical study**

**Rezapourianghahfarokhi, Mansoureh; Hussainova, Irina** Journal of the mechanical behavior of biomedical materials 2023 / art. 106232 <https://doi.org/10.1016/j.jmbbm.2023.106232>

**Optimisation of trabecular bone mimicking silicon-hydroxyapatite based composite scaffolds processed through selective laser melting**

**Ressler, Antonia; Kamboj, Nikhil Kumar; Ivanković, Hrvoje; Hussainova, Irina** Open Ceramics 2022 / art. 100252 <https://doi.org/10.1016/j.oceram.2022.100252> [Journal metrics at Scopus](#) [Article at Scopus](#)

**Optimization of mechanical strength of titania fibers fabricated by direct drawing**

**Hanschmid, Kelli; Tätte, Tanel; Hussainova, Irina** Applied physics. A, Materials science & processing 2013 / p. 663-671 : ill

**Optimization of WC-Ni-ZrO<sub>2</sub> structure**

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

**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.jrmhm.2017.03.019>

**Oxidation-abrasion of TiC-based cermets in SiC medium**

**Antonov, Maksim; Hussainova, Irina; Kübarsepp, Jakob; Traksmäa, Rainer** Wear 2011 / p. 23-31 : ill

**Parametric study on in situ Laser powder bed fusion of Mo(Si<sub>1-x</sub>Al<sub>x</sub>)<sub>2</sub>**

**Minasyan, Tatevik; Aydinyan, Sofiya; Toyserkani, Ehsan; Hussainova, Irina** Materials 2020 / art. 4849, 17 p. : ill <https://doi.org/10.3390/ma13214849> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**PCL/Si-doped multi-phase calcium phosphate scaffolds derived from cuttlefish bone**

**Ressler, Antonia; Bauer, Leonard; Prebeg, Teodora; Ledinski, Maja; Hussainova, Irina; Urlic, Inga; Ivankovic, Marica; Ivankovic, Hrvoje** Materials 2022 / art. 3348 <https://doi.org/10.3390/ma15093348> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Plant mediated synthesis of silver-based nanoparticles and their use as antimicrobial agent in environmentally-friendly applications = Taime ekstrakti abil sünteesitud hõbedal põhinevad nanoosakesed ning nende kasutus antimikroobse vahendina keskkonnasõbralikes rakendustes**

**Küünal, Siim** 2022 <https://doi.org/10.23658/taltech.2/2022> <https://digikogu.taltech.ee/et/Item/c3a53dca-9a76-4356-810f-2d51e44cdbc5> [https://www.ester.ee/record=b5492124\\*est](https://www.ester.ee/record=b5492124*est)

**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

**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, Sotirag; Kulu, Priit; Hussainova, Irina;** Katsich, Christian; Badisch, Ewald Materials science = Medžiagotyra 2012 / p. 12-17 : ill

**Processing and mechanical characterization of WC–ZrO<sub>2</sub>–Ni hybrids**

**Hussainova, Irina; Kollo, Lauri; Smirnov, Anton; Viljus, Mart** World PM2010 proceedings. Vol. 3, Sintered Steel, PM Tool Materials 2010 / p. 583-590

**Processing and mechanical properties of ZrC-ZrO<sub>2</sub> composites**

**Voltšihhin, Nikolai; Hussainova, Irina; Kübarsepp, Jakob; Traksmaa, Rainer** Engineering materials & tribology XXII 2014 / p. 258-261

**Processing and microstructural characterization of WC based cermets doped by ZrO<sub>2</sub>**

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

**Processing and microstructural characterization of WC-based cermets doped by ZrO<sub>2</sub>**

**Kimmari, Eduard; Hussainova, Irina; Smirnov, Anton; Traksmaa, 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 Proceedings of the 37th Int'l Conf & Expo on Advanced Ceramics & Composites (ICACC 2013) 2013 / 1-7 : 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

**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 Cr<sub>3</sub>C<sub>2</sub>**

**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 Cr<sub>3</sub>C<sub>2</sub>**

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

**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

**Processing of ZrC-TiC composites by SPS**

**Yung, Der-Liang; Hussainova, Irina;** Rodriguez, Miguel Angel; **Traksmaa, Rainer** Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 94-99 : ill <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.94>

**Progress in sustainable recycling and circular economy of tungsten carbide hard metal scraps for industry 5.0 and onwards**

**Kumar, Rahul, 1993-; Kariminejad, Arash; Antonov, Maksim; Goljandin, Dmitri; Klimczyk, Piotr; Hussainova, Irina** Sustainability 2023 / art. 12249 <https://doi.org/10.3390/su151612249>

**Quantifying graphitic edge exposure in graphene-based materials and its role in oxygen reduction reactions**

**Stamatin, Serban; Hussainova, Irina; Ivanov, Roman;** Colavita, Paula E. ASC catalysis 2016 / p. 5215-5221 : ill <http://dx.doi.org/10.1021/acscatal.6b00945>

**Raman spectroscopy for reliability assessment of multilayered AlCrN coating in tribo-corrosive conditions [Online resource]**

Baroninš, Janis; Antonov, Maksim; Bereznev, Sergei; Raadik, Taavi; Hussainova, Irina Coatings 2018 / art. 229, 12 p. : ill  
<https://doi.org/10.3390/coatings8070229> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Raman spectroscopy of multilayered AlCrN coating under high temperature sliding/oxidation**

Baroninš, Janis; Antonov, Maksim; Bereznev, Sergei; Raadik, Taavi; 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. 9-14 <https://www.scientific.net/KEM.799.9> [https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est)  
<https://doi.org/10.4028/www.scientific.net/KEM.799.9> [Conference proceeding at Scopus](#) [Article at Scopus](#)

**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 wc powder for manufacturing of duplex interpenetrating tool materials for dry machining**

Kariminejad, Arash; Antonov, Maksim; Hussainova, Irina; Goljandin, Dmitri; Kumar, Rahul; Klimczyk, Piotr GSFMT Scientific Conference 2023 : Tartu, 23-24 May, 2023 : abstracts 2023 / 1 p <https://fntdk.ut.ee/programm-2023/>

**Reliability aspects of PVD coatings sliding under wear and corrosive conditions = PVD pinnete töökindluse aspektid liughõõrdumise ja korrosiooni tingimustes**

Baroninš, Janis 2018 <https://digi.lib.ttu.ee/ii/?11163>

**Review of existing devices for erosion-corrosion testing of materials [Online resource]**

Baroninš, Janis; Antonov, Maksim; Hussainova, Irina Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p <http://fntdk.ut.ee/teesid/>

**Rheological properties of MWCNT-doped titanium-oxo-alkoxide gel materials for fiber drawing**

Tätte, Tanel; Hussainov, Medhat; Amiri, Mahsa; Vanetsev, Alexander; Paalo, Madis; Hussainova, Irina Materials 2022 / art. 1186  
<https://doi.org/10.3390/ma15031186> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Role of A-site (Sr), B-site (Y), and A, B sites (Sr, Y) substitution in lead-free BaTiO<sub>3</sub> ceramic compounds : structural, optical, microstructure, mechanical, and thermal conductivity properties**

Tihti, Mohammed; Ibrahim, Jamal Eldin F. M.; Basyooni, Mohamed A.; Kurovics, Emese; Belaid, Walid; Hussainova, Irina; Kocserha, Istvan Ceramics international 2023 / p. 1947-1959 <https://doi.org/10.1016/j.ceramint.2022.09.160>

**Selective laser melted Ti6Al4V split-P TPMS lattices for bone tissue engineering**

Rezapourianghahfarokhi, Mansoureh; Jasiuk, Iwona; Saarna, Mart; Hussainova, Irina International journal of mechanical sciences 2023 / art. 108353 <https://doi.org/10.1016/j.ijmecsci.2023.108353>

**Selective laser melting for manufacturing of MoSi<sub>2</sub>/Si<sub>3</sub>N<sub>4</sub> composites**

Minasyan, Tatevik; Rodriguez, Miguel Angel; Liu, Le; Aghayan, Marina; Kollo, Lauri; Hussainova, Irina ECerS 2017 : 15th Conference & Exhibition of the European Ceramic Society, July 9–13, 2017, Budapest, Hungary : Book of abstracts 2017 / p. 77-78  
<https://static.akcongress.com/downloads/ecers/ecers2017-abstract-book.pdf>

**Selective laser melting of ceramic composites**

Aydinyan, Sofiya; Liu, Le; Minasyan, Tatevik; Hussainova, Irina XVI Conference and Exhibition Of The European Ceramic Society : abstract book 2019 / p. 22

**Selective laser melting of Ti/cBN composite**

Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya; Antonov, Maksim; 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. 257-262 : ill <https://www.scientific.net/KEM.799.257> [https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est)  
<https://doi.org/10.4028/www.scientific.net/KEM.799.257> [Conference proceeding at Scopus](#) [Article at Scopus](#)

**Selective laser melting of TiB<sub>2</sub>-Ti composite with high content of ceramic phase**

Liu, Le; Minasyan, Tatevik; Ivanov, Roman; Aydinyan, Sofiya; Hussainova, Irina Ceramics international 2020 / p. 21128-21135  
<https://doi.org/10.1016/j.ceramint.2020.05.189> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Selective laser melting of Ti-B-Si system produced by SHS [Online resource]**

**Aydinyan, Sofiya; Liu, Le; Hussainova, Irina** Abstracts : 14th International Ceramics Congress 2018 / CB-10.2:L06  
[http://2018.cimtec-congress.org/abstracts\\_focused\\_session\\_cb-10](http://2018.cimtec-congress.org/abstracts_focused_session_cb-10)

**Selective laser sintered bio-inspired silicon-wollastonite scaffolds for bone tissue engineering**

**Kamboj, Nikhil Kumar;** Kazantseva, Jekaterina; Rahmani Ahranjani, Ramin; Rodriguez, Miguel Angel; **Hussainova, Irina** Materials Science and Engineering : C 2020 / art. 111223 <https://doi.org/10.1016/j.msec.2020.111223>

**Selective laser sintering of combustion synthesized titanium diboride based composites**

**Liu, Le; Minasyan, Tatevik; Aydinyan, Sofiya; Hussainova, Irina** European Powder Metallurgy Association : proceedings : 14 – 18 October 2018, Bilbao, Spain 2018 / art. 3987459 [USB] <https://www.epma.com/publications/euro-pm-proceedings/product/euro-pm2018-proceedings-usb>

**SHS produced TiB<sub>2</sub>-Si powders for selective laser melting of ceramic-based composite**

**Liu, Le; Aydinyan, Sofiya; Minasyan, Tatevik; Hussainova, Irina** Applied sciences 2020 / art. 3283, 12 p. : ill  
<https://doi.org/10.3390/app10093283> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**SHS-derived powders by reactions' coupling as primary products for subsequent consolidation**

**Aydinyan, Sofiya;** Kharatyan, Suren; **Hussainova, Irina** Materials 2021 / art. 5117 <https://doi.org/10.3390/ma14175117> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**SHS-derived powders obtained by coupled reactions and thermal dilution for subsequent consolidation**

**Aydinyan, Sofiya; Hussainova, Irina;** Kharatyan, Suren CIMTEC 2022 : 15th International Ceramics Congress (June 20-24) CIMTEC 2022 : 9th Forum on New Materials (June 25-29) 2022 [http://2022.cimtec-congress.org/focused-session-ca-11\\_1](http://2022.cimtec-congress.org/focused-session-ca-11_1)

**Sintering behavior of ZrC-TiC-MoSi<sub>2</sub> ceramic composite [Online resource]**

**Minasyan, Tatevik; Aydinyan, Sofiya; Liu, Le;** Cygan, Slawomir; **Hussainova, Irina** Explosive Production of New Materials : Science, Technology, Business, and Innovations 2018 / p. 148-150 : ill  
[http://www.ism.ac.ru/events/EPNM2018/EPNM2018\\_BookofPapers.pdf](http://www.ism.ac.ru/events/EPNM2018/EPNM2018_BookofPapers.pdf) <http://dx.doi.org/10.30826/EPNM18-052>

**Sintering of zirconium carbide-based composites**

**Yung, Der-Liang; Voltšihhin, Nikolai; Hussainova, Irina; Kollo, Lauri; Traksmaa, Rainer** Proceedings of EuroPM2012 – Hardmetals : Cermets and Ceramics 2012 / p. 83-88 : ill  
[https://www.researchgate.net/publication/250254543\\_Sintering\\_of\\_zirconium\\_carbide-based\\_composites](https://www.researchgate.net/publication/250254543_Sintering_of_zirconium_carbide-based_composites)

**Sintering routes for zirconia doped hardmetals**

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

**Sliding wear behaviour of basalt containing composites with additions of either metallic and/or ceramic phases**

**Antonov, Maksim; Goljandin, Dmitri; Andreev, A.; Voltšihhin, Nikolai; Hussainova, Irina** BaltTrib 2013 : VII International Scientific Conference : proceedings 2013 / p. 67-72 : ill

**Sliding wear performance of AlCrN coating on TiB<sub>2</sub>/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](#)

**Sliding wear performance of in-situ spark plasma sintered Ti-TiB<sub>w</sub> composites at temperatures up to 900 °C**

**Kumar, Rahul, 1993-; Antonov, Maksim; Liu, Lei; Hussainova, Irina** Wear 2021 / art. 203663, 9 p.: ill  
<https://doi.org/10.1016/j.wear.2021.203663> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Small scale mechanical properties of chromium carbide-based materials**

**Hussainova, Irina;** Jasiuk, Iwona Book of abstracts : Society of Engineering Science 45th Annual Technical Meeting : October 12-15, 2008, Urbana-Champaign, IL, USA 2008 / p. 377

**Solid lubrication at high-temperatures - a review**

**Kumar, Rahul, 1993-; Hussainova, Irina; Rahmani Ahranjani, Ramin; Antonov, Maksim** Materials 2022 / art. 1695  
<https://doi.org/10.3390/ma15051695> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Solid particle erosion of the Cr<sub>3</sub>C<sub>2</sub>-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

**Solid particle erosion of thermal sprayed coatings**

**Kulu, Priit; Hussainova, Irina; Veinthal, Renno** Wear 2005 / 1/4, p. 488-496 : ill

### **Solution based processing for nanocarbitides**

**Umalas, Madis**; Reedo, Valter; Lõhmus, A.; **Hussainova, Irina** Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2012 / p. 753-758 : 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  
<http://dx.doi.org/10.1016/j.ceramint.2016.05.059>

### **Spark plasma sintering of combustion synthesized TiB<sub>2</sub>-Si composite**

**Liu, Le**; **Aydinyan, Sofiya**; **Minasyan, Tatevik**; **Baroninš, Janis**; **Antonov, Maksim**; Kharatyan, Suren; **Hussainova, Irina** Ceramics in modern technologies 2019 / p. 59-66 <https://doi.org/10.29272/cmt.2018.0009>

### **Spark plasma sintering of layered $\gamma$ -Al<sub>2</sub>O<sub>3</sub>/graphene reinforced nanocomposites**

**Saffarshamshirgar, Ali**; **Ivanov, Roman**; **Hussainova, Irina** Proceedings of the Estonian Academy of Sciences 2019 / p. 140–144 : ill <https://doi.org/10.3176/proc.2019.2.04> [http://www.kirj.ee/public/proceedings\\_pdf/2019/issue\\_2/proc-2019-2-140-144.pdf](http://www.kirj.ee/public/proceedings_pdf/2019/issue_2/proc-2019-2-140-144.pdf) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Spinel alumina nanofibers synthesis via ALD coating of alumina nanofibers**

**Rauwel, Erwan**; Nilsen, Ola; **Rauwel, Protima**; Galeckas, Augustinas; Wragg, David; Walmsley, John; **Hussainova, Irina**; Soots, Karel WG2 workshop and 4th ALDCoE annual seminar : 23-24 May 2016, Helsinki, Finland : abstracts 2016 / [1] p. : ill

### **SrAl<sub>2</sub>O<sub>4</sub> : Eu,Dy-screen-printed layers to create phosphorescent 2D shapes**

**Rojas Hernandez, Rocio Estefania**; Rubio-Marcos, Fernando; Serrano-lova, Radu-Antonio; Fernandes Lozano, J. F.; **Hussainova, Irina** XVI Conference and Exhibition Of The European Ceramic Society : abstract book 2019 / p. 525 : ill

### **Stability and damage of nanocrystalline copper at cyclic elastic-plastic deformation**

**Kommel, Lembit**; **Hussainova, Irina**; **Veinthal, Renno**; **Saarna, Mart** Ultrafine Grained Materials - from Basics to Applications : UFG-2006 : September 25-27, 2006, Kloster Irsee, Germany 2006 / p. 3-17 - 3-19

### **Strength and plasticity of nanocrystalline copper**

**Kommel, Lembit**; **Hussainova, Irina**; **Volobujeva, Olga** Деформация и разрушение материалов = Deformation and fracture of materials 2005 / 11, p. 17-23

### **Strength and plasticity of nanocrystalline copper after HCV deformation**

**Kommel, Lembit**; **Hussainova, Irina**; **Volobujeva, Olga** Abstracts of 3rd International Conference "Phase Transition and Strength of Crystals" : September 20-24, 2004, Chernogolovka, Russia 2004 / p. 47-48

### **Structural behavior and damage evolution of nanocrystalline copper at HCV deformation**

**Kommel, Lembit**; **Hussainova, Irina**; **Nisumaa, Reet**; **Volobujeva, Olga**; **Saarna, Mart** 15th International Baltic Conference "Engineering Materials & Tribology. Balttrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 40-41 : ill

### **Structural behaviour of NC copper at hard cyclic viscoplastic deformation**

**Kommel, Lembit**; **Hussainova, Irina**; **Nisumaa, Reet**; **Volobujeva, Olga** Ultrafine Grained Materials - from Basics to Applications : UFG-2006 : September 25-27, 2006, Kloster Irsee, Germany 2006 / p. 6-16 - 6-17

### **Structure and energy of intercrystallite boundaries in graphene**

Kolesnikova, Anna; Rozhkov, M. A.; **Hussainova, Irina** Reviews on advanced materials science 2017 / p. 91-98 [http://www.ipme.ru/e-journals/RAMS/no\\_15217/contents.html](http://www.ipme.ru/e-journals/RAMS/no_15217/contents.html)

### **Structure and properties of boron nitride based composite produced by SHS method**

**Kommel, Lembit**; **Kübarsepp, Jakob**; **Hussainova, Irina**; **Kimmari, Eduard** Fifth International Conference on Composite Science and Technology : ICCST/5 : 1-3 February 2005, Sharjah, United Arab Emirates : proceedings 2005 / p. 461-466 : ill

### **Structure, phase composition, and wear mechanisms of plasma-sprayed NiCrSiB-20wt.% TiB<sub>2</sub> coatings**

Umanskii, A.; Storozenko, M.; **Hussainova, Irina**; **Antonov, Maksim** Powder metallurgy and metal ceramics 2015 / p. 663-671 : ill  
<http://dx.doi.org/10.1007/s11066-015-9661-3>

### **Subsurface of Cr<sub>3</sub>C<sub>2</sub>-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]

### **Superhard B<sub>4</sub>C-ReB<sub>2</sub> composite by SPS of microwave synthesized nanopowders**

Mnatsakanyan, R.; Davtyan, D.; **Minasyan, Tatevik**; **Aydinyan, Sofiya**; **Hussainova, Irina** Materials letters 2021 / art. 129163, 5 p.

**Synergistic effect of Ag and MoS<sub>2</sub> on high-temperature tribology of self-lubricating NiCrBSi composite coatings by laser metal deposition**

**Kumar, Rahul, 1993-; Antonov, Maksim; Varga, Markus; Hussainova, Irina; Rodriguez Ripoll, Manel** Wear 2023 / art. 205114  
<https://doi.org/10.1016/j.wear.2023.205114>

**Synthesis and consolidation of Mo-Cu composite nanopowder [Online resource]**

**Minasyan, Tatevik; Kirakosyan, Hasmik; Aydinyan, Sofiya; Liu, Le; Hussainova, Irina; Kharatyan, Suren** Explosive Production of New Materials : Science, Technology, Business, and Innovations 2018 / p. 151-153 : ill  
[http://www.ism.ac.ru/events/EPNM2018/EPNM2018\\_BookofPapers.pdf](http://www.ism.ac.ru/events/EPNM2018/EPNM2018_BookofPapers.pdf) <http://dx.doi.org/10.30826/EPNM18-053>

**Synthesis of porous bio-ceramic (Silicon and Calcium silicate) implants by selective laser melting for local delivery of Vancomycin**

**Kamboj, Nikhil Kumar; Hussainova, Irina; Rodríguez Barbero, M. A.; Rodrigo, S.; Prashanth, Konda Gokuldoss** 43rd International Conference & Exposition on Advanced Ceramics and Composites : abstract book 2019 / p. 190 [https://ceramics.org/wp-content/uploads/2018/09/ICACC19\\_Abstracts\\_WebFinal.pdf](https://ceramics.org/wp-content/uploads/2018/09/ICACC19_Abstracts_WebFinal.pdf)

**Synthesis of porous bio-ceramic(Silicon and Calcium silicate) implants by selective laser melting for local delivery of Vancomycin**

**Kamboj, Nikhil Kumar; Hussainova, Irina; Rodríguez Barbero, M. A.; Rodrigo, S.; Prashanth, Konda Gokuldoss** 43rd International Conference & Exposition on Advanced Ceramics and Composites : abstract book 2019 / p. 190 [https://ceramics.org/wp-content/uploads/2018/09/ICACC19\\_Abstracts\\_WebFinal.pdf](https://ceramics.org/wp-content/uploads/2018/09/ICACC19_Abstracts_WebFinal.pdf)

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

Umalas, Madis; Reedo, Valter; Lõhmus, Ants; **Hussainova, Irina; Juhani, Kristjan** Engineering materials and tribology 2013 / p. 62-67

**Synthesis of ternary GNP-CNT-ZrO<sub>2</sub> nanocomposite as a high-performance anode for lithium-ion batteries**

Imanian Ghazanlou, Siavash; Imanian Ghazanlou, Siamak; Imanian Ghazanlou, Sroush; Mohammadpour, Naghmeh; **Hussainova, Irina** Journal of industrial and engineering chemistry 2023 / 13 p. : ill <https://doi.org/10.1016/j.jiec.2023.07.050>

**ZrC based ceramics by high pressure high temperature SPS technique**

**Aydinyan, Sofiya; Minasyan, Tatevik; Liu, Le; Cygan, Slawomir; 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. 125-130 : ill [https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est) <https://www.scientific.net/KEM.799.125>  
<https://doi.org/10.4028/www.scientific.net/KEM.799.125> Conference proceeding at Scopus Article at Scopus

**ZrC-based and ZrC-doped composites for high-temperature and wear applications = ZrC baasil ja ZrC-ga legeritud komposiitmaterjalid rakendusteks kõrgtemperatuursetes ja kulumistingimustes**

**Yung, Der-Liang** 2016 [http://www.ester.ee/record=b4621174\\*est](http://www.ester.ee/record=b4621174*est)

**ZrC-TiC-MoSi<sub>2</sub> ceramic composite by spark plasma sintering**

**Hussainova, Irina; Minasyan, Tatevik; Liu, Le; Aydinyan, Sofiya** Journal of Physics: Conference Series 2020 / art. 012028  
<https://doi.org/10.1088/1742-6596/1527/1/012028> Conference Proceedings at Scopus Article at Scopus Article at WOS

**Teaduspreemia tehnikateaduste alal tööde tsükli "Mikro- ja nanotehnoloogiliste uurimismeetodite arendamine tööstuslike materjalide väljatöötamiseks" eest**

**Kübarsepp, Jakob; Lõhmus, Ants; Hussainova, Irina; Lõhmus, Rünno** Eesti Vabariigi teaduspreemiad 2005 2005 / lk. 54-73 : ill., fot

**Technique for extensional rheology characterization of highly reactive viscoelastic liquids**

**Hussainov, Medhat; Tätté, Tanel; Hussainova, Irina** Rheologica acta 2012 / p. 729-742 : ill  
<https://www.infona.pl/resource/bwmata1.element.springer-5e1b1676-4a52-342f-a190-f79755c0ab15>

**Tehnikateaduste valdkonna aastapreemia teadustöö "Nanokiudude võrgustik baasina multifunktsionaalsete hübriidmaterjalide tööstuslikes rakendustes" eest : Irina Hussainova. Nanokiudude võrgustik baasina mitmfunktsiooniliste hübriidmaterjalide läbimurdeks**

**Hussainova, Irina** Eesti Vabariigi preemiad 2019 : teadus. F. J. Wiedemanni keelea hind. Kultuur. Sport 2019 / lk. 108-117 : ill., portr [https://www.ester.ee/record=b1226072\\*est](https://www.ester.ee/record=b1226072*est)

**The assessment of the coated elements behaviour before and after scuffing under four-ball lubricated testing conditions**

Michalczewski, Remigiusz; **Antonov, Maksim; Vlad, Mihaela; Szczerek, Marian; Hussainova, Irina** Proceedings of the 2nd European Conference on Tribology ECOTRIB 2009 : Pisa, Italy, June 7-10, 2009 2009 / p. 107-112

**The effect of erosion parameters on the erosion rate of ceramics**

**Hussainova, Irina; Jevgrafova, Natalja** Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 183-185 : ill

**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

<http://dx.doi.org/10.1016/j.wear.2016.02.018>

**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 influence of alumina and zirconia coats on the tribological properties of alumina nanofibers**

**Aghayan, Marina; Gasik, Michael; Kollo, Lauri; Hussainova, Irina; Rodriguez, Miguel Angel** CIMTEC 2014 : 13th International Ceramics Congress : Montecatini Terme, Tuscany, Italy, June 8-13, 2014 : book of abstracts 2014

**The preparation of TiC/TiN composites by selective laser melting**

**Liu, Le; Minasyan, Tatevik; Aydinyan, Sofiya; 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. 165-170 : ill

[https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est) <https://www.scientific.net/KEM.799.165> <https://doi.org/10.4028/www.scientific.net/KEM.799.165>  
[Conference proceeding at Scopus](#) [Article at Scopus](#)

**The science of sinter-HIP : when to turn on the gas**

**Yung, Der-Liang; Tarraste, Marek; Hussainova, Irina** TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

**The structure and properties forming in boron carbide aluminium composites during processing**

**Kommel, Lembit; Hussainova, Irina; Kimmari, Eduard** Proceedings of World Congress on Powder Metallurgy and Particulate Materials, USA. Vol. 6 2002 / p. 182-187

**The template-assisted wet-combustion synthesis of copper oxide nanoparticles on mesoporous network of alumina nanofibers**

**Aghayan, Marina; Hussainova, Irina; Kirakosyan, Khachatur; Rodriguez, Miguel Angel** Materials chemistry and physics 2017 / p. 138-146 : ill <https://doi.org/10.1016/j.matchemphys.2017.01.068>

**The template-assisted wet-combustion synthesis of fibrous nickel-based catalyst for carbon dioxide methanation and methane steam reform**

**Aghayan, Marina; Potemkin, D. I.; Rubio-Marcos, Fernando; Hussainova, Irina** ECerS 2017 : 15th Conference & Exhibition of the European Ceramic Society, July 9-13, 2017, Budapest, Hungary : Book of abstracts 2017 / p. 419 : ill  
<https://static.akkongress.com/downloads/ecers/ecers2017-abstract-book.pdf>

**The template-assisted wet-combustion synthesis of fibrous nickel-based catalyst for carbon dioxide methanation and methane steam reforming**

**Aghayan, Marina; Potemkin, D. I.; Rubio-Marcos, Fernando; Uskov, S. I.; Snytnikov, N.; Hussainova, Irina** ACS applied materials and interfaces ACS applied materials & interfaces 2017 / p. 43553-43562 : ill <http://dx.doi.org/10.1021/acsami.7b08129>

**The wear of PVD coated elements in oscillation motion at high temperature**

Michalczewski, Remigiusz; Kalbarczyk, Marek; Slomka, Zbigniew; **Liu, Le; Antonov, Maksim; Hussainova, Irina** Proceedings of the Estonian Academy of Sciences 2021 / p. 500-507 : ill <https://doi.org/10.3176/proc.2021.4.18> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Thermal and microstructural analysis of doped alumina nanofibers**

**Aghayan, Marina; Gasik, Michael; Hussainova, Irina; Rubio-Marcos, Fernando; Kollo, Lauri; Kübarsepp, Jakob** Thermochemica acta 2015 / p. 43-48 : ill <http://dx.doi.org/10.1016/j.tca.2015.01.009>

### **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 transport and thermoelectric effect in composites of alumina and graphene-augmented alumina nanofibers**

**Saffarshamshirgar, Ali**; Belmonte, Manuel; Tewari, Girish C.; **Rojas Hernandez, Rocio Estefania**; Seitsonen, Jani; **Ivanov, Roman**; Karppinen, Maarit; Miranzo, Pilar; **Hussainova, Irina** Materials 2021 / art. 2242 <https://doi.org/10.3390/ma14092242> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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

### **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

### **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

### **Thermomechanical effects on the wear behavior of cermets : thermal transition**

**Hussainova, Irina** Proceedings of the 2nd International Conference, 27-29th April 2000, Tallinn, Estonia / DAAAM International Vienna, DAAAM National Estonia 2000 / p. 190-192

### **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

### **3D alumina-graphene hybrid nanofibers as a binder-free cathode for rechargeable LiIS batteries**

**Taleb, Masoud; Ivanov, Roman; 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. 191-196 : ill  
<https://www.scientific.net/KEM.799.191> [https://www.ester.ee/record=b5235278\\*est](https://www.ester.ee/record=b5235278*est) <https://doi.org/10.4028/www.scientific.net/KEM.799.191>  
[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** 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.scientific.net/KEM.799.239> [https://www.ester.ee/record=b5235278\\*est](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>

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

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

### **Time-effective synthesis of rhombohedral CuAlO2 from mesoporous alumina substrate**

**Saffarshamshirgar, Ali; Aghayan, Marina; Tripathi, Tripurari S.; Karppinen, Maarit; Gasik, Michael; Hussainova, Irina** Materials & design 2018 / p. 48-55 : ill <https://doi.org/10.1016/j.matdes.2018.03.031> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Time-effective synthesis of rhombohedral CuAlO2 from mesoporous alumina substrate [Online resource]**

**Saffarshamshirgar, Ali; Aghayan, Marina; Tripathi, Tripurari S.; Karppinen, Maarit; Gasik, Michael; Hussainova, Irina** Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT

**Toward high temperature tough ceramics**

**Hussainova, Irina**; Yung, Der-Liang; **Voltšihhin, Nikolai**; **Traksmaa, Rainer**; Hannula, Simo-Pekka ECCM15 - 15th European Conference on Composite Materials : Venice, Italy, 24-28 June 2012 / [8] p <http://www.escm.eu.org/eccm15/data/assets/178.pdf>

**Towards blue long-lasting luminescence of Eu/Nd-doped calcium-aluminate nanostructured platelets via the molten salt route**

**Rojas Hernandez, Rocio Estefania**; Rubio-Marcos, Fernando; Serrano, Aida; **Hussainova, Irina** Nanomaterials 2019 / art. 1473, 14 p. : ill <https://doi.org/10.3390/nano9101473> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Transformations of gold nanocontacts studied by molecular dynamics simulations**

Pokropivny, A.V.; Löhmus, Rünno; Erts, D.; **Hussainova, Irina**; Olin, H.; Löhmus, Ants Proceedings of International Conference on Nanotechnology NANOTECH 2004 : January 8-12, 2004, Boston, USA 2004 / p. ?

**Tribological behavior of Ni-based self-lubricating claddings containing sulfide of nickel, copper, or bismuth at temperatures up to 600 °C**

**Kumar, Rahul**, 1993-; Torres, Hector; **Aydinyan, Sofiya**; **Antonov, Maksim**; Varga, Markus; **Hussainova, Irina**; Rodrlguez Ripoll, Manel Surface and coatings technology 2023 / art. 129270, 14 p. : ill <https://doi.org/10.1016/j.surfcoat.2023.129270>

**Tribological characteristics of nanostructured copper**

**Hussainova, Irina**; Löhmus, Rünno Book of abstracts : Nano Tribo Workshop : France, 2005 2005 / p. 34

**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>

**Tribological properties of the Cr3C2-Ni metal-matrix composites**

**Hussainova, Irina**; **Pirso, Jüri** EUROMAT 2001 : 7th European Conference on Advanced Materials and Processes : Rimini, Italy, 10-14 June, 2001 : conference abstracts 2001 / p. 122-123

**Tribological properties of the Cr3C2-Ni metal-matrix composites [Electronic resource]**

**Hussainova, Irina**; **Pirso, Jüri** Proceedings of 7th European Conference on Advanced Materials and Processes : EUROMAT 2001 : Italy 2001 / [CD-ROM]

**TTÜ aasta teadlane 2017 Irina Hussainova loob tulevikumaterjale**

**Hussainova, Irina** Mente et Manu 2018 / lk. 28-30 : fot <https://www.ttu.ee/ttu-uudised/ajaleht-mente-et-manu/mente-et-manu/>  
[http://www.ester.ee/record=b1242496\\*est](http://www.ester.ee/record=b1242496*est)

**Tunneling-percolation behavior of graphene-encapsulated whiskers as electroconductive fillers for ceramics**

**Hussainova, Irina**; **Ivanov, Roman**; Kale, Sudhir S.; Jasiuk, Iwona Short fibre reinforced cementitious composites and ceramics 2019 / p. 131-139 [https://doi.org/10.1007/978-3-030-00868-0\\_9](https://doi.org/10.1007/978-3-030-00868-0_9) [Article collection metrics at Scopus](#) [Article at Scopus](#)

**Ultra high-pressure spark plasma sintered ZrC-Mo and ZrC-TiC composites**

**Yung, Der-Liang**; Cygan, Slawomir; **Antonov, Maksim**; Jaworska, Lucyna; **Hussainova, Irina** International journal of refractory metals and hard materials 2016 / p. 201-206 : ill <http://doi.org/10.1016/j.jirmhm.2016.09.014>

**Ultrahigh aspect ratio alumina nanofibers as reinforcements**

**Hussainova, Irina**; Gasik, Michael; **Aghayan, Marina** 38th International Conference & Exposition on Advanced Ceramics and Composites : abstract book : January 26-31, 2014, Daytona Beach, Florida 2014 / p. 117

**Ultrahigh pressure spark plasma sintering of ZrC-TiC-MoSi2 and ZrC-TiC-Si3N4 composites [Online resource]**

**Minasyan, Tatevik**; **Aydinyan, Sofiya**; **Liu, Le**; Cygan, Slawomir; **Hussainova, Irina** Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fmtdk.ut.ee/teesid-2018/>

**Ultra-sensitive voltammetric simultaneous determination of dopamine, uric acid and ascorbic acid based on a graphene-coated alumina electrode**

**Taleb, Masoud**; **Ivanov, Roman**; **Bereznev, Sergei**; Kazemi, Sayed Habib; **Hussainova, Irina** Microchimica acta 2017 / p. 4603-4610 : ill <https://doi.org/10.1007/s00604-017-2510-y>

**Ultra-wideband integrated graphene-based absorbers for terahertz waveguide systems**

Campion, James; Xenidis, Nikolaos; Smirnov, Serguei; **Ivanov, Roman**; Oberhammer, Joachim; **Hussainova, Irina**; **Lioubtchenko, Dmitri** Advanced Electronic Materials 2022 / art. 2200106 <https://doi.org/10.1002/aelm.202200106> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Uued perspektiivid tüvi- ja vähirakkude uurimisel**

**Hussainova, Irina; Vähi, Kersti** Mente et Manu 2016 / lk. 24-25 : fot [http://www.ttu.ee/public/u/ulikool/Tutvustus/ajaleht-mente-et-manu/MM\\_2016\\_05/index.html](http://www.ttu.ee/public/u/ulikool/Tutvustus/ajaleht-mente-et-manu/MM_2016_05/index.html)

#### **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 Co-free hardmetals doped by zirconia and produced by conventional PM and SPS routines**

**Hussainova, Irina; Antonov, Maksim; Voltšihhin, Nikolai; Kübarsepp, Jakob** Wear 2014 / p. 83-90 : ill

#### **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 behaviour of doped WC–Ni based hardmetals tested by four methods**

**Yung, Der-Liang; Antonov, Maksim; Veinthal, Renno; Hussainova, Irina** Wear 2016 / p. 171-179 : ill

<http://dx.doi.org/10.1016/j.wear.2016.02.015>

#### **Wear performance of hierarchically structured alumina reinforced by hybrid graphene encapsulated alumina nanofibers**

**Hussainova, Irina; Baroninš, Janis; Drozdova, Maria; Antonov, Maksim** Wear 2016 / p. 287-295 : ill

<http://dx.doi.org/10.1016/j.wear.2016.09.028>

#### **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

#### **Versatile graphene-alumina nanofibers for microwave absorption and EMI shielding**

**Saffar Shamshirgar, Ali; Alvarez, Maria Fernandez; Del Campo, Adolfo; Fernandez, Jose Francisco; Rojas Hernandez, Rocio**

**Estefania; Ivanov, Roman; Rosen, Johanna; Hussainova, Irina** Carbon 2023 / art. 118057 <https://doi.org/10.1016/j.carbon.2023.118057>

#### **Vibration-assisted sputter coating of cenospheres : a new approach for realizing Cu-based metal matrix syntactic foams**

**Shishkin, Andrei; Drozdova, Maria; Kozlov, Viktor; Hussainova, Irina; Lehmhus, Dirk** Metals 2017 / art. 16, p. 1-10 : ill

<http://dx.doi.org/10.3390/met7010016>

#### **YSZ-rGO composite ceramics by spark plasma sintering : the relation between thermal evolution of conductivity, microstructure and phase stability**

**Glukharev, Artem; Glumov, Oleg; Temnikova, Maria; Saffarshamshirgar, Ali; Hussainova, Irina; Konakov, Vladimir** Electrochimica acta 2021 / art. 137533 <https://doi.org/10.1016/j.electacta.2020.137533> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Испытание наноиндентированием и моделирование композитов на основе карбида хрома**

**Hussainova, Irina; Hamed, Elham; Jasiuk, Iwona** Mechanics of composite materials 2010 / p. 1-18 : ill

#### **Исследование процесса ударных взаимодействий частиц**

**Kleis, Ilmar; Pappel, Toivo; Hussainova, Irina; Štšeglov, Igor** Трение и износ 1997 / 6, с. 730-735

#### **Критический радиус включений диоксида циркония в эффекте трансформационного упрочнения керамик**

**Filippov, Roman; Freidin, Alexander; Hussainova, Irina; Vilchevskaya, Elena** Физическая мезомеханика 2014 / с. 55-64 : ill

#### **Структурно-фазовый состав и механизмы изнашивания плазменного покрытия системы NiCrSiB-20% (мас.) TiB2**

**Umanskii, A.; Storoženko, M.; Hussainova, Irina; Antonov, Maksim** Порошковая металлургия = Powder metallurgy : ежемесячный научно-технический журнал 2014 / с. 57-68

#### **Упругие модели дефектов в двумерных кристаллах**

**Kolesnikova, Anna; Orlova, T.; Hussainova, Irina; Romanov, Alexey** Физика твердого тела 2014 / с. 2480-2485 : ill