

#### **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 keraamilal 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 machine learning and experimental studies of polypropylene based polyesters tribological composite systems for sustainable recycling automation and digitalization**

**Hussain, Abrar**; **Kübarsepp, Jakob**; **Sergejev, Fjodor**; **Goljandin, Dmitri**; **Hussainova, Irina**; **Podgurski, Vitali**; **Karjust, Kristo**; **Maurya, Himanshu Singh**; **Rahmani Ahranjani, Ramin**; **Sinka, Maris** International journal of lightweight materials and manufacture 2025 / p. 252-263 <https://doi.org/10.1016/j.ijlmm.2024.11.001>

#### **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-keevispindad**

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

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

**Hussainova, Irina**; **Löhmus, 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-graafenhübridmaterjalid biovedelike elektrokeemiliseks tuvastamiseks**

**Taleb, Masoud** 2018 <https://digi.lib.ttu.ee/11202> [https://www.ester.ee/record=b5180418\\*est](https://www.ester.ee/record=b5180418*est)

**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 <https://doi.org/10.1002/pssa.201330083> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

### **Bidirectional Mo4/3CTx MXene/graphene aerogels for tailored microwave absorption**

Shamshirgar, Ali Saffar; Qin, Leiqiang; **Rojas Hernandez, Rocio Estefania**; Halim, Joseph; Fernandez, Jose F.; **Hussainova, Irina**; Rosen, Johanna ACS Applied Nano Materials 2025 / p. 1978–1990 <https://doi.org/10.1021/acsnm.4c06555>

### **Bifunctional oxygen electrocatalyst based on Fe, Co, and nitrogen co-doped graphene-coated alumina nanofibers for Zn-air battery air electrode**

Mooste, Marek; Ahmed, Zubair; Kapitulskis, Pavels; **Ivanov, Roman**; Treshchalov, Alexey; Piirsoo, Helle-Mai; Kikas, Arvo; Kisand, Vambola; Kukli, Kaupo; **Hussainova, Irina**; Tammeveski, Kaido Applied Surface Science 2024 / art. 160024

<https://doi.org/10.1016/j.apsusc.2024.160024> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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-**; **Rezapourianghahfarokhi, Mansoureh**; **Rahmani Ahranjani, Ramin**; **Maurya, Himanshu Singh**; **Kamboj, Nikhil Kumar**; **Hussainova, Irina** Biomimetics 2024 / art. 209 <https://doi.org/10.3390/biomimetics9040209> [Journal metrics at Scopus](#)

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

### **Bio-inspired TiB2-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://doi.org/10.23658/taltech.9/2024> [https://www.estoniansciencerecord.ee/record=b5667691\\*est](https://www.estoniansciencerecord.ee/record=b5667691*est)

<https://digikogu.taltech.ee/et/Item/7c3aec59-9566-41cb-b59d-b896fa72100e>

### **Biotribology**

**Hussainova, Irina** 2007

### **Boosting phosphorescence efficiency by crystal anisotropy in SrAl2O4: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 <https://www.sciencedirect.com/science/article/pii/S0257897213001825> <https://doi.org/10.1016/j.surfcoat.2013.02.027> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Characterisation of TiC-NiMo reinforced NiCrBSi hardfacing**

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

### **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; Traksmäa, Rainer** Reviews on advanced materials science 2005 / p. 447-453  
[https://www.researchgate.net/publication/250143614\\_Characterization\\_of\\_the\\_Viscoplastic\\_Behavior\\_of\\_Nanocrystalline\\_Metals\\_at\\_HCV\\_Deformation](https://www.researchgate.net/publication/250143614_Characterization_of_the_Viscoplastic_Behavior_of_Nanocrystalline_Metals_at_HCV_Deformation)

### **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. märts 2014, Tartu 2014 / [1] p

### **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/?9128>

### **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  
<https://doi.org/10.1016/j.matchemphys.2015.01.017> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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 silicon carbide by magnesio-carbothermic reduction of amorphous and crystalline silica**

**Kirakosyan, Hasmik; Nazaretyan, Khachik; Beglaryan, Hayk; Ivanov, Roman; Hussainova, Irina; Aydinyan, Sofiya** Proceedings of the Estonian Academy of Sciences 2025 / p. 260-265 <https://doi.org/10.3176/proc.2025.2.31>

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

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

**Aghayan, Marina; Hussainova, Irina;** Gasik, Michael; Kutuzov, Michael; Friman, Michael *Thermochimica acta* 2013 / p. 140-144 : ill <https://doi.org/10.1016/j.tca.2013.10.010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Tätte, Tanel; Kolesnikova, Anna; **Hussainov, Medhat;** Talviste, R.; Lõhmus, Rünno; Romanov, Alexey; **Hussainova, Irina;** Part, Marko; Lõhmus, 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 <https://www.scientific.net/KEM.527.68>

**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 <https://doi.org/10.1134/S1029959915010051> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

**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 <https://doi.org/10.1016/j.msea.2013.12.058> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

**Voltšihhin, Nikolai; Hussainova, Irina;** Cura, M. Erkin; Hannula, Simo-Pekka; **Traksmäa, 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 Rare-Earth-Free Zinc Silicate as a Novel Deep UV Emitter : Synthesis Strategies and Luminescent Properties = Haruldaste muldmetallide vaba tsinksilikaadi kui uue süva-UV kiirguri arendus : sünteesistrateegiad ja luminesentsents omadused**

**Necib, Jallouli** 2025 <https://digikogu.taltech.ee/et/Item/67078497-d42a-4e55-8a09-d665a3a023b1> <https://doi.org/10.23658/taltech.63/2025> [https://www.ester.ee/record=b5754738\\*est](https://www.ester.ee/record=b5754738*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)

**Development of yttrium-doped BaTiO<sub>3</sub> for next-generation multilayer ceramic capacitors**

Tihti, Mohammed; Ibrahim, Jamal Eldin F. M.; Basyooni, Mohamed A.; En-Nadir, Redouane; Belaid, Walid; **Hussainova, Irina;** Kocserha, István *ACS omega* 2023 / p. 8448-8460 : ill <https://doi.org/10.1021/acsomega.2c07497> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Dichroic absorption of aligned graphene-augmented inorganic nanofibers in the terahertz regime**

Xenidis, Nikolaos; Przewłoka, Aleksandra; Stelmaszczyk, Kamil; Haras, Maciej; Smirnov, Serguei; Krajewska, Aleksandra; **Ivanov, Roman; Hussainova, Irina;** Oberhammer, Joachim; Skotnicki, Tomas; Mierczyk, Zygmunt; Lioubtchenko, Dmitri *Applied materials*

### **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 (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 77-80 : ill <https://doi.org/10.4028/www.scientific.net/KEM.674.77> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

### **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 <https://doi.org/10.1016/j.ceramint.2015.02.074> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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 (BALTMATRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 239-243 : ill <https://doi.org/10.4028/www.scientific.net/KEM.674.239> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

### **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 <https://doi.org/10.3176/proc.2016.2.05> [https://artiklid.elnet.ee/record=b2768221\\*est](https://artiklid.elnet.ee/record=b2768221*est) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

### **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 <https://doi.org/10.3390/ma10070828> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Effect of grain growth inhibitors VC/Cr<sub>3</sub>C<sub>2</sub> on WC-ZrO<sub>2</sub>-Ni composite mechanics**

**Yung, Der-Liang; Dong, Minjie; Hussainova, Irina** Engineering materials & tribology XXII 2014 / p. 106-109 <https://doi.org/10.4028/www.scientific.net/KEM.604.106> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

### **Effect of HBN on wear of AlCrN-coated spark plasma - sintered TiB<sub>2</sub>/Ti composites at temperatures up to 900°C**

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

### **Effect of laser surface texturing and fabrication methods on tribological properties of Ti6Al4V/HAp biocomposites**

**Sadlik, Julia; Kosinska, Edyta; Tomala, Agnieszka; Bankosz, Magdalena; Polajnar, Marko; Kumar, Rahul; Kalin, Mitjan; Kravanja,**

**Gaia**; Hribar, Luka; **Hussainova, Irina** Materials 2025 / art.2468 <https://doi.org/10.3390/ma18112468>

**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

<https://doi.org/10.1016/j.triboint.2013.03.025> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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 SiO<sub>2</sub> medium**

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

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

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

**Effect of 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 <https://doi.org/10.1016/j.triboint.2012.09.011> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Effect of oxidation on sliding wear behavior of NiCrSiB-TiB<sub>2</sub> plasma sprayed coatings**

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

**Effect of silica precursor on the synthesis of Zn<sub>2</sub>SiO<sub>4</sub>-based material**

**Rojas Hernandez, Rocio Estefania; Hussainova, Irina; Necib, Jallouli** Proceedings of the Estonian Academy of Sciences 2025 / p. 217-221 <https://doi.org/10.3176/proc.2025.2.24>

**Effect of SiO<sub>2</sub> 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 <https://doi.org/10.1016/j.triboint.2012.12.012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Effect of solid lubricants on wear of PVD-coated spark plasma-sintered TiB<sub>2</sub>/Ti composites**

Luszcz, Maciej; Michalczewski, Remigiusz; Kalbarczyk, Marek; Osuch-Slomka, Edyta; **Liu, Le; Antonov, Maksim; Hussainova, Irina** Modern materials and manufacturing 2023 2024 / art. 040010 <https://doi.org/10.1063/5.0190460> [Conference proceedings at Scopus](#) [Article at Scopus](#)

**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> [Conference proceedings at Scopus](#) [Article at Scopus](#)

**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 Si<sub>3</sub>N<sub>4</sub>, Al<sub>2</sub>O<sub>3</sub>, and ZrO<sub>2</sub> 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 <https://doi.org/10.1016/j.triboint.2014.01.019> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

**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 <https://doi.org/10.5755/j01.ms.22.1.7307> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

**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

**Effect of unit cell rotation on mechanical performance of selective laser melted Gyroid structures for bone tissue engineering**

**Rezapourianghahfarokhi, Mansoureh; Kumar, Rahul, 1993-; Hussainova, Irina** Progress in engineering science 2024 / art. 100011 <https://doi.org/10.1016/j.pes.2024.100011>

**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. S.; **Hussainova, Irina;** Romanov, Alexey Physics of the solid state 2014 / p. 2573-2579 : ill  
<https://doi.org/10.1134/S1063783414120166> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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 <https://doi.org/10.4028/www.scientific.net/KEM.721.414> [Journal metrics at Scopus](#) [Article at Scopus](#)

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

**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 = Elektriijuhtiva oksiid-grafeenkiudkeraamika tehnoloogia ja püsivus**

**Drozdova, Maria** 2017 <https://digi.lib.ttu.ee/i/?91119> [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) [Journal metrics at Scopus](#) [Article at Scopus](#)

**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

### **Elucidating reaction mechanism by molten salt of potential rare-earth-free Zn<sub>2</sub>SiO<sub>4</sub> UV-B emitter: Insights into morphology and emission features**

**Necib, Jallouli; Feldbach, Eduard; Romet, Ivo; Nagirnyi, Vitali; Hussainova, Irina; Jüstel, Thomas; Rojas Hernandez, Rocio** Estefania Ceramics international 2025 / p. 34922-34931 : ill <https://doi.org/10.1016/j.ceramint.2025.05.212>

### **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)

### **Engineering materials and tribology**

2013

### **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 <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> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **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]**

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

### **Erosion-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>

### **Erosive wear of spark plasma sintered Al<sub>2</sub>O<sub>3</sub> - cBN ceramic composites**

**Kariminejad, Arash; Kumar, Rahul; Antonov, Maksim; Hussainova, Irina; Klimczyk, Piotr** Diamond and Related Materials 2025 / art. 112328 <https://doi.org/10.1016/j.diamond.2025.112328>

### **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

**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 <https://doi.org/10.4028/www.scientific.net/KEM.674.31> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

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

**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 <https://doi.org/10.1016/j.wear.2012.12.019> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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](#)

**From scrap to product : the effect of recycled tungsten carbide and alumina content on the mechanical properties of oxide-carbide duplex ceramic composite**

**Karimnejad, Arash; Klimczyk, Piotr; Antonov, Maksim; Hussainova, Irina** Proceedings of the Estonian Academy of Sciences 2025 / p. 192-197 <https://doi.org/10.3176/proc.2025.2.20>

**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 <https://doi.org/10.1016/j.ceramint.2014.04.087> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

### **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 Ti6Al4V-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 DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 348-353 : ill

### **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 <https://doi.org/10.1038/srep30150> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

### **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 <https://doi.org/10.1016/j.jeurceramsoc.2015.06.011> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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 sliding wear of NiAl-based coatings reinforced by borides**

**Umanskyi, Oleksandr; Poliarus, Olena; Ukrainets Maksym; Antonov, Maksim; Hussainova, Irina** Medziagotyra 2016 / p. 49 - 53 <https://doi.org/10.5755/j01.ms.22.1.8093> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **High temperature wear of cermet particle reinforced NiCrBSi hardfacing**

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

**High-entropy (Ti<sub>0.4</sub>Ta<sub>0.4</sub>V<sub>0.4</sub>Nb<sub>0.4</sub>Cr<sub>0.4</sub>)AlC MAX phase synthesized by sputtering : structural, thermal, and mechanical insights**

Melkonyan, S.; Zakaryan, Marieta; Grigoryan, Y.; **Hussainova, Irina**; **Aydinyan, Sofiya**; Kharatyan, Suren JTACC+V4 2025 : 4th Journal of Thermal Analysis and Calorimetry Conference & 10th V4 (Joint Czech-Hungarian-Polish-Slovak) Thermoanalytical Conference : Book of Abstracts 2025 / p. 179 <https://static.akcongress.com/downloads/jtacc/jtacc2025/jtacc2025-boa.pdf>

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

**Rojas Hernandez, Rocio Estefania**; Rubio-Marcos, Fernando; Serrano, Aida; Roman-Sanchez, Sara; Fernandez, Jose Francisco; **Hussainova, Irina** Ceramics international 2023 / p. 13125 - 13130 <https://doi.org/10.1016/j.ceramint.2022.12.190> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**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) <https://doi.org/10.3176/proc.2016.2.06> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**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 <https://doi.org/10.4028/www.scientific.net/KEM.674.15> Conference Proceedings at Scopus Article at Scopus

**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 <https://doi.org/10.4028/www.scientific.net/KEM.674.35> Conference Proceedings at Scopus Article at Scopus

**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)<sub>2</sub>-based composite through selective laser melting of a MoSi<sub>2</sub>-30 wt.% AlSi<sub>10</sub>Mg 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

**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

**Influence of precursor zirconium carbide powders on the properties of the spark plasma sintered ceramic composite materials**

**Voltsihhin, Nikolai; Hussainova, Irina;** Hannula, Simo-Pekka; **Viljus, Mart** Developments in Strategic Materials and Computational Design IV 2014 / p. 297-308 : ill <https://doi.org/10.1002/9781118807743> Conference proceedings at Scopus Article at Scopus

**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 TiO<sub>2</sub> 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 (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [6] p. : ill <https://doi.org/10.1109/RTUCON.2016.7763144>

**Introduction to nanomaterials and nanotechnology**

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

**Investigation of deep UV emission of rare-earth-free Zn<sub>2</sub>SiO<sub>4</sub> micropowders : the correlation of structural and luminescence properties**

**Necib, Jallouli;** Feldbach, Eduard; Romet, Ivo; Nagirnyi, Vitali; **Hussainova, Irina;** Rojas Hernandez, Rocio Estefania Journal of luminescence 2025 / art. 121070 <https://doi.org/10.1016/j.jlumin.2025.121070>

**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; Löhmus, Rünno; **Hussainova, Irina; Nisumaa, Reet** 15th International Baltic Conference "Engineering Materials & Tribology. Balttrib - 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  
<http://innomet.ttu.ee/daaam08/online/Materials%20Engineering/Sergejev.pdf>

**Isothermal oxidation of SLM fabricated Mo(Si1-xAlx)2-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)2 – 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 MoSi2/Si3N4 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**

**Voltšihhin, Nikolai; Rodriguez, Miguel Angel; Hussainova, Irina; Aghayan, Marina** Ceramics international 2014 / p. 7235-7244 : ill  
<https://doi.org/10.1016/j.ceramint.2013.12.063> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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  
<https://doi.org/10.1016/j.wear.2015.02.031> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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 <https://doi.org/10.1016/j.surfcoat.2015.10.008> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**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.; Lehmhus, 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 I. [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  
<https://www.sciencedirect.com/science/article/pii/S0043164804002236>

**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; Rodríguez 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> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**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)<sub>2</sub> by laser powder bed fusion of AlSi10Mg and combustion synthesized MoSi<sub>2</sub>**

**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(Si<sub>1-x</sub>Al<sub>x</sub>)<sub>2</sub>-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](#)

**MoSi<sub>2</sub> 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; Urić, 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-objective machine learning optimization of cylindrical TPMS lattices for bone implants**

**Rezapourianghahfarokhi, Mansoureh**; Cheloe Darabi, Ali; Khoshbin, Mohammadreza; **Hussainova, Irina** Biomimetics 2025 / art. 475 <https://doi.org/10.3390/biomimetics10070475>

### **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  
[https://www.researchgate.net/publication/288482524\\_New\\_high\\_frequency\\_surface\\_fatigue\\_wear\\_tester\\_Design\\_and\\_first\\_results](https://www.researchgate.net/publication/288482524_New_high_frequency_surface_fatigue_wear_tester_Design_and_first_results)

### **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  
<https://doi.org/10.4028/www.scientific.net/KEM.674.133> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

### **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  
<https://doi.org/10.1016/j.carbon.2014.09.053> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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-proceedings-usb>

### **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://fntdtk.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

**On the potential of Transparent Rare-Earth-Free ZnAl<sub>2</sub>O<sub>4</sub> Ceramics targeted at the UV-C to UV-B emission**

**Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando;** Romet, Ivo; Feldbach, Eduard; Buryi, Maksym; John, David; **Ivanov, Roman; Hussainova, Irina;** Fernandez, José F.; Nagirnyi, Vitali Applied materials today 2024 / ar. 102230, 14 p. : ill <https://doi.org/10.1016/j.apmt.2024.102230> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

**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 <https://doi.org/10.1007/s00339-013-7601-y> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

**Voltšihhin, Nikolai; Hussainova, Irina; Traksmaa, 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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

**Antonov, Maksim; Hussainova, Irina; Kübarsepp, Jakob; Traksmaa, 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](#)

**Periodic functionalization of graphene-layered alumina nanofibers with aromatic thermosetting copolyester via epitaxial step-growth polymerization**

Bakir, Mete; Meyer, Jacob L.; **Hussainova, Irina;** Sutrisno, Andre; Economy, James; Jasiuk, Iwona Macromolecular chemistry and physics 2017 / art. 1700338, 6 p. : ill <https://doi.org/10.1002/macp.201700338> [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 sünteetitud hõbedal põhinevad nanoosakesed ning nende kasutus antimikroobse vahendina keskkonnasõbralikes rakendustes**

**Küüna, Siim** 2022 <https://doi.org/10.23658/taltech.2/2022> <https://digikogu.taltech.ee/et/Item/c3a53dca-9a76-4356-810f-2d51e44cdcb5> [https://www.eester.ee/record=b5492124\\*est](https://www.eester.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

[https://www.researchgate.net/publication/227944686\\_Plasma\\_transferred\\_arc\\_hardfacings\\_reinforced\\_by\\_chromium\\_carbide\\_based\\_cermet\\_particles](https://www.researchgate.net/publication/227944686_Plasma_transferred_arc_hardfacings_reinforced_by_chromium_carbide_based_cermet_particles)

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

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

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

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

#### **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 [https://www.researchgate.net/publication/250226715\\_Processing\\_and\\_mechanical\\_characterization\\_of\\_WC\\_-\\_ZrO<sub>2</sub>-Ni\\_hybrids](https://www.researchgate.net/publication/250226715_Processing_and_mechanical_characterization_of_WC_-_ZrO2-Ni_hybrids)

#### **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 <https://doi.org/10.4028/www.scientific.net/KEM.604.258> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

#### **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 <https://ceramics.onlinelibrary.wiley.com/doi/abs/10.1002/9781118807965.ch11> [Conference proceedings at Scopus](#) [Article at Scopus](#)

#### **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 <https://doi.org/10.4028/www.scientific.net/KEM.674.94> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

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

**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

<https://doi.org/10.1021/acscatal.6b00945> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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, 1993-**; 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> [https://www.ester.ee/record=b5174063\\*est](https://www.ester.ee/record=b5174063*est)

**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**

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

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

**Rezapourianghahfarokhi, Mansoureh**; Jasiuk, Iwona; **Sarna, Mart; Hussainova, Irina** International journal of mechanical

sciences 2023 / art. 108353 <https://doi.org/10.1016/j.ijmecsci.2023.108353> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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. 2 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

<https://doi.org/10.1016/j.ceramint.2016.05.059> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **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 γ-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. Baltattrib - 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) Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **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.; Storoženko, M.; **Hussainova, Irina; Antonov, Maksim** Powder metallurgy and metal ceramics 2015 / p. 663-671 : ill <https://doi.org/10.1007/s11106-015-9661-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **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] [https://www.academia.edu/24587100/Subsurface\\_of\\_Cr\\_3\\_C\\_2\\_Ni\\_Cermets\\_Modified\\_by\\_Wear](https://www.academia.edu/24587100/Subsurface_of_Cr_3_C_2_Ni_Cermets_Modified_by_Wear)

#### **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. : ill <https://doi.org/10.1016/j.matlet.2020.129163> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **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; Rodríguez Ripoll, Manel** Wear 2023 / art. 205114 <https://doi.org/10.1016/j.wear.2023.205114> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **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 [https://www.researchgate.net/publication/265844548\\_Synthesis\\_of\\_ZrC-TiC\\_Blend\\_by\\_Novel\\_Combination\\_of\\_Sol-Gel\\_Method\\_and\\_Carbothermal\\_Reduction](https://www.researchgate.net/publication/265844548_Synthesis_of_ZrC-TiC_Blend_by_Novel_Combination_of_Sol-Gel_Method_and_Carbothermal_Reduction)

#### **Synthesis of 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 / p. 209-221 : ill <https://doi.org/10.1016/j.jiec.2023.07.050> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **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 BALTMATRIB 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; Tätte, 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 keeleauehind. Kultuur. Sport 2019 / lk. 108-117 : ill., portr [https://www.ester.ee/record=b1226072\\*est](https://www.ester.ee/record=b1226072*est)

**Temperature-induced wear micro-mechanism transition in additively deposited nickel alloys with different solid lubricants**  
**Kumar, Rahul, 1993-; Hussainova, Irina; Antonov, Maksim;** Maurya, Himanshu Singh; Rodríguez Ripoll, Manel Wear 2024 / art. 205452 <https://doi.org/10.1016/j.wear.2024.205452> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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

<https://doi.org/10.1016/j.wear.2016.02.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**The effect of impact angle on erosion of cermets**

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

**The effect of test conditions on the erosion resistance of cermets**

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

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

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

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

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

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

**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.akcongress.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 <https://doi.org/10.1021/acsami.7b08129> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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** Thermochimica acta 2015 / p. 43-48 : ill <https://doi.org/10.1016/j.tca.2015.01.009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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.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 CuAlO<sub>2</sub> 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 CuAlO<sub>2</sub> 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 Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fmttk.ut.ee/teesid-2018/>

### Toward high temperature tough ceramics

Hussainova, Irina; Yung, Der-Liang; Voltšihhin, Nikolai; Traksmäa, Rainer; Hannula, Simo-Pekka ECCM15 - 15th European Conference on Composite Materials : Venice, Italy, 24-28 June 2012 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; Rodriguez Ripoll, Manel Surface and coatings technology 2023 / art. 129270, 14 p. : ill <https://doi.org/10.1016/j.surfcoat.2023.129270> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### 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> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### Tribological properties of the Cr<sub>3</sub>C<sub>2</sub>-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 Cr<sub>3</sub>C<sub>2</sub>-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) [https://artiklid.elnet.ee/record=b2836030\\*est](https://artiklid.elnet.ee/record=b2836030*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 <https://doi.org/10.1016/j.jrmhm.2016.09.014> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **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-MoSi<sub>2</sub> and ZrC-TiC-Si<sub>3</sub>N<sub>4</sub> 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://fntdk.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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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) [https://artiklid.elnet.ee/record=b2797135\\*est](https://artiklid.elnet.ee/record=b2797135*est)

### **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 <https://doi.org/10.1016/j.wear.2014.01.014> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

**Zikin, Arkadi**; **Hussainova, Irina**; Katsich, Christian; **Kulu, Priit**; **Goljandin, Dmitri** Engineering materials and tribology 2013 / p. 179-184 [https://www.researchgate.net/publication/236332219\\_Wear\\_Behaviour\\_of\\_Recycled\\_Hard\\_Particle\\_Reinforced\\_NiCrBSi\\_Hardfacings\\_Deposited\\_by\\_Plasma\\_Transferred\\_Arc\\_PTA\\_Process](https://www.researchgate.net/publication/236332219_Wear_Behaviour_of_Recycled_Hard_Particle_Reinforced_NiCrBSi_Hardfacings_Deposited_by_Plasma_Transferred_Arc_PTA_Process)

### **Wear 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 <https://doi.org/10.1016/j.wear.2016.02.015> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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 <https://doi.org/10.1016/j.wear.2016.09.028> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Wear resistance analysis of duplex interpenetrating ceramic composites via in-situ vibration monitoring**

**Kariminejad, Arash**; **Auriemma, Fabio**; **Antonov, Maksim**; **Klimczyk, Piotr**; **Hussainova, Irina** International journal of refractory metals and hard materials 2026 / art. 107454 <https://doi.org/10.1016/j.jrmhm.2025.107454>

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

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

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

### **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  
<https://doi.org/10.3390/met7010016> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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 : ил

**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 : ил