

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 Cr₃C₂ base cermets

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

Abrasive wear of Cr₃C₂ base cermets [Electronic resource]

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

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

Kamboj, Nikhil Kumar 2020 https://www.ester.ee/record=b5379547*est <https://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

Additively manufactured mesostructured MoSi₂-Si₃N₄ 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 TiB₂/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 = Mitmefaaasilised kulumiskindlad PTA-keevispindad

Zikin, Arkadi 2013 <https://digi.lib.ttu.ee/i/?908> 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

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

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

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]

Assessment of tribological performance of 3D printed macro features on the metallic surface

Antonov, Maksim; Pohlak, Meelis; Ivanov, Roman; Kariminejad, Arash; Hussainova, Irina Wear 2026 / art. 206398 <https://doi.org/10.1016/j.wear.2025.206398>

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-Al₂O₃ 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](#)

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

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

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; Kapitulska, 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 [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.eester.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; Traksmaa, 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

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 MoSi₂ 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 ZnAl₂O₄ 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 ZnAl₂O₄ 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–ZrO₂ 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

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

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

Development of yttrium-doped BaTiO₃ for next-generation multilayer ceramic capacitors

Tiitih, 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 today 2024 / art. 102245 <https://doi.org/10.1016/j.apmt.2024.102245> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 MoS₂/Al₂O₃/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

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

Effect of carbon content on sinterability and properties of ZrO₂ doped WC-cermets

Cura, M. Erkin; **Voltšihhin, Nikolai; Hussainova, Irina; Viljus, Mart**; Hannula, Simo-Pekka Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 771-776

Effect of erodent particle impact energy on wear of cemented carbides

Antonov, Maksim; Yung, Der-Liang; **Goljandin, Dmitri; Mikli, Valdek; Hussainova, Irina** Wear 2017 / p. 507-515 : ill <https://doi.org/10.1016/j.wear.2016.11.032> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Rugele, Kristine; Lehmus, 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/Cr₃C₂ on WC-ZrO₂-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 TiB₂/Ti composites at temperatures up to 900°C

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

Effect of 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 SiO₂ medium

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

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

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

Effect of oxidation on abrasive wear of TiC-based cermets at various temperatures

Antonov, Maksim; Hussainova, Irina; Pirso, Jüri; Juhani, Kristjan Proceedings of 14th Nordic Symposium on Tribology : NORDTRIB 2010 : 08.06-11.06.2010, Storforsen, Sweden 2010 / p. 0054 [CD-ROM]

Effect of oxidation on erosive wear behaviour of boiler steels

Antonov, Maksim; Veinthal, Renno; Huttunen-Saarivirta, E.; Hussainova, Irina; Vallikivi, Ahto; Lelis, Martynas; Priss, Jelena Tribology international 2013 / p. 35-44 : ill <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-TiB₂ plasma sprayed coatings

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

Effect of silica precursor on the synthesis of Zn₂SiO₄-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 SiO₂ and PTFE additives on dry sliding of NiP electroless coating

Gutsev, D.; **Antonov, Maksim; Hussainova, Irina**; Grigoriev, A.Y. Tribology international 2013 / p. 295-302 : ill <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 TiB₂/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 Si₃N₄, Al₂O₃, and ZrO₂ balls tested against AlCrN PVD coating

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

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

Zhao, Gai; Hussainova, Irina; Antonov, Maksim; Wang, Qihua; Wang, Tingmei; Yung, Der-Liang Tribology international 2015 / p. 525-533 : ill <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 TiB₂ 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-graafenkiudkeraamika tehnoloogia ja püsivus

Drozdova, Maria 2017 <https://digi.lib.ttu.ee/i/?9119> 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 [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

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

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

Tihti, 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](#)

Enhancement of the persistent luminescence of SrAl₂O₄:Eu, dy ceramics through incorporation of Ag and Au nanoparticles

Rojas Hernandez, Rocio Estefania; ParisIogayar, Marina; Serrano, Aida; G. Calatayud, David; RubioIMarcos, Fernando; Hussainova, Irina; Fernandez, Jose Francisco Advanced photonics research 2025 / art. e202500292

<https://doi.org/10.1002/adpr.202500292>

Enhancing NIR emission in ZnAl₂O₄: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 Cr₃C₂-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 Cr₃C₂-Ni cermets in salt water

Antonov, Maksim; Stack, Margaret; Hussainova, Irina Proceedings of the Estonian Academy of Sciences. Engineering 2006 / 3-1, p. 176-187 : ill

Erosive wear of 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 Al₂O₃ - 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 International Conference, 25-27th September 1997, Tallinn, Estonia 1997 / p. 178-181 : ill

Experimental and theoretical investigation of particle-wall collision

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

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/NiAl₂O₄ 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-CeO₂ 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_x (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

Kariminejad, 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

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, Mihhail 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/acsbmaterials.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://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

<https://doi.org/10.1016/j.triboint.2012.08.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-entropy (Ti_{0.4}Ta_{0.4}V_{0.4}Nb_{0.4}Cr_{0.4})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.akkongress.com/downloads/jtacc/jtacc2025/jtacc2025-boab.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 Cr₃C₂-based cermets

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

High-temperature erosion of Cr₃C₂-based cermets [Electronic resource]

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

High-temperature 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://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)₂-based composite through selective laser melting of a MoSi₂-30 wt.% AlSi₁₀Mg mixture

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

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

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

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 TiO₂ thin-films mechanical behavior under loading
Lõhmus, Rünno; **Hussainova, Irina;** Leinberg, Silver; Aarik, Jaan; Tarre, Aivar; Lõhmus, 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** 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; Lõhmus, Rünno; **Hussainova, Irina;** Pokropivny, Alex; Vlassov, Sergei 2007 https://www.ester.ee/record=b2310170*est

Investigation of deep UV emission of rare-earth-free Zn₂SiO₄ 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; Lõhmus, Rünno; **Hussainova, Irina; Nisumaa, Reet** 15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 42-43 : ill

Investigation of particle - wall impact process
Kleis, Ilmar; Hussainova, Irina Wear 1999 / p. 168-173 : ill

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

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

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

Investigation of particle-wall collision

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

Investigation of particle-wall collision and erosion prediction

Hussainova, Irina 1999 http://www.ester.ee/record=b1371968*est

Investigation of particle-wall collision and erosion prediction

Hussainova, Irina 1999 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; Katushin, 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; Lohmus, Rünno; Lohmus, Ants Proceedings of International Conference on Modern Materials

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–ZrO₂–Ni cermets produced by hot isostatic pressing

Hussainova, Irina; Smirnov, Anton; Antonov, Maksim Advances in Key Engineering Materials 2011 / p. 344-348 : ill

Mechanical properties and features of erosion of cermets

Hussainova, Irina; 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

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.; Lehmkus, 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

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; Aydynyan, 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://doi.org/10.4028/www.scientific.net/KEM.799>

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

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

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

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

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

Minasyan, Tatevik; Ivanov, Roman; Toyserkani, Ehsan; Hussainova, Irina Materials letters 2022 / art. 131041

<https://doi.org/10.1016/j.matlet.2021.131041> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

MoSi2 based composites by selective laser melting

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

MoSi2 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

MoSi2-based composites by selective laser melting = Selektiivse lasersulatuse teel valmistatud MoSi2 baasil komposiidid

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

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

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

Multi-objective machine learning optimization of cylindrical TPMS lattices for bone implants

Rezapourianghahfarokhi, Mansoureh; Cheloe Darabi, Ali; Khoshbin, Mohammadreza; **Hussainova, Irina** Biomimetics 2025 / art. 475 <http://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 Cr₃C₂-Ni cermets [Electronic resource]

Du, Xiangdong; Jasiuk, Iwona; **Hussainova, Irina** Proceedings of 2006 SEM Annual Conference & Exposition on Experimental and Applied Mechanics : St.Louis, MI, USA, June 4-6, 2006 2006 / [CD-ROM]

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.; Löhms, 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

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

Küüna, 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 (BALMATTRIB & 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 TiB₂-Si₃N₄ 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 TiB₂-Si₃N₄ 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 Si₃N₄ 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 TiB₂/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 :

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 ZnAl₂O₄ 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](#)

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-ZrO₂ 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.jirmhm.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_{1-x}Al_x)₂

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](#)

Phase and microstructure evolution patterns at combustion synthesis of high-entropy M₂AlC (M=Ti/Ta/V/Nb/Cr) MAX phase

Melkonyan, Syuzanna; Zakaryan, Marieta; Grigoryan, Yeva; Kharatyan, Suren; **Hussainova, Irina;** Chabanais, Florian; Shamshirgar, Ali Saffar; Persson, Per O. A.; Rosen, Johanna; **Aydinyan, Sofiya** Journal of materials research and technology 2025 / p. 5800-5807 <https://doi.org/10.1016/j.jmrt.2025.10.186>

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

Küünal, Siim 2022 <https://doi.org/10.23658/taltech.2/2022> <https://digikogu.taltech.ee/et/Item/c3a53dca-9a76-4356-810f-2d51e44cdabc5>

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

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://matssc.ktu.lt/index.php/MatSc/article/view/1334>

Processing and mechanical characterization of WC–ZrO₂–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_-_ZrO₂-Ni_hybrids](https://www.researchgate.net/publication/250226715_Processing_and_mechanical_characterization_of_WC_-_ZrO2-Ni_hybrids)

Processing and mechanical properties of ZrC-ZrO₂ 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 ZrO₂

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

Processing and microstructural characterization of WC-based cermets doped by ZrO₂

Kimmari, Eduard; Hussainova, Irina; Smirnov, Anton; 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 Cr₃C₂

Jevgrafova, Natalja; Hussainova, Irina OST-01 Symposium on Machine Design : Tallinn, Estonia, October 4-5, 2001 : proceedings 2001 / p. 245-250 : ill

Processing and tribological properties of Cr₃C₂

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

Processing 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 (BALTMATTRIB & 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 WOS](#) [Article at WOS](#)

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://doi.org/10.4028/www.scientific.net/KEM.799.9> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Rapid and scalable combustion synthesis of (Mo₂/3Y₁/3)2AlC i-MAX as the precursor for vacancy-ordered MXene

Saffarshamshirgar, Ali; Ivanov, Roman; Aydinyan, Sofiya; Ghosh, Sohan; Chabanais, Florian; Ronchi, Rodrigo M.; Halim, Joseph; Elsukova, Anna; Qin, Leiqiang; Nazaretyan, Khachik; Hussainova, Irina Journal of Material Science and Technology 2026 / p. 157-169 <https://doi.org/10.1016/j.jmst.2025.09.014>

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

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/i/?11163> 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 BaTiO₃ ceramic compounds : structural, optical, microstructure, mechanical, and thermal conductivity properties

Tiitih, 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

Rezapourianghafarokhi, Mansoureh; Jasiuk, Iwona; Saarna, 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 MoSi₂/Si₃N₄ 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.eester.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 TiB₂-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

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 TiB₂-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

Sintering behavior of ZrC-TiC-MoSi₂ 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://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

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 TiB₂/Ti composites at high temperatures

Michalczewski, Remigiusz; Kalbarczyk, Marek; Słomka, Zbigniew; Osuch-Słomka, Edyta; Łuszcz, Maciej; Liu, Le; Antonov, Maksim; Hussainova, Irina Materials 2021 / art. 6771 <https://doi.org/10.3390/ma14226771> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Sliding wear performance of in-situ spark plasma sintered Ti-TiB_w 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 Cr₃C₂-Ni metalmatrix composites

Antonov, Maksim; Hussainova, Irina; Pirso, Jüri OST-01 Symposium on Machine Design : Tallinn, Estonia, October 4-5, 2001 : proceedings 2001 / p. 233-243 : ill

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 TiB₂-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 -Al₂O₃/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 [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

SrAl₂O₄ : 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 [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.% TiB₂ 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 Cr₃C₂-Ni cermets modified by wear [Electronic resource]

Antonov, Maksim; Hussainova, Irina Proceedings of the 10th International Conference of the European Ceramic Society 2008 / ? p. [CD-ROM] https://www.academia.edu/24587100/Subsurface_of_Cr_3_C_2_Ni_Cermets_Modified_by_Wear

Superhard B₄C-ReB₂ 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 MoS₂ 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://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

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

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

Synthesis of ternary GNP-CNT-ZrO₂ 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.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 leegeritud komposiitmaterjalid rakendusteks kõrgtemperatuursetes ja kulumistingimustes

Yung, Der-Liang 2016 http://www.ester.ee/record=b4621174*est

ZrC-TiC-MoSi₂ 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

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 BALTMATTRIB 2019. Selected, peer reviewed papers from the

conference Modern Materials and Manufacturing 2019 (MMM 2019), April 24-26, 2019, Tallinn, Estonia 2019 / p. 165-170 : ill

https://www.ester.ee/record=b5235278*est <https://www.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** Thermochemica 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://doi.org/10.4028/www.scientific.net/KEM.799.191>

3D printing of plain and gradient cermets with efficient use of raw materials

Antonov, Maksim; Ivanov, Roman; Holovenko, Yaroslav; Goljandin, Dmitri; Rahmani Ahranjani, Ramin; Kollo, Lauri; Hussainova, Irina Modern Materials and Manufacturing 2019 : 12th International DAAAM Baltic Conference and 27th International Baltic Conference BALTMATTRIB 2019. Selected, peer reviewed papers from the conference Modern Materials and Manufacturing 2019 (MMM 2019), April 24-26, 2019, Tallinn, Estonia 2019 / p. 239-245 : ill <https://doi.org/10.4028/www.scientific.net/KEM.799.239>
https://www.ester.ee/record=b5235278*est [Conference proceeding at Scopus](#) [Article at Scopus](#)

3D printing of plain and gradient cermets with efficient use of raw materials

Antonov, Maksim; Ivanov, Roman; Holovenko, Yaroslav; Goljandin, Dmitri; Rahmani Ahranjani, Ramin; Kollo, Lauri; Hussainova, Irina Cermets : aggregated book 2023 / p. 83-90 <https://doi.org/10.4028/b-jj9Oly>

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://digikogu.taltech.ee/et/Item/2a4de866-52a3-4bef-8c4e-e136c89285a3>
<https://doi.org/10.23658/taltech.47/2021>

Time-effective synthesis of rhombohedral CuAlO₂ from mesoporous alumina substrate

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

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

Saffarshamshirgar, Ali; Aghayan, Marina; Tripathi, Tripurari S.; Karppinen, Maarit; Gasik, Michael; Hussainova, Irina Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fmdtk.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.; Lõhmus, Rünno; Erts, D.; Hussainova, Irina; Olin, H.; Lõhmus, 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; Rodríguez 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; Lõhmus, 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 Cr₃C₂-Ni metal-matrix composites

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

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

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

TTÜ aasta teadlane 2017 Irina Hussainova loob tulevikumaterjale

Hussainova, Irina Mente et Manu 2018 / lk. 28-30 : fot <https://www.ttu.ee/ttu-uudised/ajaleht-mente-et-manu/mente-et-manu/>
https://www.ester.ee/record=b1242496*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 [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-MoSi₂ and ZrC-TiC-Si₃N₄ composites [Online resource]

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

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

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**; Lehmkus, 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