

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 / [CD-ROM]

Comparative analysis of two methods for evaluating wear rate of nanocrystalline diamond films

Bogatov, Andrei; Yashin, Maxim; Viljus, Mart; Menezes, Pradeep; **Podgurski, Vitali** Engineering materials and tribology XXV 2017 / p. 345-350 : ill <https://doi.org/10.4028/www.scientific.net/KEM.721.345> [Conference proceedings at Scopus](#) [Article at Scopus](#)

A comparative study of the growth dynamics and tribological properties of nanocrystalline diamond films deposited on the (110) single crystal diamond and Si(100) substrates

Podgurski, Vitali; Bogatov, Andrei; Yashin, Maxim; Viljus, Mart; Volobujeva, Olga; Mere, Arvo; Raadik, Taavi Diamond and related materials 2019 / p. 159-167 : ill <https://doi.org/10.1016/j.diamond.2018.12.024> [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

Dependence of wear of Cu-Cr-S alloy on hardness and electrical conductivity in sliding electrical contact

Kommel, Lembit; Baroninš, Janis Materials Engineering 2017 : selected, peer reviewed papers from the 26th International Baltic Conference on Materials Engineering 2017, October 26-27, Kaunas, Lithuania 2017 / p. 229-233 : ill <https://doi.org/10.4028/www.scientific.net/SSP.267.229> [Conference proceedings at Scopus](#) [Article at Scopus](#)

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 reinforcement type and content on the abrasive wear behaviour of polymer composites

Antonov, Maksim; Kers, Jaan; Liibert, Laura; Shuliak, Volodymyr; Smirnov, Anton; Bartolome, Jose F. 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. 181-188 : ill <https://doi.org/10.4028/www.scientific.net/KEM.674.181> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Effect of ceramic reinforcement on the microstructural, mechanical and tribological behavior of Al-Cu alloy metal matrix composite

Aktar Zahid Sohag, Md; Gupta, Pallav; Kondal, Neha; Kumar, Devendra; **Singh, Neera;** Jamwal, Anbesh Materials today: proceedings 2020 / p. 1407-1411 <https://doi.org/10.1016/j.matpr.2019.08.179> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Effect of graphene nanoplatelet content on mechanical and elevated-temperature tribological performance of self-lubricating ZE10 magnesium alloy nanocomposites

Kandemir, Sinan; **Yöyler, Sibel; Kumar, Rahul, 1993-; Antonov, Maksim;** Dieringa, Hajo Lubricants 2024 / art. 52 <https://doi.org/10.3390/lubricants12020052> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics 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 new superhard phases formation on properties of composite processed by SHS

Kommel, Lembit; Tamm, Toomas; Metsvahi, Raido Engineering materials and tribology 2013 / p. 137-142

Gradient microstructure in tantalum formed under the wear track during dry sliding friction

Kommel, Lembit; Põdra, Priit; Mikli, Valdek; Omranpour Shahreza, Babak Wear 2021 / art. 203573, 7 p. : ill <https://doi.org/10.1016/j.wear.2020.203573> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High temperature cyclic impact/abrasion testing of boiler steels

Priss, Jelena; Klevtsov, Ivan; Dedov, Andrei; Antonov, Maksim; Rojacz, Harald; Badisch, Ewald Engineering materials & tribology XXII 2014 / p. 289-292 <https://doi.org/10.4028/www.scientific.net/KEM.604.289> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

High-temperature tribological performance of Al₂O₃/a-C:H:Si coating in ambient air

Podgurski, Vitali; Alamgir, Asad; Yashin, Maxim; Jõgiaas, Taivo; Viljus, Mart; Raadik, Taavi; Danilson, Mati; Sergejev, Fjodor; Lümekemann, Andreas; Kluson, Jan; Sondor, Jozef; Bogatov, Andrei Coatings 2021 / art. 495, 15 p. : ill

<https://doi.org/10.3390/coatings11050495> [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](#)

The impact of microstructural refinement on the tribological behavior of niobium processed by Indirect Extrusion Angular Pressing

Omranpour Shahreza, Babak; Hernandez-Rodriguez, Marco A. L.; Hernandez-Rodriguez, Edgar; Kommel, Lembit; Sergejev, Fjodor Tribology international 2022 / art. 107412 <https://doi.org/10.1016/j.triboint.2021.107412> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Investigation of boiler materials with relation to corrosion and wear : review

Priss, Jelena; Klevtsov, Ivan; Dedov, Andrei; Antonov, Maksim Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 389-394 : ill

Investigation of the tribological behavior of the additively manufactured TiC-based cermets by scratch testing

Maurya, Himanshu Singh; Jayaraj, Jayamani; Wang, Z.; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss Journal of alloys and compounds 2023 / art. 170496, 9 p. : ill <https://doi.org/10.1016/j.jallcom.2023.170496> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mathematical models in biotribology with 2D-3D erosion integral-differential model and computational-optimization/simulation programming - a mathematical model construction based on experimental research

Casesnoves, Francisco; Surženkov, Andrei International journal of scientific research in computer science, engineering and information technology 2017 / p. 329-356 : ill <http://ijsrcseit.com/CSEIT17224010>

Mathematical models in mechanical and biomedical tribology with computational simulations/optimization methods

Casesnoves, Francisco; Surženkov, Andrei International journal of scientific research in computer science, engineering and information technology 2017 / p. 62-89 : ill <http://ijsrcseit.com/CSEIT17211>

Microstructural, mechanical and corrosion behaviour of Al-Si alloy reinforced with SiC metal matrix composite

Bandil, Kapil; Vashisth, Himanshu; Kumar, Sourav; Singh, Neera Journal of composite materials 2019 / p. 4215-4223 : ill

<https://doi.org/10.1177/0021998319856679> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Microstructure, wear and corrosion characteristics of Cu matrix reinforced SiC-graphite hybrid composites

Jamwal, Anbesh; Prakash, Prem; Kumar, Devendra; Singh, Neera; Sadasivuni, Kishor Kumar; Harshit, Kumar; Gupta, Sumit; Gupta, Pallav Journal of composite materials 2019 / p. 2545 - 2553 <https://doi.org/10.1177/0021998319832961> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mild steel tribology for circular economy of textile industries

Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim; Basit, Muhammad Abdul; Ahmad, Tahir Tribology in Industry 2021 / p. 552-560 <https://doi.org/10.24874/ti.1050.02.21.04> [Journal metrics at Scopus](#) [Article at Scopus](#)

Nonlinear comparative optimization for biomaterials wear in artificial implant technology

Casesnoves, Francisco Materials science and applied chemistry II : 59th International Scientific Conference of Riga Technical University (RTU), Section of Materials Science and Applied Chemistry - MSAC 2018 2019 / p. 52-59

<https://doi.org/10.4028/www.scientific.net/KEM.800.52> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Overview of hard cyclic viscoplastic deformation as a new SPD method for modifying the structure and properties of niobium and tantalum

Kommel, Lembit Nanotechnology and advanced material science 2024 / 15 p <https://doi.org/10.31038/NAMS.2024721>

Performance of polyimide and PTFE based composites under sliding, erosive and high stress abrasive conditions

Kumar, Rahul, 1993-; Malaval, Bastien; Antonov, Maksim; Zhaoc, Gai Tribology international 2020 / art. 106282

<https://doi.org/10.1016/j.triboint.2020.106282> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Phase, microstructure, and wear behavior of Al₂O₃-reinforced Fe-Si alloy-based metal matrix nanocomposites

Saxena, Akash; Singh, Neera; Singh, Bhupendra; Kumar, Devendra; Sadasivuni, Kishor Kumar; Gupta, Pallav; Kumar, Devendra Proceedings of the institution of mechanical engineers part L Journal of Materials Design and Applications Journal of materials design and applications 2020 / art. 146442071989338, p. 467-480 <https://doi.org/10.1177/1464420719893387> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Rippling on wear scar surfaces of nanocrystalline diamond films after reciprocating sliding against ceramic balls
Podgurski, Vitali; Hantschel, Thomas; Bogatov, Andrei; Kimmari, Eduard; Antonov, Maksim; Viljus, Mart; Mikli, Valdek; Raadik, Taavi; Kulu, Priit Tribology letters 2014 / p. 493-501 : ill <https://doi.org/10.1007/s11249-014-0379-z> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selection criteria for wear resistant powder coatings under extreme erosive wear conditions
Kulu, Priit; Pihl, Toomas Journal of thermal spray technology 2002 / p. 517-522 : 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](#)

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](#)

Superior wear resistance in EBM-Processed TC4 alloy compared with SLM and forged samples
Zhang, Weiwen; Qin, Peiting; Wang, Zhi; Yang, Chao; Kollo, Lauri; Grzesiak, Dariusz; Prashanth, Konda Gokuldoss Materials 2019 / art. 782 <https://doi.org/10.3390/ma12050782> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Surface fatigue and wear of PVD coated punches during fine blanking operation
Sergejev, Fjodor; Peetsalu, Priidu; Sivitski, Alina; Saarna, Mart; Adoberg, Eron Engineering failure analysis 2011 / p. 1689-1697 : ill

Sustainable fabrication of polypropylene-postconsumer cotton composite materials : circularity, characterization, mechanical testing, and tribology
Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim; Viljus, Mart; Krasnou, Illia Materials today sustainability 2023 / art. 100344, 16 p. : ill <https://doi.org/10.1016/j.mtsust.2023.100344> [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; Rodriguez 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](#)

The effect of microstructure evolution on the wear behavior of tantalum processed by Indirect Extrusion Angular Pressing
Omranpour Shahreza, Babak; Huot, Jacques; Antonov, Maksim; Kommel, Lembit; Sergejev, Fjodor; Perez Trujillo, Francisco Javier; Heczal, Anita; Gubicza, Jeno International journal of refractory metals and hard materials 2023 / art. 106079, 11 p. : ill <https://doi.org/10.1016/j.ijrmhm.2022.106079> [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; Słomka, 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](#)

TiAlN coatings tribology for textile machinery parts
Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim Proceedings of the Estonian Academy of Sciences 2021 / p. 163-171 : ill <https://doi.org/10.3176/proc.2021.2.04> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tribological behavior of 316L stainless steel manufactured by selective laser melting
Al Noaimy, Omar; AlMangour, Bandar; Abdulsalam, Ezzet H.; Eckert, J.; Prashanth, Konda Gokuldoss; Chaubey, A. K.; Scudino, S.; Alzuhaireh, Sabih Hashim 4th international conference on architectural & civil engineering sciences 2023 / p. 142-146 <https://doi.org/10.24086/ICACE2022/paper.889>

Tribological parameters of copper-alumina composite
Hvizdoš, Pavol; Kulu, Priit; Besteri, Michal Engineering materials and tribology 2013 / p. 191-196 https://www.researchgate.net/publication/271863555_Tribological_Parameters_of_Copper-Alumina_Composite

Tribology of alumina materials for the circular economy of manufacturing textile industries
Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim; Viljus, Mart Proceedings of the Estonian Academy of Sciences 2021 / lk. 215-220 : ill <https://doi.org/10.3176/proc.2021.3.01> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wear behavior of ceramic-metal composites as tool material for FSW of copper

Kolnes, Mart; Kübarsepp, Jakob; Sergejev, Fjodor; Kolnes, Märt; Tarraste, Marek; Viljus, Mart Solid state phenomena ; 320 2021 / p. 144–149 <https://doi.org/10.4028/www.scientific.net/SSP.320.144> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Wear of advanced cemented carbides for metalforming tool materials

Klaasen, Heinrich; Kübarsepp, Jakob Wear 2004 / p. 846-853 : ill <https://doi.org/10.1016/j.wear.2003.08.004>

Wear of different PVD coatings at industrial fine-blanking field tests

Lind, Liina; Peetsalu, Priidu; Sergejev, Fjodor Medžiagotyra = Materials science 2015 / p. 343-348 : ill <https://doi.org/10.5755/j01.ms.21.3.7249> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wear performance of PVD coated tool steels

Tšinjan, Aleksei; Klaasen, Heinrich; Kübarsepp, Jakob; Adoberg, Eron; Sergejev, Fjodor; Talkop, Adolf Estonian journal of engineering 2012 / p. 202-210 : ill

Wear resistance of thermal sprayed coatings on the base of recycled hardmetal

Kulu, Priit; Zimakov, Sergei Surface and coatings technology 2000 / p. 46-51 : ill