

Advanced chromium carbide based hardfacings

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

Comparative analysis of wear rates of microcrystalline diamond and diamond-like carbon coatings deposited on WC-Co substrates

Yashin, Maxim; Bogatov, Andrei; Podgurski, Vitali Engineering materials and tribology XXV 2017 / p. 436-440 : ill

<http://dx.doi.org/10.4028/www.scientific.net/KEM.721.436>

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](#)

Effect of nanocrystalline diamond films deflection on wear observed in reciprocating sliding tests

Podgurski, Vitali; Bogatov, Andrei; Sobolev, S.; Viljus, Mart; Sedov, V.; Ashkinazi, E.; Ralchenko, V. Journal of coating science and technology 2016 / p. 109-115 : ill <http://dx.doi.org/10.6000/2369-3355.2016.03.03.2>

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>

Energy transfer in ratchets driven by additive trichotomous noise

Sauga, Ako; Martila, Dmitri; Mankin, Romi AIP conference proceedings 2011 / p. 139-146

Energy transfer in ratchets driven by additive trichotomous noise

Sauga, Ako; Martila, Dmitri; Mankin, Romi Book of abstracts : Third International Conference on Application of Mathematics in Technical and Natural Sciences : 20-25 June 2011, Albena, Bulgaria 2011 / p. 81

Erosive wear resistance of nature-inspired flexible materials

Kumar, Rahul, 1993-; Antonov, Maksim; Holovenko, Yaroslav; Surženkov, Andrei Tribology letters 2020 / art. 51, 8 p. : ill

<https://doi.org/10.1007/s11249-020-01296-8> [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

High temperature tribological properties of Al₂O₃/NCD films investigated under ambient air conditions

Podgurski, Vitali; Yashin, Maxim; Jõgiaas, Taivo; Viljus, Mart; Alamgir, Asad; Danilson, Mati; Bogatov, Andrei Coatings 2020 / art. 175, 13 p. : ill <https://doi.org/10.3390/coatings10020175> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-temperature oxidation resistance and tribological properties of Al₂O₃/ta-C coating

Alamgir, Asad; Bogatov, Andrei; Jõgiaas, Taivo; Viljus, Mart; Raadik, Taavi; Kübarsepp, Jakob; Sergejev, Fjodor;

Lümkemann, Andreas; Kluson, Jan; **Podgurski, Vitali** Coatings 2022 / art. 547 <https://doi.org/10.3390/coatings12040547> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics 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;

Lümkemann, 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](#)

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>

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](#)

Nanocrystalline diamond films deformation observed during sliding tests against Si₃N₄ balls as a possible cause for ripple formation on wear scars surface

Bogatov, Andrei; Viljus, Mart; Raadik, Taavi; Hantschel, Thomas; **Podgurski, Vitali** Medžiagotyra = Materials science 2015 / p. 349-352 : ill <http://dx.doi.org/10.5755/j01.ms.21.3.7232>

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](#)

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

Relation between self-organization and wear mechanisms of diamond films

Podgurski, Vitali; Bogatov, Andrei; Yashin, Maxim Entropy 2018 / art. 279, 16 p. : ill <https://doi.org/10.3390/e20040279> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The role of paradigms and technical strategies for implementation of the circular economy in the polymer and composite recycling industries

Hussain, Abrar; Podgurski, Vitali; Viljus, Mart; Awan, Muhammad Rizwan Advanced Industrial and Engineering Polymer Research 2023 / p. 1-12 <https://doi.org/10.1016/j.aiepr.2022.10.001>

Self-lubricating materials for extreme temperature tribo-applications

Kumar, Rahul, 1993-; Antonov, Maksim Materials today: proceedings 2021 / p. 4583-4589
<https://doi.org/10.1016/j.matpr.2020.10.824> [Conference proceedings at Scopus](#) [Article at Scopus](#)

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](#)

Solid particle erosion of refractories : A critical discussion of two test standards

Varga, Markus; **Antonov, Maksim;** Tumma, Mike Wear 2019 / p. 552-561 : ill <https://doi.org/10.1016/j.wear.2018.12.062> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Technological impact on wear resistant multiphase hardfacings

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

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](#)

Ti6Al7Nb-TiB nanocomposites for ortho-implant applications

Singh, Neera; Edachery, Vimal; Rajput, Monika; Chatterjee, Kaushik; Kailas, Satish V.; **Prashanth, Konda Gokuldoss** Journal of materials research 2022 / p. 2525-2535 <https://doi.org/10.1557/s43578-022-00578-2> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tribological and circular economy aspects of polypropylene/cotton fibre hybrid composite

Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim; Kumar, Rahul, 1993-; Kamboj, Nikhil Kumar; Rahmani Ahranjani, Ramin; Viljus, Mart; Ahmad, Tahir; **Krumme, Andres; Krasnou, Illia** Proceedings of the Estonian Academy

of Sciences 2022 / p. 186-193 : ill <https://doi.org/10.3176/proc.2022.2.03> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

Tribological characteristics of copper based composites with Al₂O₃ particles at various temperatures

Hvizdoš, Pavol; Besterčí, Michal; **Kulu, Priit**; Kavačkaj, T. High temperature materials and processes 2013 / p. 437-442

Tribological performances of ZrC-Ni and TiC-Ni cermet reinforced PTA hardfacings at elevated temperatures

Yung, Der-Liang; **Zikin, Arkadi**; **Hussainova, Irina**; Danninger, Herbert; Badisch, Ewald; Gavrilovic, A. Surface and coatings technology 2017 / p. 497-505 : ill <https://doi.org/10.1016/j.surfcoat.2016.11.099>

Tribological properties of PVD coatings with lubricating films

Lind, Liina; **Adoberg, Eron**; Aarik, Lauri; **Kulu, Priit**; **Veinthal, Renno**; Abdel Aal, Alsayed Estonian journal of engineering 2012 / p. 193-201 : ill

Tribological properties of selective laser melted Al₁₂Si alloy

Rathod, H.J.; Nagaraju, T.; **Prashanth, Konda Gokuldoss**; Ramamurty, U. Tribology international 2019 / p. 94-101 : ill <https://doi.org/10.1016/j.triboint.2019.04.038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

Wear rate of nanocrystalline diamond coating under high temperature sliding conditions

Yashin, Maxim; **Baroninš, Janis**; Menezes, Pradeep; **Viljus, Mart**; **Raadik, Taavi**; **Bogatov, Andrei**; **Antonov, Maksim**; **Podgurski, Vitali** Materials Engineering 2017 : selected, peer reviewed papers from the 26th International Baltic Conference on Materials Engineering 2017, October 26-27, Kaunas, Lithuania 2017 / p. 219-223 : ill <http://dx.doi.org/10.4028/www.scientific.net/SSP.267.219>