

Abrasion and erosion resistance of cermets : a review

Kübarsepp, Jakob; Juhani, Kristjan; Tarraste, Marek Materials 2022 / art. 69 <https://doi.org/10.3390/ma15010069> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Analysis of microstructure and abrasive wear of Fe-based hardfacings with TiC, in-situ synthesized from TiO₂

Yöyler, Sibel; Surzhenkov, Andrei; Antonov, Maksim; Viljus, Mart; Traksmaa, Rainer; Juhani, Kristjan Euro PM2023 : proceedings 2023 / art. 195090 <https://doi.org/10.59499/EP235762969>

Assessment of 3D printed steels and composites intended for wear applications in abrasive, dry or slurry erosive conditions

Kumar, Rahul, 1993-; Antonov, Maksim; Beste, U.; Goljandin, Dmitri International journal of refractory metals and hard materials 2020 / art. 105126, 9 p. : ill <https://doi.org/10.1016/j.ijrmhm.2019.105126> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cermets with Fe-alloy binder : a review

Kübarsepp, Jakob; Juhani, Kristjan International journal of refractory metals and hard materials 2020 / art. 105290, 25 p. : ill <https://doi.org/10.1016/j.ijrmhm.2020.105290> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparison of plasma transferred arc and submerged arc welded abrasive wear resistant composite hardfacings

Simson, Taavi; Kulu, Priit; Surženkov, Andrei; Ciuplys, Antanas; Viljus, Mart; Zaldarys, Gintautas Materials science = Medžiagotyra 2018 / p. 172-176 : ill <https://doi.org/10.5755/j01.ms.24.2.19121> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Composite powders for thermal spray

Kulu, Priit; Zimakov, Sergei; Arensbürger, Daniil Medžiagotyra = Materials science 1999 / p. 22-26 : ill

Determination of resistance to wear of particulate composite

Aruniit, Aare; Antonov, Maksim; Kers, Jaan; Krumme, Andres Engineering materials & tribology XXII 2014 / p. 188-191 <https://doi.org/10.4028/www.scientific.net/KEM.604.188> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Dry reciprocating sliding wear behaviour of alumina-silicon carbide nanocomposite fabricated by ceramic injection molding

Smirnov, Anton; Bartolome, Jose F.; Moya, J.S.; Kern, F.; Gadow, R. Journal of the European Ceramic Society 2011 / p. 469-474 : ill

Effect of thermal spraying method on the microstructure and wear behaviour of FeNiCrBSiC-CrB₂ coating

Umanskyi, O.; Storozhenko, M.; Antonov, Maksim; Terentyev, O.; Koval, O.; Goljandin, Dmitri 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. 37-42 : ill https://www.ester.ee/record=b5235278*est <https://www.scientific.net/KEM.799.37> <https://doi.org/10.4028/www.scientific.net/KEM.799.37> [Conference proceeding at Scopus](#) [Article at Scopus](#)

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](#)

Electroconductive alumina-TiC-Ni nanocomposites obtained by spark plasma sintering

Rodriguez-Suarez, T.; Bartolome, Jose F.; Smirnov, Anton; Lopez-Esteban, S.; Diaz, L.A.; Torrecillas, R.; Moya, J.S. Ceramics international 2011 / p. 1631-1636 : ill

Erosive and impact-abrasive wear of hardmetals with Fe-based binders

Tarraste, Marek; Antonov, Maksim; Kolnes, Märt; Viljus, Mart; Ormus, Andres-Hardi Journal of the Japan Society of Powder and Powder Metallurgy 2025 / p. S1437-S1444 <https://doi.org/10.2497/jjspm.16F-T15-05>

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 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](#)

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](#)

Microstructural aspects of abrasive wear of composite powder materials and coatings

Veinthal, Renno; Kulu, Priit; Käerdi, Helmo International journal of materials & product technology 2011 / p. 92-119 : ill

Microstructure and tribological behavior of Al-12Si – Nano graphene composite fabricated by laser metal deposition process

Yang, Zhilu; Ma, Pan; Zhang, Nan; Yang, Dongye; **Prashanth, Konda Gokuldoss;** Jia, Yandong Journal of materials research and technology 2023 / p. 2311-2322 <https://doi.org/10.1016/j.jmrt.2023.10.095> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Performance of Al₂O₃-cBN materials and the perspective of using hyperspectral imaging during cutting tests

Antonov, Maksim; Zahavi, Ali; Kumar, Rahul, 1993-; Tamre, Mart; Klimczyk, Piotr Proceedings of the Estonian Academy of Sciences 2021 / p. 524-532 : ill <https://doi.org/10.3176/proc.2021.4.21> [Journal Metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sliding wear behaviour of alumina/nickel nanocomposites processed by a conventional sintering route

Rodriguez-Suarez, T.; Bartolome, Jose F.; **Smirnov, Anton;** Lopez-Esteban, S.; Torrecillas, R.; Moya, J.S. Journal of the European Ceramic Society 2011 / p. 1389-1395 : ill

Structure, phase composition, and wear mechanisms of plasma-sprayed NiCrSiB-20wt.% TiB₂ coatings

Umanskii, A.; Storozhenko, 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](#)

Study of the ultrafine-grains intrinsic nanostructure refinement by severe plastic deformation of copper alloys

Kommel, Lembit; Veinthal, Renno; Mikli, Valdek; Dedov, Andrei OAS 2015 : proceedings of the 3rd [i.e. 3rd] International Conference Optimization and Analysis of Structures III : Tartu, Estonia, August 23-25, 2015 2015 / p. 28-32 : ill

Tailoring the microstructure and tribological properties in commercially pure aluminium processed by High Pressure Torsion Extrusion

Omranpour Shahreza, Babak; Kommel, Lembit; Sergejev, Fjodor; Ivanisenko, Yulia; Antonov, Maksim Proceedings of the Estonian Academy of Sciences 2021 / p. 540-548 : ill <https://doi.org/10.3176/proc.2021.4.23> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wear and corrosion resistance of a laser powder bed fused AZ91D magnesium matrix composite with TiC reinforcement

Xi, Lixia; Tian, Songmao; Zhang, Dong; Gu, Dongdong; Ramasamy, Parthiban; **Prashanth, Konda Gokuldoss;** Eckert, Jürgen Materials & Design 2025 / art. 114263 <https://doi.org/10.1016/j.matdes.2025.114263>

Wear behaviour of Cr₃C₂-Ni cermet reinforced hardfacings

Bendikiene, Regita; Ciuplys, Antanas; Sertvytis, Rolandas; **Surženkov, Andrei; Tkachivskyi, Dmytro; Viljus, Mart; Traksmas, Rainer; Antonov, Maksim; Kulu, Priit** Journal of materials research and technology 2020 / p. 7068-7078 : ill
<https://doi.org/10.1016/j.jmrt.2020.05.042> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wear mechanisms of PM-HIP tool steels under low and high-stress abrasion : role of carbide type and content

Kumar, Rahul, 1993-; Antonov, Maksim; Berglund, Tomas; **Pampori, Tabeen Halawat;** Maurya, Himanshu Singh; **Viljus, Mart** Journal of materials research and technology 2025 / p. 7016-7025 <https://doi.org/10.1016/j.jmrt.2025.04.317>

Wear resistance and selection of steels, hardmetals and hardfacings for abrasive wear conditions

Kulu, Priit; Tarbe, Riho; Saarna, Mart; Surženkov, Andrei; Peetsalu, Priidu; Talviste, Kristofer International journal of microstructure and materials properties 2015 / p. 101-113 <https://doi.org/10.1504/IJMM.2015.068718> [Journal metrics at Scopus](#) [Article at Scopus](#)

Wear resistance of HVOF sprayed coatings from mechanically activated thermally synthesized Cr₃C₂-Ni spray powder

Sarjas, Heikki; Kulu, Priit; Juhani, Kristjan; Viljus, Mart; Matikainen, Ville; Vuoristo, Petri Proceedings of the Estonian Academy of Sciences 2016 / p. 101-106 : ill https://artiklid.einet.ee/record=b2768209*est <https://doi.org/10.3176/proc.2016.2.10> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wear resistant powder coatings on the base of recycled hardmetal

Tarbe, Riho; Zimakov, Sergei; Mikli, Valdek; Kulu, Priit; Veinthal, Renno Powder metallurgy progress 2005 / p. 148-157 : ill

Wear resistant thermal sprayed composite coatings based on iron self-fluxing alloy and recycled cermet powders

Sarjas, Heikki; Goljandin, Dmitri; Kulu, Priit; Mikli, Valdek; Surženkov, Andrei; Vuoristo, Petri Materials science = Medžiagotyra 2012 / p. 34-39 : ill <https://matsc.ktu.lt/index.php/MatSc/article/view/1338>

