

Abrasive wear resistance of HVOF sprayed and PTA-welded hardmetal hard phase reinforced metal-matrix based coatings

Tarbe, Riho; Kulu, Priit; Zikin, Arkadi; **Surženkov, Andrei** Engineering materials & tribology XXII 2014 / p. 3-7

<https://doi.org/10.4028/www.scientific.net/KEM.604.3> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

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>

Angularity evaluation of milled WC-Co powder

Kulu, Priit; Mikli, Valdek; Käerdi, Helmo; Besterici, Michal International journal of materials & product technology 2005 / p. 289-298 : ill

Briquetting of municipal solid waste by different technologies in order to evaluate its quality and properties

Križan, Peter; Matuš, M.; Šooš, Lubomir; **Kers, Jaan; Peetsalu, Priidu; Kask, Ülo;** Menind, Andres Agronomy research 2011 / p.

115-123 : ill

Characterization of disintegrator milled hardmetal powder

Kulu, Priit; Mikli, Valdek; Käerdi, Helmo; Besterici, Michal Powder metallurgy progress 2003 / p. 39-48 : ill

A comparison of waste education in schools and colleges across five European cities

Lee, Sheryl A.; Mork, Jane; Voca, Neven; **Voronova, Viktoria** International Journal of Sustainable Development & World Ecology

2022 / p. 338-348 <https://doi.org/10.1080/13504509.2021.2019138> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Composite powders for thermal spray

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

Determination of paper plaster hygrothermal performance: influence of different types of paper on sorption and moisture buffering

Vares, Maia-Liisa; Ruus, Aime; Nutt, Nele; Kubjas, Ardo; Raamets, Jane Journal of building engineering 2021 / art. 101830, 8 p.

: ill <https://doi.org/10.1016/j.jobte.2020.101830> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Determination of physical, mechanical and burning characteristics of polymeric waste material briquettes

Kers, Jaan; Kulu, Priit; Aruniit, Aare; Laurmaa, Viktor; Križan, Peter; Šooš, Lubomir; **Kask, Ülo** Estonian journal of engineering

2010 / p. 307-316 : ill

An economic and sustainable approach to transform aluminosilicate-rich solid waste to functionally graded composite foam for high-temperature applications

Pandey, Vaibhav; **Yadav, Mayank Kumar;** Panda, Saroja Kanta; Singh, Vinay Kumar Chemosphere 2023 / art. 139588, 12 p. : ill

<https://doi.org/10.1016/j.chemosphere.2023.139588> [Journal metrics at Scopus](#) [Article at Scopus](#)

Economic aspects of mechanical pre-treatment's role in precious metals recovery from electronic waste

Blumbergs, Ervins; Shishkin, Andrei; Markus, Karlis; Serga, Vera; **Goljandin, Dmitri; Klauson, Artur;** Abramovskis, Vitalijs;

Baroninš, Janis; Zarkov, Aleksej; Pankratov, Vladimir Metals 2024 / art. 95 <https://doi.org/10.3390/met14010095> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Economical aspects of the mechanical pre-treatment role in the precious metals recovery from electronic waste

Blumbergs, Ervins; Shishkin, Andrei; Markus, Karlis; Serga, Vera; **Goljandin, Dmitri; Klauson, Artur;** Abramovskis, Vitalijs;

Baroninš, Janis; Zarkov, Aleksej; Pankratov, Vladimir Preprints.org 2023 / 19 p <https://doi.org/10.20944/preprints202312.2345.v1>

Effect of Local Remelting and Recycled WC-Co Composite Reinforcement Size on Abrasive and Erosive Wear of Manual Arc Welded Hardfacings

Katinas, Egidijus; **Antonov, Maksim;** Jankauskas, Vytenis; **Goljandin, Dmitri** Coatings 2023 / art. 734

<https://doi.org/10.3390/coatings13040734> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Evaluating the potential of Estonia as European REE recycling capital via an environmental social governance risks assessment model

Paat, Andrus; Veetil, Sanoop Kumar Puthiya; Karu, Veiko; Hitch, Michael William The Extractive industries and society 2021 /

art. 100767, 8 p <https://doi.org/10.1016/j.exis.2020.07.001> [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>

Heat conductive plates from recycled niobium slag

Kulu, Priit; Goljandin, Dmitri; Viljus, Mart; Traksmäa, Rainer; Gregor, Andre Solid State Phenomena ; 320 2021 / p. 169-175 <https://doi.org/10.4028/www.scientific.net/SSP.320.169> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Industrial approach to circularity of polymer composites : processing, characterization, mechanical testing, and wear regression

Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Antonov, Maksim Journal of reinforced plastics and composites 2024 / p. 456-472 : ill <https://doi.org/10.1177/07316844231164563> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Investigation of Devulcanised Crumb Rubber Milling and Deagglomeration in Disintegrator System

Lapkovskis, Vjaceslavs; Mironovs, Viktors; Irtiseva, Kristine; Goljandin, Dmitri; Shishkin, Andrei Key engineering materials 2019 / p. 216-220 <https://doi.org/10.4028/www.scientific.net/KEM.800.216> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Metal-matrix hardmetal/cermet reinforced composite powders for thermal spray

Goljandin, Dmitri; Sarjas, Heikki; Kulu, Priit; Käerdi, Helmo; Mikli, Valdek Materials science = Medžiagotyra 2012 / p. 84-89 : ill https://www.researchgate.net/publication/267243513_Metal-Matrix_HardmetalCermet_Reinforced_Composite_Powders_for_Thermal_Spray

Particulate filled composite plastic materials from recycled glass fibre reinforced plastics

Aruniit, Aare; Kers, Jaan; Goljandin, Dmitri; Saarna, Mart; Tall, Kaspar; Majak, Jüri; Herranen, Henrik Materials science = Medžiagotyra 2011 / p. 276-281 : ill

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](#)

Recycled hardmetal-based powder composite coatings : optimisation of composition, structure and properties

Kulu, Priit; Käerdi, Helmo; Surženkov, Andrei; Tarbe, Riho; Veinthal, Renno; Goljandin, Dmitri; Zikin, Arkadi International journal of materials & product technology 2014 / p. 180-202 : ill <https://doi.org/10.1504/IJMP.2014.064038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Recycling bitumen for composite material production : Potential applications in the construction sector

Rikmann, Ergo; Mäeorg, Uno; Vaino, Neeme; Pallav, Vello; Järvik, Oliver; Liiv, Jüri Applied Sciences (Switzerland) 2025 / art. 1313 <https://doi.org/10.3390/app15031313>

Recycling of WC-Co hardmetals by oxidation and carbothermal reduction in combination with reactive sintering

Joost, Renee; Pirsio, Jüri; Viljus, Mart; Letunovičs, Sergei; Juhani, Kristjan Estonian journal of engineering 2012 / p. 127-139 : ill

Re-use and recycling of different electrical machines

Rassõlkin, Anton; Kallaste, Ants; Orlova, Svetlana; Gevorgov, Levon; Vaimann, Toomas; Belahcen, Anouar Latvian journal of physics and technical sciences 2018 / p. 13-23 : ill <https://doi.org/10.2478/lpts-2018-0025> [Journal metrics at Scopus](#) [Article at Scopus](#)

Role of experimental damage mechanics for the circular economy implementation in cotton industries

Hussein, Abrar; Abbas, Muhammad Mujtaba Journal of Modern Nanotechnology 2021 / 9 p <https://doi.org/10.53964/jmn.2021004>

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

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](#)

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>

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](#)

Tungsten carbide material tribology and circular economy relationship in polymer and composites industries

Hussain, Abrar; Podgurski, Vitali; Antonov, Maksim; Abbas, Muhammad Mujtaba; Rizwan, Muhammad Proceedings of the Institution of Mechanical Engineers, Part L : Journal of Materials : Design and Applications 2022 / p. 2066-2073
<https://doi.org/10.1177%2F14644207221096929> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Using chalk instead of paints in paper plaster

Nutt, Nele; Nei, Lembit; Olle, Margit Latvian journal of physics and technical sciences 2025 / p. 80-86 <https://doi.org/10.2478/lpts-2025-0031>

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

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>