

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](#)

Abrasive impact wear of WC-Co and TiC-NiMo cermets

Juhani, Kristjan; Pirso, Jüri; Viljus, Mart; Letunovitš, Sergei; Tarraste, Marek Proceedings of the 8th International Conference of DAAAM Baltic Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2012 / p. 621-626 : ill https://www.researchgate.net/publication/286139638_Abrasive_impact_wear_of_WC-Co_and_TiC-NiMo_cermets

AC magnetic loss reduction of SLM processed Fe-Si for additive manufacturing of electrical machines

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Alloying of TiC-FeCr cermet in manganese vapor

Kolnes, Märt; Tarraste, Marek; Kübarsepp, Jakob; Juhani, Kristjan; Viljus, Mart IOP conference series : materials science and engineering 2021 / art. 012043 <https://doi.org/10.1088/1757-899X/1140/1/012043>

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Anwar, Furqan; Tarraste, Marek; Berger, Lutz-Michael; Pötschke, Johannes Proceedings of the Estonian Academy of Sciences 2025 / p. 132-136 : ill <https://doi.org/10.3176/proc.2025.2.08>

Effect of carbon stabilizing elements on WC cemented carbides with chromium steel binder

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Effect of high chromium content additions in iron-bonded Ti(C,N) cermets: a hardness-toughness tradeoff

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Effect of pulsed deuterium plasma irradiation on dual-phase tungsten high-entropy alloys

Tökke, Siim; Laas, Tõnu; Priimets, Jaanis; Tarraste, Marek; Mikli, Valdek; Antonov, Maksim Fusion engineering and design 2022 / 11 p. : ill <https://doi.org/10.1016/j.fusengdes.2022.113260> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of pulsed deuterium plasma irradiation on dual-phase tungsten medium-entropy alloys

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Effect of the laser processing parameters on the selective laser melting of TiC-Fe-based cermets

Maurya, Himanshu Singh; Kollo, Lauri; Tarraste, Marek; Juhani, Kristjan; Sergejev, Fjodor; Prashanth, Konda Gokuldoss Journal of manufacturing and materials processing 2022 / art. 35, 11 p. : ill <https://doi.org/10.3390/jmmp6020035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Erosion wear of reactive sintered WC-TiC-Co cermets

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

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Exploring microstructural properties, phase transformations, and wettability in high-chromium content iron-bonded

Ti(C,N)-based cermet

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Impact of Nb content on the morphology and properties of Ti (C0.5N0.5)-FeCrMo-based green cermets

Maurya, Himanshu Singh; Tarraste, Marek; Viljus, Mart; Juhani, Kristjan; Sergejev, Fjodor; Kübarsepp, Jakob Ceramics international 2024 / 10 p <https://doi.org/10.1016/j.ceramint.2024.11.188>

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Microstructure and properties of in situ high entropy alloy/tungsten carbide composites by mechanical alloying

Sokkalingam, Rathinavelu; **Tarraste, Marek; Surreddi, Kumar Babu; Traksmaa, Rainer; Muthupandi, Veerappan; Sivaprasad, Katakam; Prashanth, Konda Gokuldoss** Material design & processing communications 2020 / 9 p. : ill <https://doi.org/10.1002/mdp2.175> [Journal metrics at Scopus](#) [Article at Scopus](#)

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Microstructure evolution of WC-TiC-CO cemented carbides during reactive sintering

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Optimization of hardmetal reinforcement content in Fe-based hardfacings for abrasive-impact wear conditions

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Optimization of reinforcement content of powder metallurgy hardfacings in abrasive wear conditions

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Selective laser melting of TiC-based cermet : HIP studies

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Selective laser melting of TiC-Fe via laser pulse shaping : microstructure and mechanical properties

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Sliding Wear and Debris Evolution in LPBFed Ceramic-Reinforced Steel Composites Under Variable Loads and Temperatures

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Spark plasma sintering of molybdenum silicides synthesized from oxide precursors

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Synergistic effect of Nb and Mo on the microstructural formation of the Ti(C,N)-high chromium ferrous-based cermets

Maurya, Himanshu Singh; Juhani, Kristjan; Tarraste, Marek; Viljus, Mart; Sergejev, Fjodor; Pampori, Tabeen Halawat; Hussain, Abrar; Kübarsepp, Jakob International journal of refractory metals and hard materials 2024 / art. 106723
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TalTechi teadur arutleb: millal käib “suur pauk”, mis kiirendab tööstuses alternatiivsete materjalide kasutamist?

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The effect of spark plasma sintering thermal cycle on behaviour of Fe-based hardfacings reinforced with WC and WC-based hardmetal

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The effect of VC, TiC and Cr₃C₂ on the microstructure and properties of WC-15CO hardmetals fabricated by the reactive sintering

Pirso, Jüri; Juhani, Kristjan; Tarraste, Marek; Viljus, Mart; Letunovitš, Sergei Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 383-388 : ill

The effect of VC, TiC and Cr₃C₂ on the microstructure and properties of WC-15Co hardmetals fabricated by the reactive sintering

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The influence of Cr₃C₂ and VC as alloying additives on the microstructure and properties of reactive sintered WC-Co cermets

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The influence of processing parameters on mechanical properties of spark plasma sintered chromium carbide based cermets

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Three-body abrasive wear of reactive sintered WC-Co hardmetals with grain growth inhibitors

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Three-body abrasive wear of WC-Co composites manufactured by reactive sintering of nanocrystalline powders [Electronic resource]

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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

Wear resistance of sintered composite hardfacings under different abrasive wear conditions

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