

Changes in surface morphology, deflection and wear of microcrystalline diamond film observed during sliding tests against Si₃N₄ balls

Bogatov, Andrei; Traksmas, Rainer; Podgurski, Vitali 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. 145-151 : ill <https://doi.org/10.4028/www.scientific.net/KEM.674.145> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Comparative analyses of tribological behavior of ultra nanocrystalline diamond films prepared on different substrates [Online resource]

Yashin, Maxim; Bogatov, Andrei; Podgurski, Vitali; Sahul, Martin; Čaplovič, Lubomir Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [4.-5. veebr. 2019, Tartu : teesid] 2019 / 1 p <http://fmdtk.ut.ee/teesid-2019/>

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](#)

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 <https://doi.org/10.4028/www.scientific.net/KEM.721.436> [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

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Development of experimental set-up for the investigation of photoelectric response of the pyroelectric crystal to short pulses of the Hg(Xe) lamp

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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>

Evaluation of wear rate of nanocrystalline diamond films using Abbott curve

Bogatov, Andrei; 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. 185-189 : ill <https://doi.org/10.4028/www.scientific.net/SSP.267.185> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Growth dynamics of nanocrystalline diamond films produced by microwave plasma enhanced chemical vapor deposition in methane/hydrogen/air mixture : scaling analysis of surface morphology

Podgurski, Vitali; Bogatov, Andrei; Sedov, V.; Sildos, Ilmo; Mere, Arvo; Viljus, Mart; Buijnsters, J. G.; Ralchenko, V. Diamond and related materials 2015 / p. 172-179 : ill <https://doi.org/10.1016/j.diamond.2015.07.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High temperature tribological performance of adaptive hard nanocomposite coatings deposited on a WC-Co substrate

Alamgir, Asad; Bogatov, Andrei; Yashin, Maxim; Viljus, Mart; Sondor, J.; Podgurski, Vitali GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 12 <http://fmdtk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

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

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

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

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High-temperature tribological performance of hard multilayer TiN-AlTiN/nACo-CrN/AlCrN-AlCrO-AlTiCrN coating deposited on WC-Co substrate

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Investigation of morphology changes on nanocrystalline diamond film surfaces during reciprocating sliding against Si₃N₄ balls

Bogatov, Andrei; Podgurski, Vitali; Raadik, Taavi; Kamjula, A. R.; Hantschel, Thomas; Tsigkourakos, M.; Kulu, Priit Engineering materials & tribology XXII 2014 / p. 126-129 <https://doi.org/10.4028/www.scientific.net/KEM.604.126> Conference proceedings at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Mechanical and tribological properties of 100-nm thick alumina films prepared by atomic layer deposition on Si(100) substrates

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

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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

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

Transition from self-organized criticality into self-organization during sliding Si₃N₄ balls against nanocrystalline diamond films

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Tribological and mechanical properties investigations of post-consumer cotton textiles

Hussain, Abrar; Podgurski, Vitali; Goljandin, Dmitri; Viljus, Mart; Antonov, Maksim; Bogatov, Andrei; Krasnou, Illia Solid state phenomena ; 320 2021 / p. 97-102 <https://doi.org/10.4028/www.scientific.net/SSP.320.97> Conference Proceedings at Scopus Article at Scopus

Tribological properties of nanocrystalline diamond coating at high temperature sliding condictions [Online resource]

Yashin, Maxim; Baroninš, Janis; Menezes, Pradeep; Viljus, Mart; Raadik, Taavi; Bogatov, Andrei; Antonov, Maksim; Podgurski, Vitali Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p. : ill <http://fntdk.ut.ee/teesid-2018/>

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 <https://doi.org/10.4028/www.scientific.net/SSP.267.219> Conference proceedings at Scopus Article at Scopus