

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

Bogatov, Andrei; Traksmaa, 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 <http://dx.doi.org/10.4028/www.scientific.net/KEM.674.145>

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 <http://dx.doi.org/10.4028/www.scientific.net/KEM.721.345>

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>

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 <http://dx.doi.org/10.4028/www.scientific.net/SSP.267.185>

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 <http://dx.doi.org/10.1016/j.diamond.2015.07.002>

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

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; Lümekemann, 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; Lümekemann, 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](#)

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

Alamgir, Asad; Yashin, Maxim; Bogatov, Andrei; Viljus, Mart; Traksmaa, Rainer; Sondor, Jozef; Lümekemann, Andreas; Sergejev, Fjodor; Podgurski, Vitali Coatings 2020 / art. 909, 10 p. : ill <https://doi.org/10.3390/coatings10090909> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Influence of surface morphology on the tribological behavior of diamond-like carbon coating

Podgurski, Vitali; Bogatov, Andrei; Freund, Martin; Kulu, Priit Engineering materials and tribology 2013 / p. 83-91 : ill

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

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

Alamgir, Asad; Bogatov, Andrei; Yashin, Maxim; Podgurski, Vitali Proceedings of the Estonian Academy of Sciences 2019 / p. 126-130 : ill <https://doi.org/10.3176/proc.2019.2.01> http://www.kirj.ee/public/proceedings_pdf/2019/issue_2/proc-2019-2-126-130.pdf [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Morphological changes on diamond and DLC films during sliding wear = Morfoloogilised muutused teemant- ja teemandilaadsetel pinnitel liugkulumisel

Bogatov, Andrei 2015 http://www.ester.ee/record=b4447899*est

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>

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

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

Bogatov, Andrei; Podgurski, Vitali; Vagiström, Heinar; Yashin, Maxim; Shaikh, Asad Alamgir; Viljus, Mart; Menezes, Pradeep; Gershman, Iosif Entropy 2019 / art. 1055 ; 12 p <https://doi.org/10.3390/e21111055> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 conduction [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://fmtdk.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 <http://dx.doi.org/10.4028/www.scientific.net/SSP.267.219>