# Artur Shugurov

List of Publications by Year
in descending order



| 68 | 587 | 566801 15 | 676716 22 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 69 | 69 | 69 | 472 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Mechanical and tribological properties of Ti-Al-Ta-N/TiAl and Ti-Al-Ta-N/Ta multilayer coatings deposited by DC magnetron sputtering. Surface and Coatings Technology, 2022, 441, 128582. | 2.2 | 8 |
| 2 | Effect of Ta Content on Scratching Behavior of Ti-Al-Ta-N Coatings on Titanium Substrate. Metals, 2022, 12, 1017. | 1.0 | 2 |
| 3 | Molecular dynamics study of dislocation-twin boundary interaction in titanium subjected to scratching. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 800, 140327. | 2.6 | 9 |
| 4 | The Effect of Multilayer Architecture and Ta Alloying on the Mechanical Performance of Ti-Al-N Coatings under Scratching and Uniaxial Tension. Metals, 2021, 11, 1307. | 1.0 | 0 |
| 5 | Effect of Ta alloying on isothermal oxidation behavior of DC magnetron sputtered Ti1-xAlxN coatings on titanium substrate. Surface and Coatings Technology, 2021, 421, 127488. | 2.2 | 6 |
| 6 | Microstructure and Mechanical Properties of Titanium Alloys. Metals, 2021, 11, 1617. | 1.0 | 6 |
| 7 | Deformation Behavior of Wrought and EBAM Ti-6Al-4V under Scratch Testing. Metals, 2021, 11, 1882. | 1.0 | 7 |
| 8 | Tuning of mechanical properties of Ti1â^'xAlxN coatings through Ta alloying. Surface and Coatings Technology, 2020, 382, 125219. | 2.2 | 16 |
| 9 | Mechanisms of Stress Generation in Thin Films and Coatings. Technical Physics, 2020, 65, 1881-1904. | 0.2 | 16 |
| 10 | Recovery of Scratch Grooves in Ti-6Al-4V Alloy Caused by Reversible Phase Transformations. Metals, 2020, 10, 1332. | 1.0 | 9 |
| 11 | Chemical bonding analysis in Ti1â€“â€“Al Ta N solid solutions. Surface and Coatings Technology, 2020, 395, 125802. | 2.2 | 15 |
| 12 | Improvement of Thermal Cycling Resistance of AlxSi1â^'xN Coatings on Cu Substrates by Optimizing Al/Si Ratio. Materials, 2019, 12, 2249. | 1.3 | 3 |
| 13 | The role of nanoscale strain-induced defects in the sharp increase of low-temperature toughness in low-carbon and low-alloy steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 768, 138491. | 2.6 | 19 |
| 14 | Effect of Nanoscale Mesoscopic Structural States Associated with Lattice Curvature on the Mechanical Behavior of Fe-Cr-Mn Austenitic Steel. Physical Mesomechanics, 2019, 22, 382-391. | 1.0 | 14 |
| 15 | Mesoscopic Structural States at the Nanoscale in Surface Layers of Titanium and Its Alloy Ti-6Al-4V in Ultrasonic and Electron Beam Treatment. Physical Mesomechanics, 2019, 22, 345-354. | 1.0 | 30 |
| 16 | The Influence of Nitrogen Partial Pressure on the Composition, Microstructure, and Mechanical Characteristics of Ti1 â€“xâ€“yAlxTÐ°yN Coatings Obtained by Reactive Magnetron Sputtering. Technical Physics Letters, 2019, 45, 418-422. | 0.2 | 2 |
| 17 | The effect of phase transformations on the recovery of pulsed electron beam irradiated Ti-6Al-4V titanium alloy during scratching. Journal of Alloys and Compounds, 2019, 795, 275-283. | 2.8 | 11 |
| 18 | Effect of microstructure on mechanical properties and deformation behavior of Tiâ€“6Alâ€“4V alloy during scratch testing. AIP Conference Proceedings, 2019, , . | 0.3 | 0 |

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| 19 | Effect of Ta content on fracture of Ti1â€“xâ€“yAlxTayN coatings under uniaxial tension. AIP Conference Proceedings, 2019, , . | 0.3 | 0 |
| 20 | The Role of Grain Boundaries in Rotational Deformation in Polycrystalline Titanium under Scratch Testing. Physical Mesomechanics, 2019, 22, 365-374. | 1.0 | 19 |
| 21 | Investigation of oxidation resistance of Ti1â€“xAlxN/Ti1â€“xAlx multilayers. AIP Conference Proceedings, 2019, , . | 0.3 | 0 |
| 22 | Numerical study of atomic scale deformation mechanisms of Ti grains with different crystallographic orientation subjected to scratch testing. Applied Surface Science, 2019, 471, 318-327. | 3.1 | 36 |
| 23 | Scratch testing of polycrystalline titanium. AIP Conference Proceedings, 2018, , . | 0.3 | 0 |
| 24 | Investigation of adhesive behavior of Ti-Al-N/Ti-Al multilayers by scratch testing. AIP Conference Proceedings, 2018, , . | 0.3 | 1 |
| 25 | Enhancement of thermal cycling resistance of EB-PVD YSZ and CeO2 thermal barrier coatings by deposition of a Ni-Al bond coat. AIP Conference Proceedings, 2018, , . | 0.3 | 0 |
| 26 | Numerical study of plastic ploughing of nanosized polycrystalline titanium under scratching. AIP Conference Proceedings, 2018, , . | 0.3 | 0 |
| 27 | The effect of deposition parameters on microstructure and mechanical properties of Ti-Al-Ta-N coatings. AIP Conference Proceedings, 2018, , . | 0.3 | 0 |
| 28 | Elastic recovery of nanostructured surface layer of Ti-6Al-4V titanium alloy after scratch-test. Journal of Physics: Conference Series, 2018, 1115, 032056. | 0.3 | 0 |
| 29 | Mechanical properties and tribological behavior of magnetron sputtered TiAlN/TiAl multilayer coatings. Surface and Coatings Technology, 2018, 353, 254-262. | 2.2 | 39 |
| 30 | The effect of crystallographic grain orientation of polycrystalline Ti on ploughing under scratch testing. Wear, 2018, 408-409, 214-221. | 1.5 | 45 |
| 31 | Scale invariance of structural transformations in plastically deformed nanostructured solids. Physical Mesomechanics, 2017, 20, 55-68. | 1.0 | 23 |
| 32 | Effect of local curvature of the coating-substrate interface on deformation and fracture of ceramic coatings under uniaxial tension. Physical Mesomechanics, 2017, 20, 472-479. | 1.0 | 5 |
| 33 | Effects of nitrogen and argon ion implantations on surface morphology, microstructure, and mechanical properties of Ti-Al-N coatings. AIP Conference Proceedings, 2017, , . | 0.3 | 0 |
| 34 | Study of crack resistance of TiAlN coatings by scratch testing. Physical Mesomechanics, 2017, 20, 185-192. | 1.0 | 19 |
| 35 | The effect of Al intermediate layer on thermal resistance of EB-PVD yttria-stabilized zirconia coatings on titanium substrate. AIP Conference Proceedings, 2017, , . | 0.3 | 0 |
| 36 | Wear of electroplated gold-based coatings. Physical Mesomechanics, 2016, 19, 407-419. | 1.0 | 5 |

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| 37 | Structural modification of TiAlN coatings by preliminary Ti Ion bombardment of a steel substrate. Technical Physics, 2016, 61, 409-415. | 0.2 | 9 |
| 38 | The effect of laser treatment of WC-Co coatings on their failure under thermal cycling. AIP Conference Proceedings, 2016, , . | 0.3 | 1 |
| 39 | Fracture toughness and oxidation resistance of Ti-Al-N coatings on stainless steel substrates. AIP Conference Proceedings, 2016, , . | 0.3 | 1 |
| 40 | The effect of coating/substrate interface curvature on fracture of Si-Al-N coatings subjected to mechanical loading. AIP Conference Proceedings, 2015, , . | 0.3 | 0 |
| 41 | Improvement of the wear resistance of electroplated Au-Ni coatings by Zr ion bombardment of Ni-B sublayer. AIP Conference Proceedings, 2015, , . | 0.3 | 0 |
| 42 | The study of crack resistance of TiAlN coatings under mechanical loading and thermal cycle testing. AIP Conference Proceedings, 2015, , . | 0.3 | 1 |
| 43 | PECVD synthesis, optical and mechanical properties of silicon carbon nitride films. Applied Surface Science, 2015, 339, 102-108. | 3.1 | 40 |
| 44 | Effect of the number of layers in Zr-Y-O/Si-Al-N multilayer coatings on their mechanical properties and wear resistance. Journal of Friction and Wear, 2014, 35, 426-433. | 0.1 | 4 |
| 45 | Effect of a hard sublayer on contact interaction and wear behavior of electrodeposited gold-based coatings. , 2014, , . | | 1 |
| 46 | Mechanisms of stress generation and relaxation in thin films and coatings. AIP Conference Proceedings, 2014, , . | 0.3 | 1 |
| 47 | Wrinkling of the metalâ€“polymer bilayer: the effect of periodical distribution of stresses and strains. RSC Advances, 2014, 4, 7389. | 1.7 | 15 |
| 48 | Effect of local curvature of internal and external interfaces on mass transfer responsible for thin film degradation. Physical Mesomechanics, 2013, 16, 348-354. | 1.0 | 5 |
| 49 | Effect of the nanostructuring of a Cu substrate on the fracture of heat-resistant Si-Al-N coatings during uniaxial tension. Technical Physics, 2012, 57, 779-786. | 0.2 | 18 |
| 50 | Fractal analysis of the evolution of friction surfaces of galvanic AuNi coatings. Technical Physics Letters, 2012, 38, 484-487. | 0.2 | 5 |
| 51 | Sclerometric study of galvanic AuNi and AuCo coatings. Technical Physics Letters, 2011, 37, 223-225. | 0.2 | 9 |
| 52 | Viscoelastic wrinkling in compression-stressed metal film-polymer sublayer system. Technical Physics Letters, 2011, 37, 896-899. | 0.2 | 1 |
| 53 | Strain mechanisms in annealed thin copper films on a viscoelastic sublayer. Physical Mesomechanics, 2011, 14, 49-56. | 1.0 | 1 |
| 54 | The role of stress distribution at the film/barrier interface in formation of copper silicides. Semiconductors, 2010, 44, 116-122. | 0.2 | 8 |

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|---|---|---|---|
| 55 | Elastic deformation of Ti films during alternating bending. Technical Physics, 2010, 55, 1583-1587. | 0.2 | 2 |
| 56 | Mechanisms of periodic deformation of the film-substrate system under compressive stress. Physical Mesomechanics, 2010, 13, 79-87. | 1.0 | 12 |
| 57 | Multi-level deformation of thin films caused by stressâ€“strain distribution at the film-substrate interface. Procedia Engineering, 2009, 1, 23-26. | 1.2 | 4 |
| 58 | Specific features of the determination of the mechanical characteristics of thin films by the nanoindentation technique. Physics of the Solid State, 2008, 50, 1050-1055. | 0.2 | 25 |
| 59 | Scaling effects in structural-phase self-organization at the â€œthin film - substrateâ€•interface. Physical Mesomechanics, 2007, 10, 117-128. | 1.0 | 9 |
| 60 | Mechanical Properties of Thin Ag Films on a Silicon Substrate Studied Using the Nanoindentation Technique. Physics of the Solid State, 2005, 47, 2055. | 0.2 | 32 |
| 61 | Fractal analysis of electromigration-induced changes of surface topography in Au conductor lines. Surface Science, 2003, 524, 191-198. | 0.8 | 14 |
| 62 | Surface Morphology, Microstructure and Mechanical Properties of Thin Ag Films. Journal of Korean Powder Metallurgy Institute, 2003, 10, 190-194. | 0.2 | 1 |
| 63 | Effect of dopants and interlayers on the growth of thin insulating films. Theoretical and Applied Fracture Mechanics, 2001, 36, 51-56. | 2.1 | 0 |
| 64 | Effect of sulfur and selenium on the surface relief of insulating films and electrical characteristics of metal-insulator-p-GaAs structures. Semiconductors, 2001, 35, 80-85. | 0.2 | 2 |
| 65 | Smoothening of thin film surfaces. , 0, , . | | 0 |
| 66 | Electromigration-induced damage of Au conductor lines. , 0, , . | | 0 |
| 67 | Measuring complex for thin films degradation investigations under various external actions. , 0, , . | | 0 |
| 68 | Grain growth and thermal stability of Ag thin films. , 0, , . | | 1 |