

# Viacheslav B Tarelnyk

## List of Publications by Year in descending order

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76  
papers

732  
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#	ARTICLE	IF	CITATIONS
1	Віробничі процеси осадження електроискровими методами на сталевих поверхнях. Вісник Національного університету Серія А: Механізація та Автоматизація Віробничих Процесів, 2022, , 8-13.	0.0	0
2	A REVIEW OF THE ELECTRO-SPARK DEPOSITION TECHNOLOGY. Вісник Сумського національного аграрного університету Серія А: Механізація та Автоматизація Віробничих Процесів, 2022, , 45-53.	0.0	0
3	Віробничі процеси осадження електроискровими методами на сталевих поверхнях. Вісник Національного університету Серія А: Механізація та Автоматизація Віробничих Процесів, 2022, , 43-49.	0.0	0
4	New technology for restoring Babbitt coatings. Journal of Physics: Conference Series, 2021, 1741, 012040.	0.4	2
5	Increasing fretting resistance of flexible element pack for rotary machine flexible coupling Part 3. The influence of dynamic loads on flexible coupling flexible element stress-strain state. Journal of Physics: Conference Series, 2021, 1741, 012050.	0.4	0
6	Increasing fretting resistance of flexible element pack for rotary machine flexible coupling Part 2. The influence of coupled shafts misalignment on flexible coupling flexible elements stress-strain state. Journal of Physics: Conference Series, 2021, 1741, 012049.	0.4	0
7	Increasing fretting resistance of flexible element pack for rotary machine flexible coupling Part 1. Analysis of the reasons affecting fretting resistance of flexible elements for expansion couplings. Journal of Physics: Conference Series, 2021, 1741, 012048.	0.4	0
8	Assessment of Technological Capabilities for Forming Al-C-B System Coatings on Steel Surfaces by Electrospark Alloying Method. Materials, 2021, 14, 739.	2.9	8
9	Improving Ecological Safety when Forming Wear-Resistant Coatings on the Surfaces of Rotation Body Parts of 12Kh18N10T Steel Using a Combined Technology Based on Electrospark Alloying. Surface Engineering and Applied Electrochemistry, 2021, 57, 173-184.	0.8	13
10	Developing a system and criteria for directed choice of technology to provide required quality of surfaces of flexible coupling parts for rotor machines. Journal of Physics: Conference Series, 2021, 1741, 012030.	0.4	1
11	Research on the Characterization of Ag+Cu+B83 Composite Coatings on the Surface of Tin Bronze by Electro-spark Deposition. , 2021, , .		0
12	New Process for Nitriding Steel Parts. , 2021, , .		0
13	New Method for Nitrocarburizing Steel Parts. , 2021, , .		2
14	Analysis of the Quality of Sulfomolybdenum Coatings Obtained by Electrospark Alloying Methods. Materials, 2021, 14, 6332.	2.9	2
15	Increasing the Life of the Slider Bearings of the Turbines of High-Speed Compressors. Chemical and Petroleum Engineering (English Translation of Khimicheskoe i Neftyanoe Mashinostroenie), 2020, 55, 821-828.	0.3	5
16	Structure and Wear Resistance of FeNiCrBSiCa-MeB2 Electrospark Coatings. Powder Metallurgy and Metal Ceramics, 2020, 59, 330-341.	0.8	4
17	The Structure Formation and Hardness of High-Entropy Alloy Coatings Obtained by Electrospark Deposition. Powder Metallurgy and Metal Ceramics, 2020, 59, 201-208.	0.8	11
18	Electrospark Deposition of Fenicrbsic-Meb2 Coatings on Steel. Powder Metallurgy and Metal Ceramics, 2020, 59, 57-67.	0.8	10

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19	Electrospark Deposition of Multilayer Coatings. Powder Metallurgy and Metal Ceramics, 2020, 59, 76-88.	0.8	4
20	Effect of Laser Processing on the Qualitative Parameters of Protective Abrasion-Resistant Coatings. Powder Metallurgy and Metal Ceramics, 2020, 58, 703-713.	0.8	6
21	Technology Support for Protecting Contacting Surfaces of Half-Coupling Shaft Press Joints Against Fretting Wear. Lecture Notes in Mechanical Engineering, 2020, , 216-225.	0.4	16
22	Changing Cohesive Energy Between Atoms in Metal-to-Metal Transition Layer for Fe-Sn and Fe-Cu-Sn Compounds in the Course of Spark Alloying Process. Springer Proceedings in Physics, 2020, , 117-133.	0.2	2
23	Influence of titanium diboride particles size on the structure of TiB <sub>2</sub> -(Fe-Mo) composite materials. Functional Materials, 2020, 27, .	0.1	1
24	New technological methods of protecting the surfaces of the parts of transport and lifting machines against fretting corrosion. Bulletin of Kharkov National Automobile and Highway University, 2020, .	0.0	0
25	New Process for Forming Multicomponent Wear-Resistant Nanostructures by Electrospark Alloying Method. Springer Proceedings in Physics, 2020, , 135-149.	0.2	1
26	Application of Multicomponent Wear-Resistant Nanostructures Formed by Electrospark Alloying for Protecting Surfaces of Compression Joints Parts. Springer Proceedings in Physics, 2020, , 195-209.	0.2	2
27	Cementation of Steel Details by Electrospark Alloying. Metallofizika I Noveishie Tekhnologii, 2020, 42, 655-667.	0.5	6
28	Energy Dispersive X-Ray Microanalysis of Part Surface Layer Carburized by Electric Spark Alloying. , 2020, , .		1
29	Increasing the Efficiency of Running-In the Titanium Nitride Nanostructures Formed on R6M5 and 12KH18N10T Steels by Sulphidizing with Electric Spark Alloying Method. , 2020, , .		2
30	Comparative Tribological Tests for Face Impulse Seals Sliding Surfaces Formed by Various Methods. Lecture Notes in Mechanical Engineering, 2019, , 382-391.	0.4	8
31	Modeling Technological Parameters for Producing Combined Electrospark Deposition Coatings. Materials Science Forum, 2019, 968, 131-142.	0.3	10
32	Mathematical Methods for the Analysis of Electrospark Alloying of Metal Surfaces. , 2019, , .		0
33	Improvement of Quality of the Surface Electroerosive Alloyed Layers by the Combined Coatings and the Surface Plastic Deformation. I. Features of Formation of the Combined Electroerosive Coatings on Special Steels and Alloys. Metallofizika I Noveishie Tekhnologii, 2019, 41, 47-69.	0.5	25
34	Improvement of Quality of the Surface Electroerosive Alloyed Layers by the Combined Coatings and the Surface Plastic Deformation. II. The Analysis of a Stressedly-Deformed State of Surface Layer after a Surface Plastic Deformation of Electroerosive Coatings. Metallofizika I Noveishie Tekhnologii, 2019, 41, 173-192.	0.5	7
35	Improvement of Quality of the Surface Electroerosive Alloyed Layers by the Combined Coatings and the Surface Plastic Deformation. III. The Influence of the Main Technological Parameters on Microgeometry, Structure and Properties of Electrolytic Erosion Coatings. Metallofizika I Noveishie Tekhnologii, 2019, 41, 313-335.	0.5	6
36	A new way of repairing and strengthening sheet steel parts that are have abrasive wear during operation. VĀ-snik SumsĒ <sup>1</sup> kogo NacĀ-onalĒ <sup>1</sup> nogo Agrarnogo UnĀ-versitetu SerĀ-Āĉ: MehanĀ-zacĀ-Āĉ Ta AvtomatizacĀ-Āĉ VirobniĀh ProcesĀ-v, 2019, , 18-24.	0.0	0

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37	Investigation of the Formation Processes of Aluminized Layers Obtained by Electrospark Alloying. Part II. Mathematical Model of the Aluminizing Process. <i>Metallofizika I Noveishie Tekhnologii</i> , 2019, 41, 1483-1498.	0.5	1
38	Investigation of the Formation Processes of Aluminized Layers Obtained by Electrospark Alloying. Part I. Structural-Phase State of the Steel Surface after Aluminizing. <i>Metallofizika I Noveishie Tekhnologii</i> , 2019, 41, 1377-1394.	0.5	3
39	Quality Analysis of Aluminized Surface Layers Produced by Electrospark Deposition. <i>Powder Metallurgy and Metal Ceramics</i> , 2018, 56, 688-696.	0.8	27
40	Mathematical modeling a process of strengthening steel part working surfaces at carburizing thereof by electroerosive alloying method. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	2
41	Investigation of Qualitative Parameters of Surface Layers Formed by Stepwise Carburizing and Sulfo-Carburizing of Steel Parts With the Use of Electroerosion Alloying Method. , 2018, , .		1
42	Improvement in Babbitt Sliding Bearing Quality with Electrospark Alloying. <i>Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie)</i> , 2018, 54, 598-604.	0.3	7
43	Effect of running coatings on tribological properties of strengthened steel surfaces. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	2
44	Alternative Methods for Forming Sliding Surfaces of Face Impulse Seals. , 2018, , .		1
45	Electrospark Graphite Alloying of Steel Surfaces: Technology, Properties, and Application. <i>Surface Engineering and Applied Electrochemistry</i> , 2018, 54, 147-156.	0.8	28
46	The Analysis of a Structural State of Surface Layer after Electroerosive Alloying. I. Features of Formation of Electroerosive Coatings on Steel 45. <i>Metallofizika I Noveishie Tekhnologii</i> , 2018, 40, 235-254.	0.5	27
47	The Analysis of a Structural State of Surface Layer after Electroerosive Alloying. II. Features of Formation of Electroerosive Coatings on Special Steels and Alloys by Hard Wear-Resistant and Soft Antifriction Materials. <i>Metallofizika I Noveishie Tekhnologii</i> , 2018, 40, 795-815.	0.5	24
48	Ecologically Safe Process for Sulfo-Aluminizing of Steel Parts. <i>Å½urnal inÅ¼4enernih Nauk</i> , 2018, 5, C 16-C 20.	0.6	2
49	Electrode Materials for Composite and Multilayer Electrospark-Deposited Coatings from Niâ€“Cr and WCâ€“Co Alloys and Metals. <i>Powder Metallurgy and Metal Ceramics</i> , 2017, 55, 585-595.	0.8	32
50	Increase in the Reliability and Durability of Metal Impulse End Seals. Part 1. <i>Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie)</i> , 2017, 53, 114-120.	0.3	28
51	Increase in the Reliability and Durability of Metal Impulse Seals. Part 2*. <i>Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie)</i> , 2017, 53, 266-272.	0.3	30
52	Problems and Solutions in Renovation of the Rotors of Screw Compressors by Combined Technologies. <i>Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie)</i> , 2017, 53, 107-110.	0.3	10
53	Increase in the Reliability and Durability of Metal Impulse Seals. Part 3*. <i>Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie)</i> , 2017, 53, 385-389.	0.3	32
54	Electric-spark coatings on a steel base and contact surface for optimizing the working characteristics of babbitt friction bearings. <i>Surface Engineering and Applied Electrochemistry</i> , 2017, 53, 285-294.	0.8	29

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55	Definition of criteria for estimating alternative technologies of increasing quality of rotor shaft neck by electroerosive alloying and surface plastic deformation methods. IOP Conference Series: Materials Science and Engineering, 2017, 233, 012051.	0.6	3
56	Problems and criteria of quality improvement in end face mechanical seal rings through technological methods. IOP Conference Series: Materials Science and Engineering, 2017, 233, 012037.	0.6	1
57	Utilization of the UV laser with picosecond pulses for the formation of surface microstructures on elastomeric plastics. IOP Conference Series: Materials Science and Engineering, 2017, 233, 012036.	0.6	15
58	New method for strengthening surfaces of heat treated steel parts. IOP Conference Series: Materials Science and Engineering, 2017, 233, 012048.	0.6	29
59	Improvement of integrated technology for restoring surfaces of steel and iron parts. IOP Conference Series: Materials Science and Engineering, 2017, 233, 012050.	0.6	6
60	New sulphiding method for steel and cast iron parts. IOP Conference Series: Materials Science and Engineering, 2017, 233, 012049.	0.6	26
61	Investigation of Regularities of the Processes of Formation of Surface Layers with Electroerosive Alloying. Part I. Metallofizika I Noveishie Tekhnologii, 2017, 38, 1611-1633.	0.5	25
62	Investigation of Regularities of the Processes of Formation of Surface Layers with Electroerosive Alloying. Part II. Metallofizika I Noveishie Tekhnologii, 2017, 39, 363-385.	0.5	23
63	Improvement of Compressor Seal Assembly Elements. Part 1. Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie), 2015, 51, 328-333.	0.3	6
64	Improvement of Compressor Seal Assembly Elements. Part 2. Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie), 2015, 51, 402-407.	0.3	5
65	Improvement of fixed joints quality by integrated technologies of electroerosive alloying. , 2015, , 329/178-329/183.	0.1	0
66	Electroerosive alloying process for bushings quality improvement. , 2015, , 460-462.	0.1	0
67	Designing Thrust Sliding Bearings of High Bearing Capacity. Procedia Engineering, 2012, 39, 148-156.	1.2	27
68	Designing Radial Sliding Bearing Equipped with Hydrostatically Suspended Pads. Procedia Engineering, 2012, 39, 157-167.	1.2	23
69	Strengthening and Repair of Parts of Rotary Machines by Electroerosion Alloying. Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie), 2004, 40, 371-375.	0.3	0
70	Increasing the Service Life of Centrifugal Compressors by Electroerosion Alloying of Impellers. Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie), 2004, 40, 376-380.	0.3	0
71	Application of composite electroerosion coatings with subsequent surface plastic deformation. Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie), 2004, 40, 381-385.	0.3	0
72	Hardening of compressor parts by electroerosion alloying and ionic nitriding. Chemical and Petroleum Engineering (English Translation of Khimicheskoe I Neftyanoe Mashinostroenie), 1996, 32, 179-181.	0.3	0

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73	New Method of Friction Assemblies Reliability and Endurance Improvement. Applied Mechanics and Materials, 0, 630, 388-396.	0.2	24
74	Upgrading of Pump and Compressor Rotor Shafts Using Combined Technology of Electroerosive Alloying. Applied Mechanics and Materials, 0, 630, 397-412.	0.2	24
75	Laser Texturing of Sliding Surfaces of Bearings and Pump Seals. Applied Mechanics and Materials, 0, 630, 301-307.	0.2	29
76	Assessment of Hydroabrasive Wear Resistance of Construction Materials with Functional Coatings, which are Formed by Resource-Saving and Environmentally Friendly Technologies. Key Engineering Materials, 0, 864, 265-277.	0.4	4