

# Sidorenko Sergey

## List of Publications by Year in descending order

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papers

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#	ARTICLE	IF	CITATIONS
1	Influence of microstructural features and deformation-induced martensite on hardening of stainless steel by cryogenic ultrasonic impact treatment. <i>Surface and Coatings Technology</i> , 2018, 343, 57-68.	2.2	52
2	Resonant tunneling of surface plasmon-polaritons. <i>Optics Express</i> , 2007, 15, 6380.	1.7	42
3	Structural and magnetic properties of annealed FePt/Ag/FePt thin films. <i>Applied Surface Science</i> , 2013, 266, 100-104.	3.1	31
4	Characterization of ZrN coating low-temperature deposited on the preliminary Ar <sup>+</sup> ions treated 2024 Al-alloy. <i>Surface and Coatings Technology</i> , 2019, 361, 413-424.	2.2	28
5	Grain boundary diffusion induced reaction layer formation in Fe/Pt thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 115, 203-211.	1.1	24
6	Corrosion of 2024 alloy after ultrasonic impact cladding with iron. <i>Surface Engineering</i> , 2018, 34, 324-329.	1.1	24
7	Influence of the annealing atmosphere on the structural properties of FePt thin films. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	22
8	Synthesis of Deformation-Induced Nanocomposites on Aluminium D16 Alloy Surface by Ultrasonic Impact Treatment. <i>Metallofizika I Noveishie Tekhnologii</i> , 2016, 38, 545-563.	0.2	20
9	Low-temperature formation of the FePt phase in the presence of an intermediate Au layer in Pt <sup>x</sup> /Au <sup>y</sup> /Fe thin films. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 035003.	1.3	16
10	Interdiffusion in Au(120Ånm)/Ni(70Ånm) thin films at the low-temperature annealing in the different atmospheres. <i>Vacuum</i> , 2013, 87, 69-74.	1.6	15
11	Influence of the substrate choice on the L10 phase formation of post-annealed Pt/Fe and Pt/Ag/Fe thin films. <i>Journal of Applied Physics</i> , 2014, 116, 044310.	1.1	15
12	Influence of intermediate Ag layer on the structure and magnetic properties of Pt/Ag/Fe thin films. <i>Vacuum</i> , 2014, 101, 33-37.	1.6	15
13	Peculiarities of Structure and Phase Formation in the Surface Layers of 2024 Aluminium Alloy due to Ultrasonic Impact Treatment in Various Environments. <i>Metallofizika I Noveishie Tekhnologii</i> , 2017, 39, 49-68.	0.2	15
14	Formation of Cu <sub>x</sub> Au <sub>1-x</sub> phases by cold homogenization of Au/Cu nanocrystalline thin films. <i>Beilstein Journal of Nanotechnology</i> , 2014, 5, 1491-1500.	1.5	13
15	Effect of Low-Energy Inert-Gas Ion Bombardment of the Metal Surface on the Oxygen Adsorption and Oxidation. <i>Progress in Physics of Metals</i> , 2016, 17, 209-228.	0.5	13
16	Formation of Nanocrystalline Structure of TaSi <sub>2</sub> Films on Silicon. <i>Powder Metallurgy and Metal Ceramics</i> , 2003, 42, 14-18.	0.4	10
17	Diffusion and solid state reactions in Fe/Ag/Pt and FePt/Ag thin-film systems. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 175001.	1.3	10
18	Evolution of a Structureâ€“Phase State and Microhardness of a Surface of Stainless Steel 12Cr18Ni10Ti in the Conditions of Ultrasonic Impact Treatment in Various Mediums. <i>Metallofizika I Noveishie Tekhnologii</i> , 2017, 39, 905-928.	0.2	10

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19	Enhanced diffusion caused by surface reactions in thin films of Sn-Cu-Mn. <i>Thin Solid Films</i> , 2014, 550, 723-731.	0.8	7
20	Secondary Ion Emission of High-Entropy Cr <sub>14.3</sub> Mn <sub>14.3</sub> Fe <sub>14.3</sub> Ni <sub>28.6</sub> Co <sub>14.3</sub> Cu <sub>14.3</sub> Alloy. <i>Powder Metallurgy and Metal Ceramics</i> , 2016, 55, 458-463.	0.4	6
21	Investigation of a pulsed magnetron sputtering discharge with a vacuum pentode modulator power supply. <i>Vacuum</i> , 2003, 72, 59-69.	1.6	5
22	Oxidation and reduction processes in Ni/Cu/Cr/Si(100) thin films under low-energy ion irradiation. <i>Materials Research Express</i> , 2019, 6, 126431.	0.8	5
23	Optical properties of amorphous and crystalline FeSi <sub>2</sub> , TiSi <sub>2</sub> , MoSi <sub>2</sub> and CrSi <sub>2</sub> films. <i>Microelectronic Engineering</i> , 1997, 37-38, 559-564.	1.1	4
24	Thermally driven redistribution of phases and components in Cu/Sn thin films. <i>Journal of Alloys and Compounds</i> , 2012, 535, 108-113.	2.8	4
25	A single-volume approach for vacancy formation thermodynamics calculations. <i>Europhysics Letters</i> , 2016, 116, 16001.	0.7	4
26	Synchrotron analysis of structure transformations in V and V/Ag thin films. <i>Vacuum</i> , 2018, 150, 186-195.	1.6	4
27	Formation of surface periodic microstructure at laser irradiation of the multilayer Ni/Cu/Cr system. <i>Applied Surface Science</i> , 2008, 255, 1712-1718.	3.1	3
28	Effect of Copper on the Formation of Ordered L10(FePt) Phase in Nanosized Fe <sub>50</sub> Pt <sub>50</sub> /Cu/Fe <sub>50</sub> Pt <sub>50</sub> Films on SiO <sub>2</sub> /Si (001) Substrates. <i>Powder Metallurgy and Metal Ceramics</i> , 2016, 55, 109-113.	0.4	3
29	Effect of barrier underlayer on diffusion and phase composition of Ni/Cu thin films under annealing. , 2020, , .		3
30	Mass Transfer in Nanosize Layers of Transition Metals Under the Influence of Ion-Plasma Processing. <i>Metallofizika I Noveishie Tekhnologii</i> , 2017, 39, 349-361.	0.2	3
31	Plasmon Spectroscopy of a Surface of the Transition Metal Films after Low-Energy Ion Action. <i>Metallofizika I Noveishie Tekhnologii</i> , 2018, 40, 919-930.	0.2	3
32	Enhancement of Heat Resistance of Ti6Al4V Titanium Alloy by Formation of Oxide Composite Layers Using Ultrasonic Impact Treatment. <i>Metallofizika I Noveishie Tekhnologii</i> , 2018, 40, 1521-1537.	0.2	3
33	Nanoscale diffusion in Pt/56Fe/57Fe thin-film system. <i>Thin Solid Films</i> , 2015, 589, 173-181.	0.8	2
34	Diffusion of Au and its influence on the coercivity of [FePt/Au/FePt] 2x thin films during annealing in different atmospheres. <i>Thin Solid Films</i> , 2018, 658, 12-21.	0.8	2
35	Structural and Phase Transformations in Nanoscale Cu/Cr System under Heat and Ion Actions. <i>Metallofizika I Noveishie Tekhnologii</i> , 2019, 41, 1-11.	0.2	2
36	Materials Science Aspects of FePt-Based Thin Films™ Formation. <i>Progress in Physics of Metals</i> , 2018, 19, 337-363.	0.5	2

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37	Influence of Copper on $D_{10}$ to $L_{10}$ Phase Transformation in Nanoscale $Fe_{50}Pt_{50}$ Films. Metallofizika I Noveishie Tekhnologii, 2016, 37, 487-498.	0.2	2
38	Features of Deformation, Hardening and Mass Transfer After Ultrasonic Impact Surface Treatment of an Aluminium Alloy D16 by Various Strikers. Metallofizika I Noveishie Tekhnologii, 2017, 39, 1097-1117.	0.2	2
39	Diffusion Phase Formation in the Cu-Sn Nanofilms System. Defect and Diffusion Forum, 0, 309-310, 167-176.	0.4	1
40	Effect of Sb content on the phase composition of $CoSb_x$ nanofilms grown on a heated substrate. Inorganic Materials, 2014, 50, 431-436.	0.2	1
41	Thermally Activated Processes of the Phase Composition and Structure Formation of the Nanoscaled $Co\hat{e}Sb$ Films. Powder Metallurgy and Metal Ceramics, 2016, 54, 738-745.	0.4	1
42	Phase transformations in Pt/Fe bilayers during post annealing probed by resistometry. Journal of Physics Condensed Matter, 2019, 31, 285401.	0.7	1
43	Structural Defects in Ni/Cu/Cr/Si Multilayer Nanosystem Induced by Thermal and Ion Influences. Metallofizika I Noveishie Tekhnologii, 2021, 43, 183-208.	0.2	1
44	Effect of the Annealing Atmosphere on the Formation of Nanoscale $Co\hat{e}Sb$ Films Functional Thermoelectric Elements. Metallofizika I Noveishie Tekhnologii, 2017, 39, 677-691.	0.2	1
45	Fabrication of Nanosize Films on the Base of Scutterudite $CoSb_3$ for Thermoelectric Devices. Progress in Physics of Metals, 2018, 19, 5-24.	0.5	1
46	Structure of Vanadium Films on $SiO_2(001)$ , $MgO(100)$ , $Al_2O_3(0001)$ , $SrTiO_3(100)$ Substrates and Features of Their Thermal Oxidation. Metallofizika I Noveishie Tekhnologii, 2018, 40, 777-794.	0.2	1
47	Influence of an Atmosphere of Annealing on Magnetic Properties of Nanosize Films of FePt Alloy. Metallofizika I Noveishie Tekhnologii, 2019, 41, 157-171.	0.2	1
48	Antibacterial Treatment of the Titanium with $Ar^{+}$ Ions. Metallofizika I Noveishie Tekhnologii, 2020, 42, 215-236.	0.2	1
49	Adsorption Capacity of Metallic Thin Films after Bombarding by Low-Energy $Ar^{+}$ Ions. Metallofizika I Noveishie Tekhnologii, 2020, 42, 621-630.	0.2	1
50	A possible cause of difference in lattice constant between bulk specimens and vacuum-deposited films. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1977, 20, 132-133.	0.0	0
51	Formation of the structure and properties of molybdenum disilicide films during solidification on silicon. Powder Metallurgy and Metal Ceramics, 1996, 35, 157-160.	0.4	0
52	Structure Changes in Ni-Ga System due to Reactive Interdiffusion. Defect and Diffusion Forum, 1997, 143-147, 1511-1516.	0.4	0
53	Nanotechnology of $CoSi_2$ epitaxial film formation on monocrytalline silicon. , 2008, , .		0
54	The Effect of Plastic Deformation on Nitrogen Diffusion in $\hat{e}Fe$ . Defect and Diffusion Forum, 2011, 309-310, 155-160.	0.4	0

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55	The Diffusion Problem of New Phase Inclusion Growth in Bounded Regions of Oversaturated Solid Solution. Defect and Diffusion Forum, 0, 329, 99-111.	0.4	0
56	Structural and Concentration Heterogeneities during Formation of Silicide Phases in the Thin Film System Ti(5nm)/Ni(24nm)/Si(001). Defect and Diffusion Forum, 0, 344, 79-84.	0.4	0
57	FePt Thin Films – Prospective Materials for Ultrahigh Density Magnetic Recording. Journal of Nano Research, 2016, 39, 151-161.	0.8	0
58	Formation of Hard Magnetic FePt Based Films on Amorphous Silicon Oxide and Sapphire Substrates by RTA. , 2019, , .		0
59	Structural phase transformations in annealed Pt/Mn/Fe trilayers. Journal of Physics Condensed Matter, 2020, 32, 365404.	0.7	0
60	STRUCTURE FORMATION OF SURFACE DIFFUSION LAYERS IN COLD DEFORMED IRON-BASED ALLOYS UNDER SATURATION BY NITROGEN AND CARBON. , 2001, , .		0
61	Effect of the –Diffusion Pump–™ in Nanosize Metal Compositions. Metallofizika I Noveishie Tekhnologii, 2016, 38, 669-682.	0.2	0
62	Influence of the Ag and Cu Intermediate Layers on the Temperature Ranges of Phase Transformations in Pt/Fe Film Compositions. Metallofizika I Noveishie Tekhnologii, 2017, 38, 1599-1609.	0.2	0
63	The Secondary-Ion Emission: Matrix Effect. Progress in Physics of Metals, 2018, 19, 418-441.	0.5	0
64	Influence of Hydrogen Annealing on Ordering in FePd Films with Ag Underlayer. Springer Proceedings in Physics, 2020, , 367-377.	0.1	0
65	Structure Transformation of the Fe Sub-Surface Layers Induced by the Presence of Graphene. Metallofizika I Noveishie Tekhnologii, 2020, 42, 669-694.	0.2	0
66	Effects of Surface Passivation of Fe-Based Amorphous Compositions as a Result of Bombardment by Low-Energy Ar <sup>+</sup> Ions. Metallofizika I Noveishie Tekhnologii, 2020, 42, 963-976.	0.2	0