

# Sergey V Panin

## List of Publications by Year in descending order

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259  
papers

1,444  
citations

471371

17  
h-index

642610

23  
g-index

260  
all docs

260  
docs citations

260  
times ranked

778  
citing authors

#	ARTICLE	IF	CITATIONS
1	Resistance to Impact of Loads of Shock Nature of Protective Coatings Intended for Protection of Boat Devices of Water Transport. Lecture Notes in Intelligent Transportation and Infrastructure, 2022, , 212-220.	0.3	1
2	High Performance Polymer Composites: A Role of Transfer Films in Ensuring Tribological Properties—A Review. Polymers, 2022, 14, 975.	2.0	14
3	Effect of Transfer Film on Tribological Properties of Anti-Friction PEI- and PI-Based Composites at Elevated Temperatures. Polymers, 2022, 14, 1215.	2.0	8
4	Investigation of fracture of “PEEK-CF-prepreg”™ US-consolidated lap joints. Procedia Structural Integrity, 2022, 40, 61-69.	0.3	2
5	Estimating Low- and High-Cyclic Fatigue of Polyimide-CF-PTFE Composite through Variation of Mechanical Hysteresis Loops. Materials, 2022, 15, 4656.	1.3	11
6	Mechanism for improving low temperature impact toughness and fatigue durability of high-strength low-alloy steels for applications in the Arctic region. Acta Mechanica, 2021, 232, 1773-1784.	1.1	2
7	Improving mechanical properties of wire-based EBAM $\langle \text{Ti-6Al-4V} \rangle$ parts by adding $\langle \text{TiC} \rangle$ powders. Material Design and Processing Communications, 2021, 3, e136.	0.5	3
8	Effect of Various Type of Nanoparticles on Mechanical and Tribological Properties of Wear-Resistant PEEK + PTFE-Based Composites. Materials, 2021, 14, 1113.	1.3	13
9	Evolution of the Fine Structure and Properties of Rail Metal during Long-Term Operation. Physical Mesomechanics, 2021, 24, 202-210.	1.0	2
10	Impact Damage Detection in Laminate and Honeycomb CFRPs using Lamb Wave Ultrasonic Sensing. Russian Journal of Nondestructive Testing, 2021, 57, 114-124.	0.3	6
11	Increasing Low-Temperature Toughness of 09Mn2Si Steel through Lamellar Structuring by Helical Rolling. Metals, 2021, 11, 352.	1.0	6
12	Design of Composites with a Specified Set of Physicomechanical Properties Using Three Control Parameters. Physical Mesomechanics, 2021, 24, 196-201.	1.0	1
13	UHMWPE-Based Glass-Fiber Composites Fabricated by FDM. Multiscaling Aspects of Design, Manufacturing and Performance. Materials, 2021, 14, 1515.	1.3	4
14	Stability Loss and Delamination of a Thermal Barrier Coating from the Substrate under Heat Loads. Physical Mesomechanics, 2021, 24, 269-281.	1.0	3
15	A Method for Predicting the Parameters of Plastic Deformation of Dispersedly Reinforced Materials by Using a Modified Mori-Tanaka Model. Mechanics of Composite Materials, 2021, 57, 153-160.	0.9	3
16	Two-component feedstock based on ultra-high molecular weight polyethylene for additive manufacturing of medical products. Advanced Industrial and Engineering Polymer Research, 2021, 4, 235-235.	2.7	1
17	Deformation Behavior and Fracture Patterns of Laminated PEEK- and PI-Based Composites with Various Carbon-Fiber Reinforcement. Polymers, 2021, 13, 2268.	2.0	13
18	Experimental—FEM Study on Effect of Tribological Load Conditions on Wear Resistance of Three-Component High-Strength Solid-Lubricant PI-Based Composites. Polymers, 2021, 13, 2837.	2.0	11

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19	Wear-Resistant Glass-Filled Composites Based on Ultrahigh-Molecular-Weight Polyethylene. Role of Adhesion Varied with Coupling Agents. <i>Physical Mesomechanics</i> , 2021, 24, 548-560.	1.0	2
20	Three-Component Wear-Resistant PEEK-Based Composites Filled with PTFE and MoS <sub>2</sub> : Composition Optimization, Structure Homogenization, and Self-lubricating Effect. <i>Springer Tracts in Mechanical Engineering</i> , 2021, , 275-299.	0.1	0
21	Effect of adhesion on mechanical properties of polyetheretherketone based laminated composites reinforced with carbon fibers. <i>Procedia Structural Integrity</i> , 2021, 32, 334-339.	0.3	3
22	DEVELOPMENT OF AN OPTIMAL COMPOSITION OF THREE-COMPONENT HIGH-STRENGTH WEAR-RESISTANT COMPOSITES BASED ON POLYIMIDE. <i>Journal of Applied Mechanics and Technical Physics</i> , 2021, 62, 1028-1036.	0.1	0
23	Scale levels of quasi-static and dynamic fracture behavior of Ti-6Al-4V parts built by various additive manufacturing methods. <i>Theoretical and Applied Fracture Mechanics</i> , 2020, 110, 102781.	2.1	14
24	Using Methods of Analysis of Optical Images of Friction Surfaces of Ti-Al-N Based Coatings for Assessing Accumulation of Damage and Diagnostics of Failure in Tribological Tests. <i>Russian Journal of Nondestructive Testing</i> , 2020, 56, 635-646.	0.3	1
25	The Role of Elastic Recovery in Formation of Tribological Properties of Ultra-High-Molecular Weight Polyethylene with Various Sizes of Initial Powder. <i>Russian Physics Journal</i> , 2020, 63, 867-876.	0.2	1
26	Antifriction and Mechanical Properties of the Thermoplastic Matrix of Polyetheretherketone-Based Composites. <i>Journal of Friction and Wear</i> , 2020, 41, 310-317.	0.1	2
27	The effect of annealing of milled carbon fibers on the mechanical and tribological properties of solid-lubricant thermoplastic polyimide-based composites. <i>Polymer Engineering and Science</i> , 2020, 60, 2735-2748.	1.5	13
28	The Effect of Physical-Chemical Nature of UHMWPE and PPS Thermoplastic Matrices on the Formation of Mechanical and Tribological Properties of their Carbon Fiber Filled Composites. <i>Russian Physics Journal</i> , 2020, 63, 554-562.	0.2	5
29	PROBLEMS AND PROSPECTS OF COMPUTER DESIGN OF NEW COMPOSITE MATERIALS. <i>Journal of Applied Mechanics and Technical Physics</i> , 2020, 61, 828-833.	0.1	1
30	A Study of the Structure and Strain Resistance of Low-Alloy 09Mn2Si Steel After Its Helical Rolling Under Static and Dynamic Loading. <i>Russian Physics Journal</i> , 2020, 63, 1171-1178.	0.2	1
31	Increasing Fatigue Life of 09Mn2Si Steel by Helical Rolling: Theoretical-Experimental Study on Governing Role of Grain Boundaries. <i>Materials</i> , 2020, 13, 4531.	1.3	9
32	Effect of Shock and Vibration Loading on the Fracture Mechanisms of a VT23 Titanium Alloy. <i>Strength of Materials</i> , 2020, 52, 252-261.	0.2	5
33	Taguchi Optimization of Parameters for Feedstock Fabrication and FDM Manufacturing of Wear-Resistant UHMWPE-Based Composites. <i>Materials</i> , 2020, 13, 2718.	1.3	19
34	Development of a Wear-Resistant Extrudable Composite Material Based on an Ultrahigh-Molecular Polyethylene with Predetermined Properties. <i>Mechanics of Composite Materials</i> , 2020, 56, 15-26.	0.9	8
35	Recrystallization at Crack Surfaces as a Specific Fracture Mechanism at Elevated Temperatures-Cellular Automata Simulation. <i>Physical Mesomechanics</i> , 2020, 23, 1-12.	1.0	2
36	Design of Wear-Resistant UHMWPE-Based Composites Loaded with Wollastonite Microfibers Treated with Various Silane Coupling Agents. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4511.	1.3	6

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37	Simulation of Frictional Wear with Account of Temperature for Polymer Composites. Physical Mesomechanics, 2020, 23, 147-159.	1.0	20
38	Comparative Analysis of Tribological and Mechanical Properties of Extrudable Polymer-UHMWPE Composites Fabricated by 3D Printing and Hot-Pressing Methods. Journal of Friction and Wear, 2020, 41, 228-235.	0.1	7
39	Material Design Methodology for Optimized Wear-Resistant Thermoplastic Matrix Composites Based on Polyetheretherketone and Polyphenylene Sulfide. Materials, 2020, 13, 524.	1.3	9
40	Increasing Wear Resistance of UHMWPE by Loading Enforcing Carbon Fibers: Effect of Irreversible and Elastic Deformation, Friction Heating, and Filler Size. Materials, 2020, 13, 338.	1.3	19
41	Effect of Adhesion on Mechanical and Tribological Properties of Glass Fiber Composites, Based on Ultra-High Molecular Weight Polyethylene Powders with Various Initial Particle Sizes. Materials, 2020, 13, 1602.	1.3	29
42	Nanoscale Mesoscopic Structural States in Low-Alloy Steels for Martensitic Phase Formation and Low-Temperature Toughness Enhancement. Physical Mesomechanics, 2020, 23, 376-383.	1.0	9
43	Simulation of friction and wear of polyetheretherketone at accounting for scuffing. AIP Conference Proceedings, 2020, , .	0.3	0
44	Mechanical and tribological properties of thermoplastic polyimide based composites loaded with various PTFE fillers. AIP Conference Proceedings, 2020, , .	0.3	0
45	Structure and properties of SLM-manufactured Ti-6Al-4V parts subjected to combined ultrasonic impact - Electrophysical treatment. AIP Conference Proceedings, 2020, , .	0.3	0
46	An algorithm for detecting irregularities in images of material surfaces in the digital image correlation method. AIP Conference Proceedings, 2020, , .	0.3	0
47	Improving fatigue durability of SLM Ti-6Al-4V parts by combined ultrasonic impact-electrophysical treatment. AIP Conference Proceedings, 2020, , .	0.3	0
48	Mechanical and tribological properties of polyimide based composites reinforced with surface-modified short carbon and glass fibers. AIP Conference Proceedings, 2020, , .	0.3	1
49	Acoustic emission study on the effect of notch shape and temperature on elastic energy release during impact testing of 17Mn1Si pipe steel. Engineering Fracture Mechanics, 2019, 210, 288-299.	2.0	3
50	Applying Digital Image Correlation Technique for Studying the Growth of a Fatigue Crack in VT23 Titanium Alloy Welded Joints. Russian Journal of Nondestructive Testing, 2019, 55, 384-392.	0.3	1
51	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
52	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
53	Mechanical Properties of Gas Main Steels after Long-Term Operation and Peculiarities of Their Fracture Surface Morphology. Materials, 2019, 12, 491.	1.3	13
54	Structure, as well as the Tribological and Mechanical Properties, of Extrudable Polymer-Polymer-UHMWPE Composites for 3D Printing. Journal of Friction and Wear, 2019, 40, 107-115.	0.1	9

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55	Influence of long-term cold climate operation on structure, fatigue durability and impact toughness of 09Mn2Si pipe steel. <i>Engineering Failure Analysis</i> , 2019, 102, 87-101.	1.8	15
56	Computer-Aided Design of the Composition of Extrudable Polymerâ€“Polymer UHMWPE Composites with Specified Antifriction and Mechanical Properties. <i>Journal of Friction and Wear</i> , 2019, 40, 501-510.	0.1	3
57	A Unified Approach to Determining the Effective Physicomechanical Characteristics of Filled Polymer Composites Based on Variational Principles. <i>Mechanics of Composite Materials</i> , 2019, 54, 775-788.	0.9	14
58	INFLUENCE OF LONG-TERM OPERATION ON THE STRUCTURE AND IMPACT TOUGHNESS OF THE 09Mn2Si PIPE STEEL. <i>Diagnostics Resource and Mechanics of Materials and Structures</i> , 2019, , 52-56.	0.1	0
59	Effect of long-term operation on steels of main gas pipeline: Structural and mechanical degradation. <i>Journal of King Saud University, Engineering Sciences</i> , 2018, 30, 363-367.	1.2	6
60	Influence of energy dissipation at the interphase boundaries on impact fracture behaviour of a plain carbon steel. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 97, 478-499.	2.1	14
61	Stress-Strain State in a Buckled Thermal Barrier Coating on an Elastic Substrate. <i>Physical Mesomechanics</i> , 2018, 21, 498-507.	1.0	5
62	Algorithm for J-integral measurement by digital image correlation method. , 2018, , .		4
63	Algorithm of digital image preprocessing for constructing displacement vector fields. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	0
64	Cellular automata simulation of recrystallization at hot crack surfaces. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	0
65	Experimental-theoretical design of multicomponent UHMWPE composites with prescribed mechanical and tribotechnical properties. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	0
66	Wear-resistant polyetheretherketone composites. <i>Materials Today: Proceedings</i> , 2018, 5, 25976-25982.	0.9	11
67	Structural Scale Levels of Plastic Deformation and Fracture of High-Strength Titanium Alloy Welds. <i>Physical Mesomechanics</i> , 2018, 21, 464-474.	1.0	14
68	Thermocatalytic transformation of heavy residual feedstock in the presence of polyoxomolybdate compounds. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	3
69	Impact of Dynamic Non-Equilibrium Processes on Fracture Mechanisms of High-Strength Titanium Alloy VT23. <i>Metals</i> , 2018, 8, 983.	1.0	9
70	Effect of long-term operation on steels of main gas pipeline. Reduction of static fracture toughness. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 38, 182-186.	2.1	8
71	Effect of Operating Degradation in Arctic Conditions on Physical and Mechanical Properties of 09Mn2Si Pipeline Steel. <i>Procedia Engineering</i> , 2017, 178, 597-603.	1.2	24
72	Multiscaling of lattice curvature on friction surfaces of metallic materials as a basis of their wear mechanism. <i>Physical Mesomechanics</i> , 2017, 20, 69-77.	1.0	8

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73	The role of notch tip shape and radius on deformation mechanisms of 12Cr1MoV steel under impact loading. Part 2. Influence of strain localization on fracture and numeric simulations. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 1838-1853.	1.7	8
74	DIC Study of Fatigue Crack Growth after Single Overloads and Underloads. Procedia Structural Integrity, 2017, 5, 889-895.	0.3	3
75	Effects of plastic distortion in the lattice curvature zone of a crack tip. Physical Mesomechanics, 2017, 20, 280-290.	1.0	11
76	Detecting acoustic-emission signals with fiber-optic interference transducers. Russian Journal of Nondestructive Testing, 2017, 53, 415-421.	0.3	20
77	Influence of long-term operation on structure, fatigue durability and impact toughness of 09Mn2Si pipe steel. Procedia Structural Integrity, 2017, 5, 401-408.	0.3	1
78	Temperature Effect on Deformation and Fracture Mechanisms under Impact Loading of 17Mn1Si Steel with Explicit Accounting Structural Heterogeneity. Procedia Engineering, 2017, 187, 680-687.	1.2	1
79	Effect of the mesh size of the vector displacement field on the strain estimate in the digital image correlation method. Journal of Applied Mechanics and Technical Physics, 2017, 58, 425-434.	0.1	4
80	Fracture investigation of V-notch made of tungsten-copper functionally graded materials. Physical Mesomechanics, 2017, 20, 457-464.	1.0	5
81	Algorithm of fatigue crack detection and determination of its tip position in optical images. Optoelectronics, Instrumentation and Data Processing, 2017, 53, 237-244.	0.2	3
82	The physical basics of structure formation in electroexplosive coatings. Doklady Physics, 2017, 62, 67-70.	0.2	13
83	The role of notch tip shape and radius on deformation mechanisms of 12Cr1MoV steel under impact loading. Part 1. Energy parameters of fracture. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 586-596.	1.7	14
84	Evaluation of dynamic fracture toughness parameters of locomotive axle steel by instrumented Charpy impact test. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 512-522.	1.7	5
85	Structure of electro-explosion resistant coatings consisting of immiscible components. Materials Letters, 2017, 188, 25-28.	1.3	11
86	Detecting barely visible impact damages of honeycomb and laminate CFRP using digital shearography. AIP Conference Proceedings, 2017, , .	0.3	2
87	Applying an Ultrasonic Lamb Wave Based Rechnique to Testing the Condition of V96ts3T12 Aluminum Alloy. Russian Journal of Nondestructive Testing, 2017, 53, 817-829.	0.3	12
88	Efficiency of Bilateral Filter Application in Problems of Optical Flow Calculation. Optoelectronics, Instrumentation and Data Processing, 2017, 53, 583-590.	0.2	0
89	Effect of Structural Heterogeneity of 17Mn1Si Steel on the Temperature Dependence of Impact Deformation and Fracture. Metals, 2017, 7, 280.	1.0	4
90	Mechanical Characterization of Composite Coatings Formed by Reactive Detonation Spraying of Titanium. Metals, 2017, 7, 355.	1.0	3

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91	Effect of Temperature-Force Factors and Concentrator Shape on Impact Fracture Mechanisms of 17Mn1Si Steel. Advances in Materials Science and Engineering, 2017, 2017, 1-12.	1.0	6
92	Structure and fatigue durability of 09Mn2Si pipe steel after long-term operation in far north conditions. Diagnostics Resource and Mechanics of Materials and Structures, 2017, , 81-85.	0.1	0
93	Brittle or Quasi-Brittle Fracture of Engineering Materials 2016. Advances in Materials Science and Engineering, 2016, 2016, 1-2.	1.0	2
94	Application of bilateral filtration with weight coefficients for similarity metric calculation in optical flow computation algorithm. AIP Conference Proceedings, 2016, , .	0.3	0
95	The structure and mechanical properties of VT23 laser-welded joints. AIP Conference Proceedings, 2016, , .	0.3	5
96	Investigation of Pm-75 carbon black addition on the properties of protective polymer coatings. AIP Conference Proceedings, 2016, , .	0.3	1
97	Influence of strain localization on deformation mechanisms and fracture of 12Cr1MoV steel with various notch shape under impact loading. AIP Conference Proceedings, 2016, , .	0.3	0
98	Influence of notch shape on deformation mechanisms and energy parameters of fracture of 12Cr1MoV steel under impact loading. AIP Conference Proceedings, 2016, , .	0.3	1
99	Effect of Stress Concentrator Shape on Impact Fracture Mechanisms of 17Mn1Si Steel. Procedia Engineering, 2016, 165, 1925-1930.	1.2	2
100	Stress-strain state in "coating"substrate"system after coating stability loss induced by impact of thermal stresses. AIP Conference Proceedings, 2016, , .	0.3	0
101	Tribological properties of epoxy composite materials for marine and river transport. AIP Conference Proceedings, 2016, , .	0.3	1
102	Influence of Nano- and Microfillers on the Mechanical and Tribotechnical Properties of "UHMWPE-PTFE"Composites. Key Engineering Materials, 2016, 712, 161-165.	0.4	5
103	Software for segmentation, statistical analysis and modeling of surface ordered structures. AIP Conference Proceedings, 2016, , .	0.3	2
104	The investigation of ultrasonic mechanical forging influence on the structure and mechanical properties of VT23 welded joints by methods of laser and electron beam welding. AIP Conference Proceedings, 2016, , .	0.3	3
105	Comparative analysis of methods for determination of the thermal characteristics of filled polymer composites. AIP Conference Proceedings, 2016, , .	0.3	1
106	Influence of carbon nano- and micron-sized fibers on structure, mechanical and tribotechnical properties of polymer composites with UHMWPE matrix. AIP Conference Proceedings, 2016, , .	0.3	0
107	Polyfunctional Coatings on the Basis of Powder Paints Electrostatically Sprayed from the Composite Mixtures Treated in Planetary Ball Mill. Key Engineering Materials, 2016, 712, 166-170.	0.4	0
108	Impact toughness of 12Cr1MoV steel. Part1 " Influence of temperature on energy and deformation parameters of fracture. Theoretical and Applied Fracture Mechanics, 2016, 83, 105-113.	2.1	24



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109	Impact toughness of 12Cr1MoV steel. Part 2 " Influence of high intensity ion beam irradiation on energy and deformation parameters and mechanisms of fracture. Theoretical and Applied Fracture Mechanics, 2016, 83, 82-92.	2.1	19
110	Numerical and Experimental Study of Strain Localization in Notched Specimens of a Ductile Steel on Meso- and Macroscales. Advanced Engineering Materials, 2016, 18, 2095-2106.	1.6	9
111	Synergy of crack closure, near-tip residual stress and crack-tip blunting in crack growth under periodic overloads " A fractographic study. International Journal of Fatigue, 2016, 93, 18-29.	2.8	21
112	Analysis and automated fatigue damage evaluation of a 17Mn1Si pipeline steel. Procedia Structural Integrity, 2016, 2, 1928-1935.	0.3	6
113	Effect of vacuum arc ion beam treatment on the structure and mechanical properties of 30CrMnSiNi2A steel. Physical Mesomechanics, 2016, 19, 392-406.	1.0	2
114	ENHANCING PERFORMANCE CHARACTERISTICS OF EQUIPMENT OF SEA AND RIVER TRANSPORT BY USING EPOXY COMPOSITES. Transport, 2016, 31, 333-342.	0.6	17
115	Influence of high intensity ion beam irradiation on impact toughness of 12Cr1MoV steel. Procedia Structural Integrity, 2016, 2, 403-408.	0.3	0
116	Improvement of Wear Resistance of UHMWPE by Adding Solid Lubricating Fillers. Key Engineering Materials, 2016, 712, 155-160.	0.4	5
117	Structural and mechanical characterization of detonation coatings formed by reaction products of titanium with components of the spraying atmosphere. AIP Conference Proceedings, 2016, , .	0.3	0
118	Fatigue failure stages of VT1-0 titanium in different structural states. Study by acoustic emission method. AIP Conference Proceedings, 2016, , .	0.3	3
119	Effect of high-intensity Zr ion beam irradiation on the impact strength of the heat-resistant 12Cr1MoV steel. AIP Conference Proceedings, 2016, , .	0.3	0
120	Investigation of Acoustic Parameters for Structural Health Monitoring of Sandwich Panel under Cyclic Load. Key Engineering Materials, 2016, 712, 319-323.	0.4	1
121	Computer simulation of material behavior at the notch tip: Effect of microrotations on elastic energy release. AIP Conference Proceedings, 2016, , .	0.3	4
122	Complex algorithm of optical flow determination by weighted full search. AIP Conference Proceedings, 2016, , .	0.3	0
123	Algorithm of crack tracking during fatigue test through calculating the optical flow. AIP Conference Proceedings, 2016, , .	0.3	0
124	Diagnostics of glass fiber reinforced polymers and comparative analysis of their fabrication techniques with the use of acoustic emission. AIP Conference Proceedings, 2016, , .	0.3	2
125	Structural levels of fatigue failure and damage estimation in 17Mn1Si steel on the basis of a multilevel approach of physical mesomechanics. Acta Mechanica, 2016, 227, 151-157.	1.1	13
126	Scale levels of damage to the raceway of a spherical roller bearing. Engineering Failure Analysis, 2016, 59, 69-78.	1.8	27



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127	Functional role of polycrystal grain boundaries and interfaces in micromechanics of metal ceramic composites under loading. <i>Computational Materials Science</i> , 2016, 116, 74-81.	1.4	23
128	Combined action of crack closure and residual stress under periodic overloads: A fractographic analysis. <i>International Journal of Fatigue</i> , 2016, 82, 667-675.	2.8	32
129	Multi-purpose fatigue sensor. Part 1. Uniaxial and multiaxial fatigue. <i>Frattura Ed Integrita Strutturale</i> , 2016, 10, 198-204.	0.5	4
130	Biocompatible composites of ultrahigh molecular weight polyethylene. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	0
131	Behavior of nanoporous thermal barrier coatings under cyclic thermal loading. Computer-aided simulation. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	2
132	Development of high resolution shearography device for non-destructive testing of composite materials. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	3
133	Biomechanical characteristics of polymeric UHMWPE composites with hybrid matrix and dispersed fillers. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	0
134	Effect of ion-beam treatment on structure and fracture resistance of 12Cr1MoV steel under static, cyclic and dynamic loading. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	0
135	Effect of Load Ratio on Fatigue Failure Micromechanisms of Railway Axle Steel. <i>Applied Mechanics and Materials</i> , 2015, 770, 209-215.	0.2	1
136	Surface Layer Modification of 12Cr1MoV and 30CrMnSiNi2 Steels by Zr+ Ion Beam to Improve the Fatigue Durability. <i>Procedia Technology</i> , 2015, 19, 313-319.	1.1	6
137	Tribomechanical Properties of Polymeric Composites Based on Mixture of Ultra High Molecular Weight Polyethylene and Polyamide. <i>Applied Mechanics and Materials</i> , 2015, 770, 87-92.	0.2	0
138	Deformation, temperature and electrical field simulation in composite materials and their effective calculation characteristics. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	0
139	Microfiller influence on structure and properties of the composite. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	0
140	The estimation of biological tissues trauma under their perforation by one-dimensional implants. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	0
141	Acoustic emission features at deformation of aluminum alloys with different strain behavior types. <i>AIP Conference Proceedings</i> , 2015, , .	0.3	2
142	Structural and mechanical defects of materials of offshore and onshore main gas pipelines after long-term operation. <i>Open Engineering</i> , 2015, 5, .	0.7	14
143	Selection of parameters of the three-dimensional recursive search algorithm in constructing displacement vector fields with the use of the hierarchical approach. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2015, 51, 124-133.	0.2	5
144	Mechanical and tribological characteristics of nano- and microcomposites with UHMWPEâ€“PTFE polymerâ€“polymer matrix. <i>Journal of Friction and Wear</i> , 2015, 36, 502-508.	0.1	7

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145	Application of meso- and fracture mechanics to material affected by a network of thermal fatigue cracks. International Journal of Fatigue, 2015, 76, 33-38.	2.8	2
146	Structural fracture scales in shock-loaded epoxy composites. Physical Mesomechanics, 2015, 18, 58-74.	1.0	31
147	Strength Analysis of Anisotropic Thermal Barrier Coating under Heat Shock. Procedia Engineering, 2015, 113, 408-412.	1.2	0
148	Modeling of filled Polymeric Composite Materials in View of Structural Features. Procedia Engineering, 2015, 113, 474-478.	1.2	1
149	Acoustic Emission at the Kinetic and Development of the Structural Defects under Deformation of Aluminum Alloy. Advanced Materials Research, 2015, 1091, 119-124.	0.3	0
150	Wear resistance of composites based on hybrid UHMWPE+PTFE matrix: Mechanical and tribotechnical properties of the matrix. Journal of Friction and Wear, 2015, 36, 249-256.	0.1	35
151	Aluminum Foil Based Fatigue Sensor for Structural Health Monitoring of Carbon Fiber Composites. Procedia Technology, 2015, 19, 307-312.	1.1	6
152	STRUCTURAL LEVELS OF THE NUCLEATION AND GROWTH OF FATIGUE CRACK IN 17MN1SI STEEL PIPELINE AFTER LONG-TERM SERVICE. Transport, 2015, 30, 15-23.	0.6	10
153	Fatigue life improvement of 12Cr1MoV steel by irradiation with Zr <sup>+</sup> ion beam. International Journal of Fatigue, 2015, 76, 3-10.	2.8	23
154	Fatigue life enhancement by irradiation of 12Cr1MoV steel with a Zr <sup>+</sup> ion beam. Mesoscale deformation and fracture. Physical Mesomechanics, 2015, 18, 261-272.	1.0	12
155	Impact Toughness of 17MnSi Pipeline Steel without and after Modification by Ultrasonic Surface Impact Treatment. Procedia Engineering, 2015, 113, 525-529.	1.2	1
156	Quantitative Analysis of a Network of Thermal-Fatigue Cracks on the Surface of a Material. Materials Science, 2015, 50, 805-816.	0.3	0
157	Defectometry Analysis of Surface Condition Damaged with Corrosion Pitting. Materials Science Forum, 2015, 818, 153-157.	0.3	3
158	DEFORMATION AND ENERGY PARAMETERS OF FRACTURE OF STEEL OF THE MAIN GAS PIPELINE. Advances in Science and Technology Research Journal, 2015, 9, 40-46.	0.4	3
159	Investigation of various criteria for evaluation of aluminum thin foil "smart sensors" images. IOP Conference Series: Materials Science and Engineering, 2014, 66, 012024.	0.3	3
160	Investigation of "smart sensor's" behavior during cyclic test of carbon fiber reinforce polymer. , 2014, , .		1
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