Ivan V Pavlenko

List of Publications by Year
in descending order

73 papers	925 citations	361413 20 h-index	526287 27 g-index
80 all docs	80 docs citations	80 times ranked	532 citing authors

#	Article	IF	Citations
1	Mobile Applications in Engineering Based on the Technology of Augmented Reality. Lecture Notes in Mechanical Engineering, 2022, , 366-376.	0.4	6
2	Small Parts Recognition by Convolutional Neural Networks with Implementation to Virtual Reality Devices for Assisted Assembly Tasks. EAI/Springer Innovations in Communication and Computing, 2022, , 185-196.	1.1	1
3	Diagnostics of the Rotor-Stator Contact by Spectral Analysis of the Vibration State for Rotor Machines. Lecture Notes in Mechanical Engineering, 2022, , 521-534.	0.4	2
4	Method for an Effective Selection of Tools and Cutting Conditions during Precise Turning of Non-Alloy Quality Steel C45. Materials, 2022, 15, 505.	2.9	14
5	Impact of Magnetic-Pulse and Chemical-Thermal Treatment on Alloyed Steels' Surface Layer. Applied Sciences (Switzerland), 2022, 12, 469.	2.5	3
6	The Experimental SMART Manufacturing System in SmartTechLab. Lecture Notes in Mechanical Engineering, 2022, , 228-238.	0.4	5
7	The Effect of Blade Angle Deviation on Mixed Inflow Turbine Performances. Applied Sciences (Switzerland), 2022, 12, 3781.	2.5	3
8	Materials Selection in Product Development: Challenges and Quality Management Tools. Lecture Notes in Mechanical Engineering, 2022, , 72-86.	0.4	3
9	Impact of Nitrocarburizing on Hardening of Reciprocating Compressor's Valves. Coatings, 2022, 12, 574.	2.6	3
10	Composition, Structure, and Properties of Ti, Al, Cr, N, C Multilayer Coatings on AISI W1-7 Alloyed Tool Steel. Coatings, 2022, 12, 616.	2.6	1
11	Locating Chart Choice Based on the Decision-Making Approach. Materials, 2022, 15, 3557.	2.9	5
12	Flow Modeling in a Vortex Chamber of a Liquid–Steam Jet Apparatus. Processes, 2022, 10, 984.	2.8	3
13	Using Regression Analysis for Automated Material Selection in Smart Manufacturing. Mathematics, 2022, 10, 1888.	2.2	13
14	Development of Flexible Fixtures with Incomplete Locating: Connecting Rods Machining Case Study. Machines, 2022, 10, 493.	2.2	7
15	Determination of contact points between workpiece and fixture elements as a tool for augmented reality in fixture design. Wireless Networks, 2021, 27, 1657-1664.	3.0	36
16	Methods and Algorithms for Calculating Nonlinear Oscillations of Rotor Systems. Lecture Notes in Mechanical Engineering, 2021, , 63-74.	0.4	2
17	Multiaxis Machining of Fork-Type Parts: Fixture Design and Numerical Simulation. Lecture Notes in Networks and Systems, 2021, , 142-152.	0.7	0
18	Ensuring economic efficiency of flexible fixtures in multiproduct manufacturing. Engineering Management in Production and Services, 2021, 13, 53-62.	0.9	4

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19	Simulation of Diffusion Processes in Chemical and Thermal Processing of Machine Parts. Processes, 2021, 9, 698.	2.8	28
20	Modeling of Technological Processes for a Rectification Plant in Second-Generation Bioethanol Production. Processes, 2021, 9, 944.	2.8	3
21	Intensification of mass transfer processes through the impact of the velocity gradient on hydrodynamics and stability of liquid droplets in a gas flow. Chemical Engineering Science, 2021, 235, 116470.	3.8	1
22	Influence of Spray Nozzle Operating Parameters on the Fogging Process Implemented to Prevent the Spread of SARS-CoV-2 Virus. Energies, 2021, 14, 4280.	3.1	6
23	Improvement of Mathematical Model for Sedimentation Process. Energies, 2021, 14, 4561.	3.1	6
24	Estimation of Wear Resistance for Multilayer Coatings Obtained by Nitrogenchroming. Metals, 2021, 11, 1153.	2.3	3
25	Parameter Identification of the Heat Supply System in a Coach. Lecture Notes in Mechanical Engineering, 2021, , 643-653.	0.4	0
26	Improvement of Hydraulic Characteristics for Impellers Using the Finite Volume Analysis. EAI/Springer Innovations in Communication and Computing, 2021, , 161-174.	1.1	2
27	Biomass Combustion Control in Small and Medium-Scale Boilers Based on Low Cost Sensing the Trend of Carbon Monoxide Emissions. Processes, 2021, 9, 2030.	2.8	3
28	Sedimentation Tanks for Treating Rainwater: CFD Simulations and PIV Experiments. Energies, 2021, 14, 7852.	3.1	7
29	Numerical Simulation of Aeroelastic Interaction Between Gas-Liquid Flow and Deformable Elements in Modular Separation Devices. Lecture Notes in Mechanical Engineering, 2020, , 765-774.	0.4	35
30	Mathematical Modeling of Operating Process and Technological Features for Designing the Vortex Type Liquid-Vapor Jet Apparatus. Lecture Notes in Mechanical Engineering, 2020, , 613-622.	0.4	27
31	Mathematical Modeling of Nutrient Release from Capsulated Fertilizers. Periodica Polytechnica: Chemical Engineering, 2020, 64, 562-568.	1.1	9
32	Identification of the Interfacial Surface in Separation of Two-Phase Multicomponent Systems. Processes, 2020, 8, 306.	2.8	3
33	Parameter Identification of Cutting Forces in Crankshaft Grinding Using Artificial Neural Networks. Materials, 2020, 13, 5357.	2.9	41
34	The Mathematical Model for the Secondary Breakup of Dropping Liquid. Energies, 2020, 13, 6078.	3.1	4
35	Effect of Superimposed Vibrations on Droplet Oscillation Modes in Prilling Process. Processes, 2020, 8, 566.	2.8	13
36	Three-Dimensional Mathematical Model of the Liquid Film Downflow on a Vertical Surface. Energies, 2020, 13, 1938.	3.1	2

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37	Technological Assurance and Features of Fork-Type Parts Machining. Lecture Notes in Mechanical Engineering, 2020, , 114-125.	0.4	29
38	Digital Twin of Experimental Workplace for Quality Control with Cloud Platform Support. EAI/Springer Innovations in Communication and Computing, 2020, , 135-145.	1.1	4
39	Parameter Identification of Technological Equipment for Ensuring the Reliability of the Vibration Separation Process. EAI/Springer Innovations in Communication and Computing, 2020, , 261-272.	1.1	25
40	Two-Phase Turbulent Flow in the Separation Channel with an Oscillating Wall. Lecture Notes in Mechanical Engineering, 2020, , 570-581.	0.4	1
41	Technological Features of Locating Charts in Fixture Design. Lecture Notes in Networks and Systems, 2020, , 66-74.	0.7	1
42	Hydrodynamics of Two-Phase Upflow in a Pneumatic Classifier with the Variable Cross-Section. Lecture Notes in Mechanical Engineering, 2020, , 216-227.	0.4	1
43	Condition Monitoring of Kaplan Turbine Bearings Using Vibro-diagnostics. , 2020, , 1182-1188.		30
44	APPLICATION OF THE CFD SOFTWARE FOR MODELING THERMAL COMFORT IN SPORT HALL. MM Science Journal, 2020, 2020, 3723-3727.	0.4	4
45	Ensuring the Reliability of Separation Equipment Based on Parameter Identification of the Operation Process. EAI/Springer Innovations in Communication and Computing, 2020, , 207-216.	1.1	0
46	Methodology of Experimental Research of Aeroelastic Interaction Between Two-Phase Flow and Deflecting Elements for Modular Separation Devices. Lecture Notes in Mechanical Engineering, 2020, , 489-499.	0.4	1
47	Technological Assurance of Manufacturing Effectiveness on CNC Machining Centers. Advances in Business Information Systems and Analytics Book Series, 2020, , 344-384.	0.4	0
48	Parameter Identification of the Capillary Rising Process in Nanomaterials for Evaporative Cooling Applications. Lecture Notes in Mechanical Engineering, 2020, , 201-215.	0.4	0
49	Improvement of Parameters for the Multi-Functional Oil-Gas Separator of â€œHEATER-TREATERâ€•Type. , 2019, , .		27
50	Study on Interfacial Surface in Modified Spray Tower. Processes, 2019, 7, 532.	2.8	15
51	Automated Training of Convolutional Networks by Virtual 3D Models for Parts Recognition in Assembly Process. Lecture Notes in Mechanical Engineering, 2019, , 287-297.	0.4	5
52	Information System for Computer-Aided Fixture Design. EAI/Springer Innovations in Communication and Computing, 2019, , 121-132.	1.1	4
53	Mathematical Modeling and Numerical Simulation of Fixtures for Fork-Type Parts Manufacturing. EAI/Springer Innovations in Communication and Computing, 2019, , 133-142.	1.1	28
54	Ensuring the Reliability of Pneumatic Classification Process for Granular Material in a Rhomb-Shaped Apparatus. Applied Sciences (Switzerland), 2019, 9, 1604.	2.5	17

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55	Ensuring Vibration Reliability of Turbopump Units Using Artificial Neural Networks. Lecture Notes in Mechanical Engineering, 2019, , 165-175.	0.4	32
56	Parametric Optimization of Fixtures for Multiaxis Machining of Parts. Lecture Notes in Mechanical Engineering, 2019, , 335-347.	0.4	23
57	Solving the Coupled Aerodynamic and Thermal Problem for Modeling the Air Distribution Devices with Perforated Plates. Energies, 2019, 12, 3488.	3.1	25
58	Scientific and Methodological Approach for the Identification of Mathematical Models of Mechanical Systems by Using Artificial Neural Networks. Lecture Notes in Electrical Engineering, 2019, , 299-306.	0.4	37
59	Parameter identification of the Basset force acting on particles in fluid flow induced by the oscillating wall. Journal of Applied Mathematics and Computational Mechanics, 2019, 18, 53-63.	0.7	4
60	Estimation of the Reliability of Automatic Axial-balancing Devices for Multistage Centrifugal Pumps. Periodica Polytechnica, Mechanical Engineering, 2018, 63, 52-56.	1.4	31
61	Comprehensive Approach for Identification of Nonlinear Stiffness Characteristics of Bearing Supports for the Oxidizer Turbopump of the Liquid Rocket Engine. Å½urnal inÅ¾enrih Nauk, 2018, 5, D6-D14.	0.6	2
62	Fundamental Approach for Analysis of Dynamic Characteristics of Fixtures. EAI Endorsed Transactions on Industrial Networks and Intelligent Systems, 2018, 4, 154366.	1.9	4
63	Comprehensive Approach for Mathematical Modeling of Mechanical Systems: Fixture Design Case Study. , 2018, , .		2
64	Computer-Aided Positioning of Elements of the System â€œFixture â€" Workpieceâ€. , 2018, , .		3
65	Numerical simulation of the system â€œfixtureâ€"workpieceâ€for lever machining. International Journal of Advanced Manufacturing Technology, 2017, 91, 79-90.	3.0	27
66	Appliance of Inertial Gas-Dynamic Separation of Gas-Dispersion Flows in the Curvilinear Convergent-Divergent Channels for Compressor Equipment Reliability Improvement. IOP Conference Series: Materials Science and Engineering, 2017, 233, 012025.	0.6	26
67	The model of crossed movement and gas-liquid flow interaction with captured liquid film in the inertial-filtering separation channels. Separation and Purification Technology, 2017, 173, 240-243.	7.9	35
68	Dynamic analysis of centrifugal machines rotors supported on ball bearings by combined application of 3D and beam finite element models. IOP Conference Series: Materials Science and Engineering, 2017, 233, 012053.	0.6	32
69	Mathematical Model of the Fixture Flexibility Impact on Machining Accuracy of Levers. Acta Mechanica Slovaca, 2016, 20, 6-15.	0.1	1
70	Investigation of Nonlinear Axial Rotor Oscillations of the Multistage Centrifugal Compressor with the Automatic Balancing Device. VÃ½robnÃ© inÅ¾inierstvo, 2013, 12, .	0.1	2
71	Preface. Medical Mycology, 2009, 47, 1-1.	0.7	34
72	Static and Dynamic Analysis of the Closing Rotor Balancing Device of the Multistage Centrifugal Pump. Applied Mechanics and Materials, 0, 630, 248-254.	0.2	29

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73	Classification of Separation Equipment by Design and Technological Features. EAI Endorsed Transactions on Energy Web, 0, , 170676.	0.4	0