JÃ¡n PiteÄ¾

List of Publications by Year
in descending order

84 papers	911 citations	623734 14 h-index	610901 24 g-index
90 all docs	90 docs citations	90 times ranked	701 citing authors

#	Article	IF	Citations
1	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
2	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
3	The Experimental SMART Manufacturing System in SmartTechLab. Lecture Notes in Mechanical Engineering, 2022, , 228-238.	0.4	5
4	Numerical Simulation of Gas Flow Passing through Slots of Various Shapes in Labyrinth Seals. Energies, 2022, 15, 2971.	3.1	2
5	Drying Biomass with a High Water Contentâ€"The Influence of the Final Degree of Drying on the Sizing of Indirect Dryers. Processes, 2022, 10, 739.	2.8	8
6	Using Regression Analysis for Automated Material Selection in Smart Manufacturing. Mathematics, 2022, 10, 1888.	2.2	13
7	Friction Properties of the Heat-Treated Electroless Ni Coatings Embedded with c-BN Nanoparticles. Coatings, 2022, 12, 1008.	2.6	3
8	Online Monitoring of Surface Quality for Diagnostic Features in 3D Printing. Machines, 2022, 10, 541.	2.2	8
9	Comparative study of week-ahead forecasting of daily gas consumption in buildings using regression ARMA/SARMA and genetic-algorithm-optimized regression wavelet neural network models. Journal of Building Engineering, 2021, 34, 101955.	3.4	10
10	Computational Intelligence in the Context of Industry 4.0. , 2021, , 27-94.		4
11	Methods and Algorithms for Calculating Nonlinear Oscillations of Rotor Systems. Lecture Notes in Mechanical Engineering, 2021, , 63-74.	0.4	2
12	SMART Production System with Full Digitalization for Assembly and Inspection in Concept of Industry 4.0. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2021, , 181-192.	0.3	2
13	Modeling of Technological Processes for a Rectification Plant in Second-Generation Bioethanol Production. Processes, 2021, 9, 944.	2.8	3
14	CNN Training Using 3D Virtual Models for Assisted Assembly with Mixed Reality and Collaborative Robots. Applied Sciences (Switzerland), 2021, 11, 4269.	2.5	20
15	Influence of the main technological parameters and material properties of the workpiece on the geometrical accuracy of the machined surface at wedm. International Journal of Advanced Manufacturing Technology, 2021, 115, 3065-3087.	3.0	10
16	Research of Geometric Accuracy of Circular Holes Machined by Wire EDM Technology. Tehnicki Vjesnik, 2021, 28, .	0.2	0
17	Parameter Identification of the Heat Supply System in a Coach. Lecture Notes in Mechanical Engineering, 2021, , 643-653.	0.4	0
18	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

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19	Identification of the Interfacial Surface in Separation of Two-Phase Multicomponent Systems. Processes, 2020, 8, 306.	2.8	3
20	Digital Twin of Experimental Smart Manufacturing Assembly System for Industry 4.0 Concept. Sustainability, 2020, 12, 3658.	3.2	95
21	Effect of Superimposed Vibrations on Droplet Oscillation Modes in Prilling Process. Processes, 2020, 8, 566.	2.8	13
22	The Digitization of Quality Control Operations with Cloud Platform Computing Technologies. , 2020, , 305-334.		6
23	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
24	IoT System with Switchable GSM, LoRaWAN, and Sigfox Communication Technology for Reliable Data Collection to Open-Source or Industrial Cloud Platforms. EAI/Springer Innovations in Communication and Computing, 2020, , 311-333.	1.1	5
25	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
26	Maximizing the Productivity of a Gas Melting Furnace with Regard to the Ecological Efficiency of its Operation. Management Systems in Production Engineering, 2020, 28, 292-297.	1.1	1
27	AN AUTOMATIC ERROR SURFACE DIAGNOSTICS DURING TURNING MACHINING OPERATION USING LASER SENSOR. MM Science Journal, 2020, 2020, 3995-3999.	0.4	0
28	Simulation of printed circuit boards recycling process. MATEC Web of Conferences, 2019, 292, 01040.	0.2	1
29	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
30	An Automated Training of Deep Learning Networks by 3D Virtual Models for Object Recognition. Symmetry, 2019, 11, 496.	2.2	38
31	Ensuring the Reliability of Pneumatic Classification Process for Granular Material in a Rhomb-Shaped Apparatus. Applied Sciences (Switzerland), 2019, 9, 1604.	2.5	17
32	Analysis of the Pulsating Water Jet Maximum Erosive Effect on Stainless Steel. Lecture Notes in Mechanical Engineering, 2019, , 233-241.	0.4	6
33	Solving the Coupled Aerodynamic and Thermal Problem for Modeling the Air Distribution Devices with Perforated Plates. Energies, 2019, 12, 3488.	3.1	25
34	Tribological characterisation in dry sliding conditions of compocasted hybrid A356/SiCp/Grp composites with graphite macroparticles. International Journal of Advanced Manufacturing Technology, 2019, 100, 2135-2146.	3.0	26
35	Recognition of Assembly Parts by Convolutional Neural Networks. Lecture Notes in Mechanical Engineering, 2019, , 281-289.	0.4	11
36	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

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37	Estimation of the Reliability of Automatic Axial-balancing Devices for Multistage Centrifugal Pumps. Periodica Polytechnica, Mechanical Engineering, 2018, 63, 52-56.	1.4	31
38	Modeling of the ecological separation process of printed circuit boards. MATEC Web of Conferences, 2018, 210, 01004.	0.2	1
39	Using Special Filter with Membership Function in Biomass Combustion Process Control. Applied Sciences (Switzerland), 2018, 8, 1279.	2.5	8
40	Identification of DMSP-5 Fluidic Muscle Dynamics Using Hammerstein Model. , 2018, , .		1
41	AUXILIARY DEVICE FOR ACCURATE MEASUREMENT BY THE SMART VISION SYSTEM. MM Science Journal, 2018, 2018, 2136-2139.	0.4	4
42	Data optimization for communication between wireless IoT devices and Cloud platforms in production process. , 2018, , .		6
43	INTRODUCTORY ANALYSIS OF GAS CONSUMPTION TIME SERIES IN NON-RESIDENTIAL BUILDINGS FOR PREDICTION PURPOSES USING WAVELET DECOMPOSITION. MM Science Journal, 2018, 12, 2648-2655.	0.4	3
44	Machine learning algorithms implementation into embedded systems with web application user interface. , 2017, , .		10
45	Solution of the repetitive control circuit using W-transform. , 2017, , .		0
46	Prediction of the Geometrical Accuracy of the Machined Surface of the Tool Steel EN X30WCrV9-3 after Electrical Discharge Machining with CuZn37 Wire Electrode. Metals, 2017, 7, 462.	2.3	14
47	Statistical Approach to Optimize the Process Parameters of HAZ of Tool Steel EN X32CrMoV12-28 after Die-Sinking EDM with SF-Cu Electrode. Metals, 2017, 7, 35.	2.3	21
48	COMPARATIVE SURVEY OF VARIOUS STATIC AND DYNAMIC MODELS OF PNEUMATIC ARTIFICIAL MUSCLES. Transactions of the Canadian Society for Mechanical Engineering, 2017, 41, 825-844.	0.8	3
49	An analytical dynamic model of heat transfer from the heating body to the heated room. MATEC Web of Conferences, 2017, 125, 02047.	0.2	3
50	Properties Evaluation of Thin Microhardened Surface Layer of Tool Steel after Wire EDM. Metals, 2016, 6, 95.	2.3	28
51	Model reference multiple-degree-of-freedom adaptive control with HONUs. , 2016, , .		0
52	Dynamic characterization and simulation of two-link soft robot arm with pneumatic muscles. Mechanism and Machine Theory, 2016, 103, 98-116.	4.5	52
53	A Review of Research on Water Jet with Slurry Injection. Procedia Engineering, 2016, 149, 333-339.	1.2	23
54	Testing of two types of membership functions in fuzzy adaptive controller of pneumatic muscle actuator. , 2016, , .		0

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55	Embedded vision equipment of industrial robot for inline detection of product errors by clusteringâ€“classification algorithms. International Journal of Advanced Robotic Systems, 2016, 13, 172988141666490.	2.1	23
56	Feature selection via competitive levy flights. , 2016, , .		1
57	Modelling of pneumatic muscle actuator using Hill's model with different approximations of static characteristics of artificial muscle. MATEC Web of Conferences, 2016, 76, 02015.	0.2	6
58	ANALYSIS OF HYSTERETIC BEHAVIOR OF TWO-DOF SOFT ROBOTIC ARM. MM Science Journal, 2016, 2016, 935-941.	0.4	4
59	DESIGN OF ADJUSTABLE SMART VISION SYSTEM BASEDON ARTIFICIAL MUSCLE ACTUATORS. MM Science Journal, 2016, 2016, 947-951.	0.4	2
60	Simulation of fuzzy adaptive position controllers for pneumatic muscle actuator. , 2015, , .		2
61	Static Force Model-Based Stiffness Model for Pneumatic Muscle Actuators. International Journal of Engineering Research in Africa, 2015, 18, 207-214.	0.7	2
62	Effect of the Electrolyte Temperature and the Current Density on a Layer Microhardness Generated by the Anodic Aluminium Oxidation. Advances in Materials Science and Engineering, 2015, 2015, 1-9.	1.8	5
63	Enhanced Dynamic Model of Pneumatic Muscle Actuator with Elman Neural Network. Abstract and Applied Analysis, 2015, 2015, 1-16.	0.7	3
64	Dynamic simulation of pneumatic muscle actuator in Matlab/Simulink environment. , 2014, , .		4
65	Application of neural networks to evaluate experimental data of galvanic zincing. , 2014, , .		3
66	Improved modeling of pneumatic muscle actuator using recurrent neural network. , 2014, , .		4
67	Operating Characteristics of Antagonistic Actuator with Pneumatic Artificial Muscles. Applied Mechanics and Materials, 2014, 616, 101-109.	0.2	9
68	Reference model for hybrid adaptive control of pneumatic muscle actuator. , 2014, , .		7
69	Dynamics of pneumatic muscle actuator: Measurement and modeling. , 2014, , .		4
70	Smart 3D pointing device based on MEMS sensor and bluetooth low energy. , 2013, , .		6
71	Computational intelligence and low cost sensors in biomass combustion process. , 2013, , .		10
72	Dynamic model of pneumatic actuator based on advanced geometric muscle model. , 2013, , .		19

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73	Dynamic modeling of PAM based actuator using modified Hill's muscle model. , 2013, , .		16
74	Experimental Study and Modeling of the Zinc Coating Thickness. Advanced Materials Research, 2013, 712-715, 382-386.	0.3	11
75	Operating Modes of Pneumatic Artificial Muscle Actuator. Applied Mechanics and Materials, 2013, 308, 39-44.	0.2	22
76	Biomass Combustion Control and Stabilization Using Low-Cost Sensors. Advances in Mechanical Engineering, 2013, 5, 685157.	1.6	15
77	Model-Based Evolution of a Fast Hybrid Fuzzy Adaptive Controller for a Pneumatic Muscle Actuator. International Journal of Advanced Robotic Systems, 2012, 9, 40.	2.1	37
78	Rehabilitation Device Construction based on Artificial Muscle Actuators. , 2012, , .		9
79	Dynamic simulation model of PAM based antagonistic actuator. , 2011, , .		22
80	Arm Position Simulation of Pam Based Actuator. Annals of DAAAM & Proceedings, 2011, , 0145-0146.	0.1	8
81	Electro-Pneumatic Robot Actuator with Artificial Muscles and State Feedback. Applied Mechanics and Materials, 0, 460, 23-31.	0.2	13
82	Pneumatic Artificial Muscle as Actuator in Mechatronic System. Applied Mechanics and Materials, 0, 460, 81-90.	0.2	14
83	Monitoring of Operating Conditions of Biomass Combustion Process. Applied Mechanics and Materials, 0, 308, 153-158.	0.2	8
84	Diagnostics of Aluminum Alloys Melting Temperature in High Pressure Casting. Key Engineering Materials, 0, 669, 110-117.	0.4	5