

Michal Kelemen

List of Publications by Year in descending order

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docs citations

89
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346
citing authors

#	ARTICLE	IF	CITATIONS
1	A Novel Approach for a Inverse Kinematics Solution of a Redundant Manipulator. Applied Sciences (Switzerland), 2018, 8, 2229.	2.5	41
2	VFH*TDT (VFH* with Time Dependent Tree): A new laser rangefinder based obstacle avoidance method designed for environment with non-static obstacles. Robotics and Autonomous Systems, 2014, 62, 1098-1115.	5.1	38
3	Failure analysis of irreversible changes in the construction of rubberâ€™textile conveyor belt damaged by sharp-edge material impact. Engineering Failure Analysis, 2014, 39, 135-148.	4.0	25
4	A snake robot for locomotion in a pipe using trapezium-like travelling wave. Mechanism and Machine Theory, 2021, 158, 104221.	4.5	25
5	In-pipe micromachine locomotion via the inertial stepping principle. Journal of Mechanical Science and Technology, 2014, 28, 3237-3247.	1.5	23
6	Measuring method for feedback provision during development of fuel map in hexadecimal format for high-speed racing engines. Measurement: Journal of the International Measurement Confederation, 2014, 50, 203-212.	5.0	20
7	Measuring of thermal characteristics for Peltier thermopile using calorimetric method. Measurement: Journal of the International Measurement Confederation, 2014, 53, 40-48.	5.0	19
8	Investigation of Snake Robot Locomotion Possibilities in a Pipe. Symmetry, 2020, 12, 939.	2.2	19
9	Methodology of contact stress analysis of gearwheel by means of experimental photoelasticity. Applied Optics, 2016, 55, 4856.	2.1	18
10	Snake Robot Movement in the Pipe Using Concertina Locomotion. Applied Mechanics and Materials, 0, 611, 121-129.	0.2	12
11	Analyzing, Modeling and Simulation of Humanoid Robot Hand Motion. Procedia Engineering, 2014, 96, 489-499.	1.2	12
12	Miniature Mobile Bristled In-Pipe Machine. International Journal of Advanced Robotic Systems, 2014, 11, 189.	2.1	11
13	Adaptable Mechatronic Locomotion System. Acta Mechanica Slovaca, 2010, 14, 102-109.	0.1	10
14	Method for accurate measurement of output ignition curves for combustion engines. Measurement: Journal of the International Measurement Confederation, 2013, 46, 1379-1384.	5.0	9
15	Influence of pipe geometric deviation on bristled in-pipe mobile robot locomotion. International Journal of Advanced Robotic Systems, 2018, 15, 172988141877580.	2.1	9
16	In-pipe bristled micromachine. , 0, , .		8
17	Concept of Locomotion Mobile Undercarriage Structure Control for the Path Tracking. Solid State Phenomena, 0, 198, 79-83.	0.3	8
18	Rapid Control Prototyping of Embedded Systems Based on Microcontroller. Procedia Engineering, 2014, 96, 215-220.	1.2	7

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19	Chimney Sweeping Robot Based on a Pneumatic Actuator. Applied Sciences (Switzerland), 2021, 11, 4872.	2.5	7
20	Modeling of a snake-like robot rectilinear motion and requirements for its actuators. , 2011, , .		6
21	Design and Development of Lift Didactic Model Within Subjects of Mechatronics. Procedia Engineering, 2012, 48, 280-286.	1.2	6
22	New approach of fixation possibilities investigation for snake robot in the pipe. , 2015, , .		6
23	Specific Problems in Measurement of Coefficient of Friction Using Variable Incidence Tribometer. Symmetry, 2020, 12, 1235.	2.2	6
24	A Portable BVM-based Emergency Mechanical Ventilator. , 2021, , .		6
25	An Adaptive Neuro-Fuzzy Control of Pneumatic Mechanical Ventilator. Actuators, 2021, 10, 51.	2.3	6
26	Simulation Model of Manipulator for Model Based Design. Applied Mechanics and Materials, 2014, 611, 175-182.	0.2	5
27	A Concept of the Differentially Driven Three Wheeled Robot. International Journal of Applied Mechanics and Engineering, 2013, 18, 687-698.	0.7	5
28	Robotic snakes. Acta Mechanica Slovaca, 2018, 22, 38-43.	0.1	5
29	Chimney Cleaning and Inspection Robot. Acta Mechanica Slovaca, 2019, 23, 6-9.	0.1	5
30	Motion analysis of snake robot segment. , 2013, , .		4
31	Inverse Kinematic Model of Humanoid Robot Hand. Applied Mechanics and Materials, 2014, 611, 75-82.	0.2	4
32	Embedded Systems via Using Microcontroller. Applied Mechanics and Materials, 0, 816, 248-254.	0.2	4
33	Positioning of Pneumatic Actuator Using Open-Loop System. Applied Mechanics and Materials, 0, 816, 160-164.	0.2	4
34	Model-based Approach to Development of Engineering Systems. Acta Mechanica Slovaca, 2013, 17, 56-62.	0.1	4
35	Educational Model of Four Legged Robot. Acta Mechanica Slovaca, 2014, 18, 68-73.	0.1	4
36	Experimental Identification of Linear Actuator Properties. Acta Mechanica Slovaca, 2015, 19, 42-47.	0.1	4

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37	Intelligent in-pipe machine adjustable to inner pipe diameter. , 2012, , .		3
38	Kinematic analysis of snake-like robot using obstacle aided locomotion. , 2012, , .		3
39	The Use of Geometric Mechanics Concept at Kinematic Modeling in Mobile Robotics. Procedia Engineering, 2014, 96, 273-280.	1.2	3
40	Wheeled mobile robot in structured environment. , 2018, , .		3
41	Simulation of Worm-Like Machine. Strojnický Casopis, 2018, 68, 25-34.	0.9	3
42	The Snake Rectilinear Motion Modeling on the Flat Inclined Surface. International Journal of Mechanics and Applications, 2012, 2, 39-42.	9.0	3
43	Model Based Design of Mechatronic Systems. Acta Mechanica Slovaca, 2017, 21, 8-9.	0.1	3
44	Declination Angle Gage for Tilt Measurement Sensors. Procedia Engineering, 2012, 48, 549-556.	1.2	2
45	Bristled In-pipe Machine Inside Pipe With Geometric Deviations. Procedia Engineering, 2012, 48, 287-294.	1.2	2
46	Algorithm for determining static characteristic on electromagnetic actuator for rectilinear locomotion structure of a snake-like robot. , 2012, , .		2
47	Influence of Pipe Geometric Deviations on In-Pipe Machine Locomotion. Applied Mechanics and Materials, 0, 611, 221-226.	0.2	2
48	Analysis of Uncertainty of Tilt Measurement with Accelerometer. Applied Mechanics and Materials, 0, 611, 548-556.	0.2	2
49	Design of Algorithm of Hydraulic Control System. Procedia Engineering, 2012, 48, 413-419.	1.2	1
50	Model of Elements of the Hydraulic Control System for Biaxial Tensile Test. Procedia Engineering, 2012, 48, 420-427.	1.2	1
51	Mathematical Model of Four Wheeled Mobile Robot and its Experimental Verification. Applied Mechanics and Materials, 0, 611, 130-136.	0.2	1
52	Suppression of the Nonrespirable Fraction of Dust When Measuring Its Mass Concentration in a Working Medium. Measurement Techniques, 2014, 56, 1197-1201.	0.6	1
53	Stepper Motor Control by ATMEL AVR Microcontroller. Applied Mechanics and Materials, 0, 816, 321-326.	0.2	1
54	The Process of Gait Generation for Snake-Like Robot with Nonholonomic Constraints. Applied Mechanics and Materials, 0, 816, 240-247.	0.2	1

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55	Modeling and Simulation of Vertical Position Stability of Quadrocopter. Applied Mechanics and Materials, 2015, 816, 43-48.	0.2	1
56	Friction Force Identification for Machine Locomotion. Applied Mechanics and Materials, 2015, 816, 276-281.	0.2	1
57	Design of Wheeled Robot for Rough Terrain. Applied Mechanics and Materials, 2015, 816, 270-275.	0.2	1
58	Speed Control of a DC Motor Using PD and PWM Controllers. Solid State Phenomena, 2015, 220-221, 244-250.	0.3	1
59	Educational Model of Line Follower Robot LINA 2010. Solid State Phenomena, 0, 220-221, 989-994.	0.3	1
60	Kinematics of Serial Manipulators. , 0, , .		1
61	Study Model of the Snake Like Robot. , 2010, , 227-232.		1
62	Theoretical Basics of Geometric Mechanics and Differential Geometry. American Journal of Mechanical Engineering, 2014, 2, 178-183.	0.4	1
63	THEORETICAL RESEARCH OF THE INTERNAL GAS DYNAMICS PROCESSES OF MEASUREMENTS OF HOT AIR CURTAIN WITH CROSS-FLOW FAN. MM Science Journal, 2020, 2020, 3966-3972.	0.4	1
64	Measurement of the SMA Actuator Properties. , 2011, , 187-195.		1
65	Optical Line Recognition Sensors for Line Follower. Acta Mechanica Slovaca, 2013, 17, 16-21.	0.1	1
66	The Simulation of Hydraulic Synchronous Lift of Heavy Loads. American Journal of Mechanical Engineering, 2014, 2, 191-194.	0.4	1
67	Didactic Tools for Education of Embedded Systems. American Journal of Mechanical Engineering, 2014, 2, 204-208.	0.4	1
68	ROBOTIC GRIPPER ACTUATED USING THE SHAPE MEMORY ALLOY ACTUATORS. MM Science Journal, 2022, 2022, 5539-5545.	0.4	1
69	Didactic Models Used on Mechatronic Courses. Solid State Phenomena, 2013, 199, 661-666.	0.3	0
70	Puck Collecting Robot. Applied Mechanics and Materials, 2014, 611, 256-264.	0.2	0
71	Design of Control of DC Motor. Applied Mechanics and Materials, 2014, 611, 325-331.	0.2	0
72	Uncertainty of Dust Mass Concentration Measurement. Applied Mechanics and Materials, 2014, 611, 511-518.	0.2	0

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73	Matematic Model of the Use of Raw Spheroidal Iron Casts. Procedia Engineering, 2014, 96, 257-267.	1.2	0
74	The Design of Ideal Positioning Servo System. Applied Mechanics and Materials, 0, 816, 132-139.	0.2	0
75	The Design of Tracked Mobile Robot for Non-Urban Environment. Applied Mechanics and Materials, 0, 816, 288-293.	0.2	0
76	Anisotropic Friction Difference Principle of In-Pipe Machine. Applied Mechanics and Materials, 2015, 816, 306-312.	0.2	0
77	Design of reconfigurable robot. , 2018, , .		0
78	Condition of Magnetostrictive Sensor for Position Measurement. , 2019, , .		0
79	Motion control of nonholonomic robots at low speed. International Journal of Advanced Robotic Systems, 2020, 17, 172988142090255.	2.1	0
80	Analysis and Synthesis in the Design of Magnetic Switching Electric Machines. Actuators, 2021, 10, 164.	2.3	0
81	HEAD ON HALL EFFECT SENSOR ARRANGEMENT FOR DISPLACEMENT MEASUREMENT. MM Science Journal, 2021, 2021, 4757-4763.	0.4	0
82	OPTIMIZATION OF THE DEVELOPED OUTER SURFACE OF AN INDUSTRIAL OIL COOLER. MM Science Journal, 2021, 2021, 4764-4768.	0.4	0
83	Robot with Adjustable Undercarriage " The Design and the Simulation. , 2014, , 543-550.		0
84	Design of Mobile Inspection Robot. American Journal of Mechanical Engineering, 2014, 2, 219-225.	0.4	0
85	Guitar Playing Robot. Acta Mechanica Slovaca, 2017, 21, 10-15.	0.1	0
86	Uncertainty of Temperature Measurement in Working Environment. Acta Mechanica Slovaca, 2019, 23, 20-23.	0.1	0
87	RECONFIGURABLE WHEEL-LEGGED ROBOT. MM Science Journal, 2020, 2020, 3960-3965.	0.4	0
88	EDUCATIONAL TWO WHEELED MOBILE ROBOT. Technical Sciences and Technologies, 2021, , 117-124.	0.0	0
89	VERIFICATION OF THE TORQUE GAUGES. MM Science Journal, 2022, 2022, 5533-5538.	0.4	0