

František Mach

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/559886/publications.pdf>

Version: 2024-02-01

38
papers

228
citations

1478505

6
h-index

1058476

14
g-index

39
all docs

39
docs citations

39
times ranked

197
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-contact Electromagnetic Actuator for a Ball Valve. , 2021, , .		0
2	Trade-off between resolution and frame rate of visual tracking of mini-robots on an experimental planar platform. Journal of Micro-Bio Robotics, 2020, 16, 123-135.	2.1	1
3	Magnetic Forces Behind Hyperelastic Behavior of Magnetorheological Elastomers. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	1
4	Collective Planar Actuation of Miniature Magnetic Robots Towards Individual Robot Operation. , 2020, , .		4
5	Magnetically Guided Soft Robotic Grippers. , 2019, , .		6
6	Magnetic Actuation of Multiple Robots by the Coplanar Coils System. , 2019, , .		5
7	Positioning Uncertainty Reduction of Magnetically Guided Actuation on Planar Surfaces. , 2019, , .		5
8	Trade-off Between Resolution and Frame Rate for Visual Tracking of Mini-robots on Planar Surfaces. , 2019, , .		2
9	Bistable Fully Electromagnetic Valve for High-Speed and Fail-Safe Operations. IEEE Transactions on Industrial Electronics, 2019, 66, 349-357.	7.9	6
10	Uncertainty Quantification for Real-Time Operation of Electromagnetic Actuators. Mathematics in Industry, 2019, , 597-603.	0.3	0
11	Design, fabrication and testing of electroadhesive interdigital electrodes. Open Physics, 2018, 16, 430-434.	1.7	5
12	Monostable electromagnetic actuator for high-speed and fail-safe valve operation. Electrical Engineering, 2017, 99, 1317-1324.	2.0	3
13	Calibration of numerical models based on advanced optimization and penalization techniques. Journal of Electrical Engineering, 2017, 68, 396-400.	0.7	0
14	N-body simulation of electrically charged plastic particles motion in free-fall electrostatic separator. , 2017, , .		2
15	Numerical and experimental analysis of electrostatic adhesion force generated by interdigital electrodes. , 2017, , .		1
16	Numerical analysis for reducing negative impact of power transformers on the environment. , 2016, , .		0
17	Fast algorithm for evaluation of critical parameters of smart overalls. , 2016, , .		3
18	Experimental electrostatic separator for charged particles of plastic mixture. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
19	Novel monostable fail-safe electromagnetic actuator for straight valve in high-speed operation. , 2016, , .		2
20	Utilization of advanced optimization and penalization techniques for calibration of numerical models. , 2016, , .		0
21	Measured and Simulated Distributions of Voltage and Temperature along Stator Coils of Synchronous Generator. Advances in Electrical and Electronic Engineering, 2015, 13, .	0.3	3
22	Induction heating of rotating cylindrical nonmagnetic billets with prescribed temperature profile. , 2014, , .		0
23	Estimation of charges and critical velocity of plastic particles in triboelectric separator. , 2014, , .		1
24	Model-based determination of nonlinear material parameters of metals with low melting points. , 2014, , .		0
25	Finite-Element 2-D Model of Induction Heating of Rotating Billets in System of Permanent Magnets and its Experimental Verification. IEEE Transactions on Industrial Electronics, 2014, 61, 2584-2591.	7.9	12
26	Shape optimization of electromagnetic actuators. , 2014, , .		5
27	Model of Induction Heating of Rotating Non-Magnetic Billets and its Experimental Verification. IEEE Transactions on Magnetics, 2014, 50, 309-312.	2.1	11
28	Evolutionary algorithm-based multi-criteria optimization of triboelectrostatic separator. Journal of Computational and Applied Mathematics, 2014, 270, 134-142.	2.0	8
29	Induction heating of rotating nonmagnetic billet in magnetic field produced by high-parameter permanent magnets. Electrical Engineering & Electromechanics, 2014, .	0.6	0
30	Numerical solution of coupled problems using code Agros2D. Computing (Vienna/New York), 2013, 95, 381-408.	4.8	81
31	Optimization of the system for induction heating of nonmagnetic cylindrical billets in rotating magnetic field produced by permanent magnets. Computing (Vienna/New York), 2013, 95, 537-552.	4.8	9
32	Modeling of rotational induction heating of nonmagnetic cylindrical billets. Applied Mathematics and Computation, 2013, 219, 7170-7180.	2.2	5
33	Hardâ€coupled nonlinear model of induction heating of nonmagnetic cylindrical billets in rotation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2012, 31, 1368-1378.	0.9	0
34	Genetic algorithms for multicriteria shape optimization of induction furnace. , 2012, , .		0
35	Optimized arrangement of device for electrostatic separation of plastic particles. , 2012, , .		1
36	Induction heating of cylindrical nonmagnetic ingots by rotation in static magnetic field generated by permanent magnets. Journal of Computational and Applied Mathematics, 2012, 236, 4732-4744.	2.0	23

#	ARTICLE	IF	CITATIONS
37	Hard-coupled model of local direct resistance heating of thin sheets. Journal of Computational and Applied Mathematics, 2012, 236, 4725-4731.	2.0	5
38	Higher-order finite element modeling of rotational induction heating of nonferromagnetic cylindrical billets. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2011, 30, 1517-1527.	0.9	17