Krzysztof Talałka

List of Publications by Year
in descending order

71	699	516215	642321
papers	citations	16	23
		h-index	g-index

71	71	71	192
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental approach to modeling of the plasticizing operation in the hot plate welding process. Archives of Civil and Mechanical Engineering, 2022, 22, 1.	1.9	3
2	Designing of the Electromechanical Drive for Automated Hot Plate Welder Using Load Optimization with Genetic Algorithm. Materials, 2022, 15, 1787.	1.3	6
3	Computational methodology for drug delivery to the inner ear using magnetic nanoparticle aggregates. Computer Methods and Programs in Biomedicine, 2022, 221, 106860.	2.6	4
4	Numerical Modeling of the Mechanical Characteristics of the Magnetorheological Elastomers. MATEC Web of Conferences, 2022, 357, 06001.	0.1	1
5	Analysis of Wedge Lock Washer using the Finite Element Method. MATEC Web of Conferences, 2022, 357, 02025.	0.1	0
6	The Concept of Structure a Flexible Design and Manufacturing Method Focused on the Individual Production of Grippers. MATEC Web of Conferences, 2022, 357, 01008.	0.1	0
7	Finite Element Analysis of the Axially Non-symmetrical Piercing Punches Performance for Belt Perforation. MATEC Web of Conferences, 2022, 357, 02001.	0.1	0
8	Issues with Belt Guidance and Device Controls in the Automated Conveyor and Drive Belt Perforation Process. IOP Conference Series: Materials Science and Engineering, 2021, 1016, 012018.	0.3	3
9	Conventional Selection of Mechanical Fasteners for Flat Belts. Applied Sciences (Switzerland), 2021, 11, 2916.	1.3	1
10	Comparative Analysis of Polyurethane Drive Belts with Different Cross-Section Using Thermomechanical Tests for Modeling the Hot Plate Welding Process. Materials, 2021, 14, 3826.	1.3	3
11	A Coupled Eulerian-Lagrangian Simulation and Tool Optimization for Belt Punching Process with a Single Cutting Edge. Materials, 2021, 14, 5406.	1.3	5
12	Symmetric Nature of Stress Distribution in the Elastic-Plastic Range of Pinus L. Pine Wood Samples Determined Experimentally and Using the Finite Element Method (FEM). Symmetry, 2021, 13, 39.	1.1	14
13	Model of the pressing and drying system of organic material. IOP Conference Series: Materials Science and Engineering, 2021, 1199, 012099.	0.3	1
14	Design problems of axisymmetric connections in the aspect of machine engineering drawings. IOP Conference Series: Materials Science and Engineering, 2020, 776, 012034.	0.3	0
15	The influence of the limit stress value on the sublimation rate during the dry ice densification process. IOP Conference Series: Materials Science and Engineering, 2020, 776, 012072.	0.3	10
16	The design issues of rolling bearing assemblies. IOP Conference Series: Materials Science and Engineering, 2020, 776, 012054.	0.3	0
17	Application of the Mohr-Coulomb model for simulating the biomass compaction process. IOP Conference Series: Materials Science and Engineering, 2020, 776, 012066.	0.3	10
18	Magnetorheological Elastomer Stress Relaxation Behaviour during Compression: Experiment and Modelling. Materials, 2020, 13, 4795.	1.3	14

#	Article	IF	Citations
19	Analysis of the guiding column and sleeve cooperation in the linear slide bearing of the punching die head-punch block. IOP Conference Series: Materials Science and Engineering, 2020, 776, 012055.	0.3	3
20	Mathematical Model Describing the Influence of Geometrical Parameters of Multichannel Dies on the Limit Force of Dry Ice Extrusion Process. Materials, 2020, 13, 3317.	1.3	15
21	Evaluation of the belt punching process efficiency based on the resistance force of the compressed material. International Journal of Advanced Manufacturing Technology, 2020, 110, 717-727.	1.5	12
22	The Cam-Clay model in the application of technological process modeling. IOP Conference Series: Materials Science and Engineering, 2020, 776, 012067.	0.3	5
23	Numerical analysis of thin-walled component structure. IOP Conference Series: Materials Science and Engineering, 2020, 776, 012047.	0.3	0
24	Analysis of threaded connections under impact load. IOP Conference Series: Materials Science and Engineering, 2020, 776, 012052.	0.3	1
25	The application of the Finite Element Method analysis in the process of designing the punching die for belt perforation. IOP Conference Series: Materials Science and Engineering, 2020, 776, 012057.	0.3	4
26	Process Analysis of the Hot Plate Welding of Drive Belts. Acta Mechanica Et Automatica, 2020, 14, 84-90.	0.3	8
27	Determination of the effective geometrical features of the piercing punch for polymer composite belts. International Journal of Advanced Manufacturing Technology, 2019, 104, 315-332.	1.5	37
28	Evaluation of the possibility of using the Drucker-Prager-Cap model in simulations of the densification process of shredded natural materials. MATEC Web of Conferences, 2019, 254, 02018.	0.1	11
29	The directions of the development of the methods for designing the geometric form of mechanical structures. MATEC Web of Conferences, 2019, 254, 02034.	0.1	2
30	Functional and construction indicator for the briquetting process of lignocellulosic materials. MATEC Web of Conferences, 2019, 254, 05011.	0.1	1
31	Testing of a torque sensor used to measure the parameters of the briquetting process of lignocellulosic materials. MATEC Web of Conferences, 2019, 254, 05013.	0.1	1
32	Damping in magnetorheological elastomers under compressive stress. MATEC Web of Conferences, 2019, 254, 06002.	0.1	6
33	The influence of the piercing punch profile on the stress distribution on its cutting edge. MATEC Web of Conferences, 2019, 254, 02001.	0.1	21
34	Testing of a force sensor used to measure the briquetting process parameters of lignocellulosic materials. MATEC Web of Conferences, 2019, 254, 05012.	0.1	3
35	Modelling and static stability analyses of the hexa-quad bimorph walking robot. MATEC Web of Conferences, 2019, 254, 02029.	0.1	2
36	Modelling the Belt Perforation Process with the Piercing Punch and the Die in the Context of the Construction of the Punching Dies. IOP Conference Series: Materials Science and Engineering, 2019, 647, 012013.	0.3	5

#	Article	IF	Citations
37	Self-excited vibrations in the off-road machines. , 2019, , 574-576.	0.2	0
38	Cooperation of axisymmetric connection elements under dynamic load. MATEC Web of Conferences, 2018, 157, 02017.	0.1	4
39	Analysis of the influence of the cutting edge geometry on parameters of the perforation process for conveyor and transmission belts. MATEC Web of Conferences, 2018, 157, 01022.	0.1	30
40	Study of the prototype mechanism of height adjustment of the bed in hospital bed. MATEC Web of Conferences, 2018, 157, 02028.	0.1	3
41	Influence of geometrical parameters of convergent sleeve on the value of limit stress. MATEC Web of Conferences, 2018, 157, 05006.	0.1	16
42	Estimation of the perforation force for polymer composite conveyor belts taking into consideration the shape of the piercing punch. International Journal of Advanced Manufacturing Technology, 2018, 98, 2539-2561.	1.5	48
43	Modelling mechanical properties of the multilayer composite materials with the polyamide core. MATEC Web of Conferences, 2018, 157, 02052.	0.1	26
44	Experimental research on biomass cutting process. MATEC Web of Conferences, 2018, 157, 07016.	0.1	25
45	Concept of the Hexa-Quad Bimorph Walking Robot and the Design of its Prototype. Acta Mechanica Et Automatica, 2018, 12, 60-65.	0.3	2
46	Butt Welding of Round Drive Belts. Acta Mechanica Et Automatica, 2018, 12, 115-126.	0.3	20
47	An Approach to Identifying Phenomena Accompanying Micro and Nanoparticles in Contact With Irregular Vessel Walls. IEEE Transactions on Nanobioscience, 2017, 16, 463-475.	2.2	4
48	Influence of the Compression Length on the Ultimate Stress in the Process of Mechanical Agglomeration of Dry Ice. Procedia Engineering, 2017, 177, 363-368.	1.2	18
49	Identification of Phenomena Accompanying the Process of Compressing Natural Polymers. Procedia Engineering, 2017, 177, 369-374.	1.2	4
50	Adjustment of the Distance of Objects to the Microsoft Kinect Device Fitted with Nyko Zoom Attachment Used in a Three-axis Manipulator. Procedia Engineering, 2017, 177, 387-392.	1.2	0
51	The Determination of Mechanical Properties of Magnetorheological Elastomers (MREs). Procedia Engineering, 2017, 177, 324-330.	1.2	54
52	Modelling Geometric Properties in Construction of Special Devices. Procedia Engineering, 2017, 177, 425-430.	1.2	2
53	Multi-angularity - Identification of Parameters and Compatibility Conditions of the Axisymmetric Connection with form Deviations. Procedia Engineering, 2017, 177, 431-438.	1.2	16
54	Influence of Construction Mass Distribution on the Walking Robot's Gait Stability. Procedia Engineering, 2017, 177, 419-424.	1.2	6

#	Article	IF	Citations
55	The Study of Mechanical Properties of Natural Polymers in the Compacting Process. Procedia Engineering, 2017, 177, 411-418.	1.2	26
56	Analysis of the Energy Efficiency of the Shredded Wood Material Densification Process. Procedia Engineering, 2017, 177, 352-357.	1.2	14
57	Dry Ice Compaction in Piston Extrusion Process. Acta Mechanica Et Automatica, 2017, 11, 313-316.	0.3	25
58	Vacuum conveyor belts perforation â€" methods, materials and problems. , 2017, , 1138-1142.	0.2	9
59	Influence of the Value of Limit Densification Stress on the Quality of the Pellets During the Agglomeration Process of CO2. Procedia Engineering, 2016, 136, 269-274.	1.2	25
60	Investigation of Internal Friction of Agglomerated Dry Ice. Procedia Engineering, 2016, 136, 275-279.	1.2	19
61	Influence of the Type of Acceleration Characteristic of the Stepping Motor for Efficient Power Usage. Procedia Engineering, 2016, 136, 370-374.	1.2	6
62	Method of Determination of Safety Factor on Example of Selected Structure. Procedia Engineering, 2016, 136, 50-55.	1.2	9
63	Agglomeration of Natural Fibrous Materials in Perpetual Screw Technique â€" A Challenge for Designer. Procedia Engineering, 2016, 136, 63-69.	1.2	18
64	Determination of the Torque Characteristics of a Stepper Motor. Procedia Engineering, 2016, 136, 375-379.	1.2	9
65	Computer analysis of insect-like robot leg structure â€" Part 1 â€" Static finite-element analysis. Journal of Mechanical and Transport Engineering, 2016, , 53-62.	0.2	1
66	Computer analysis of insect-like robot leg structure â€" Part 2 â€" Kinematic and dynamic analyses. Journal of Mechanical and Transport Engineering, 2016, , 63-75.	0.2	1
67	Contact Problems Between the Hub and the Shaft with a Three-angular Shape of Cross-section for Different Angular Positions. Procedia Engineering, 2014, 96, 50-58.	1.2	18
68	The Evaluation of Form Deviations During Teeth Manufacturing of Gear Rings. Procedia Engineering, 2014, 96, 44-49.	1.2	2
69	Static Compression Tests of Concentrated Crystallized Carbon Dioxide. Applied Mechanics and Materials, 0, 816, 490-495.	0.2	9
70	Contact Problems between the Hub and the Shaft with a Four-Angular Shape of Cross-Section for Different Angular Positions. Applied Mechanics and Materials, 0, 816, 54-62.	0.2	14
71	Analysis of the process of wood plasticization by hot rolling. Journal of Theoretical and Applied Mechanics, 0, , 503.	0.2	4