JÃ¡n DiÅ¾o

List of Publications by Year
in descending order

76 papers	526 citations	623734 14 h-index	794594 19 g-index
83 all docs	83 docs citations	83 times ranked	263 citing authors

#	Article	IF	Citations
1	Research of the Fatigue Life of Welded Joints of High Strength Steel S960 QL Created Using Laser and Electron Beams. Materials, 2020, 13, 2539.	2.9	32
2	Simulation Analysis of the Effects of a Rail Vehicle Running with Wheel Flat. Manufacturing Technology, 2016, 16, 889-896.	1.4	27
3	Design of a Mechanical Part of an Automated Platform for Oblique Manipulation. Applied Sciences (Switzerland), 2020, 10, 8467.	2.5	25
4	Application of Light Metal Alloy EN AW 6063 to Vehicle Frame Construction with an Innovated Steering Mechanism. Materials, 2020, 13, 817.	2.9	24
5	Vibration Analysis of a Coach with the Wheel-flat Due to Suspension Parameters Changes. Procedia Engineering, 2017, 192, 107-112.	1.2	23
6	Experimental Determination of the Mansonâ''Coffin Curves for an Original Unconventional Vehicle Frame. Materials, 2020, 13, 4675.	2.9	23
7	Computation of Modal Properties of Two Types of Freight Wagon Bogie Frames Using the Finite Element Method. Manufacturing Technology, 2018, 18, 208-214.	1.4	22
8	Structural Analysis of a Modified Freight Wagon Bogie Frame. MATEC Web of Conferences, 2017, 134, 00010.	0.2	21
9	Design and Application of Multi-software Platform for Solving of Mechanical Multi-body System Problems. , 2011, , 345-354.		20
10	Evaluation of Ride Comfort for Passengers by Means of Computer Simulation. Manufacturing Technology, 2015, 15, 8-14.	1.4	20
11	Examination of Vertical Dynamics of Passenger Car with Wheel Flat Considering Suspension Parameters. Procedia Engineering, 2017, 187, 235-241.	1.2	18
12	Multibody System of a Rail Vehicle Bogie with a Flexible Body. Manufacturing Technology, 2015, 15, 781-788.	1.4	18
13	Assessment of a rail vehicle running with the damaged wheel on a ride comfort for passengers. MATEC Web of Conferences, 2018, 157, 03004.	0.2	14
14	Analysis of a Goods Wagon Running on a Railway Test Track. Manufacturing Technology, 2016, 16, 667-672.	1.4	14
15	Evaluation of Ride Comfort in a Railway Passenger Car Depending on a Change of Suspension Parameters. Sensors, 2021, 21, 8138.	3.8	14
16	Development of a New System for Attaching the Wheels of the Front Axle in the Cross-Country Vehicle. Symmetry, 2020, 12, 1156.	2.2	13
17	Numerical Analysis of the Structure Girder for Vehicle Axle Scale Calibration. Procedia Engineering, 2017, 177, 510-515.	1.2	12
18	Design of a robotic manipulator for handling products of automotive industry. International Journal of Advanced Robotic Systems, 2020, 17, 172988142090629.	2.1	12

#	Article	IF	Citations
19	Vertical Vibration of Two Axle Railway Vehicle. Procedia Engineering, 2017, 177, 25-32.	1.2	11
20	Investigation of ride properties of a three-wheeled electric vehicle in terms of driving safety. Transportation Research Procedia, 2019, 40, 663-670.	1.5	11
21	Design of a Three-Finger Robot Manipulator. Manufacturing Technology, 2016, 16, 485-489.	1.4	10
22	Comparison of Analytical Stress Analysis and Numerical Calculation of Mobile Work Machine Part. Manufacturing Technology, 2018, 18, 190-193.	1.4	9
23	Evaluation of Vibrational Properties of a Three-wheeled Vehicle in Terms of Comfort. Manufacturing Technology, 2019, 19, 197-203.	1.4	8
24	Assessment of the Passenger Ride Comfort for a Coach by Means of Simulation Computations. LOGI - Scientific Journal on Transport and Logistics, 2017, 8, 24-32.	1.0	6
25	Research of possibilities of reducing the driving resistance of a railway vehicle by means of the wheel construction improvement. Transportation Research Procedia, 2019, 40, 831-838.	1.5	6
26	Clarification of Features of the Wheel Movement with a Perspective Constructive Scheme on a Rail. Applied Sciences (Switzerland), 2020, 10, 6758.	2.5	6
27	Strength Analysis of a Structure for Attachment of a Winch on SUV. Manufacturing Technology, 2017, 17, 291-295.	1.4	6
28	Modification and analyses of structural properties of a goods wagon bogie frame. Diagnostyka, 2018, 20, 41-48.	0.8	6
29	A Study of Improving Running Safety of a Railway Wagon with an Independently Rotating Wheelâ€™s Flange. Symmetry, 2021, 13, 1955.	2.2	6
30	Improvement driving characteristics of electric tricycle. , 2018, , .		6
31	Assessment of Dynamics of a Rail Vehicle in Terms of Running Properties While Moving on a Real Track Model. Symmetry, 2022, 14, 536.	2.2	6
32	Evaluation of the Influence of a Rail Vehicle Running with Wheel-flat on the Railway Track. LOGI - Scientific Journal on Transport and Logistics, 2018, 9, 24-31.	1.0	5
33	FEM analysis of main parts of a manipulator for mounting a compressor to a car equipped with a pneumatic suspension system. Diagnostyka, 2020, 21, 87-94.	0.8	5
34	Improvement of Steerability and Driving Safety of an Electric Three-Wheeled Vehicle by a Design Modification of its Steering Mechanism. LOGI - Scientific Journal on Transport and Logistics, 2022, 13, 49-60.	1.0	5
35	Process of modelling the freight wagon multibody system and analysing its dynamic properties by means of simulation computations. MATEC Web of Conferences, 2018, 235, 00027.	0.2	4
36	Piston kinematics of a combustion engine with unconventional crank mechanism. MATEC Web of Conferences, 2018, 244, 03006.	0.2	4

#	Article	IF	Citations
37	Structural design of soldering station chain conveyor working positions. MATEC Web of Conferences, 2018, 157, 01002.	0.2	4
38	Improvement of diesel injector nozzle test techniques. IOP Conference Series: Materials Science and Engineering, 2020, 985, 012031.	0.6	4
39	A Numerical Study of a Compressed Air Engine with Rotating Cylinders. Applied Sciences (Switzerland), 2021, 11, 7504.	2.5	4
40	Experimental investigation of the motorcycle braking properties when riding on different road surfaces. IOP Conference Series: Materials Science and Engineering, 2020, 1002, 012030.	0.6	4
41	Design of a technical solution for a metro door system. Transportation Research Procedia, 2019, 40, 767-773.	1.5	3
42	Applied Research of Applicability of High-Strength Steel for a Track of a Demining Machine in Term of Its Tribological Properties. Metals, 2021, 11, 505.	2.3	3
43	Side Plate Strength Analysis of the Mechanism for Vehicle Axle Scale Calibration. Manufacturing Technology, 2017, 17, 147-151.	1.4	3
44	Assessment of Passengerâ€™s Ride Comfort of a Tricycle. LOGI - Scientific Journal on Transport and Logistics, 2018, 9, 10-17.	1.0	3
45	Increase of the Overturning Immunity of an Electric Tricycle. Manufacturing Technology, 2019, 19, 297-302.	1.4	3
46	Application of simulation computations in investigation of vibration properties of a tricycle. Diagnostyka, 2019, 20, 97-104.	0.8	3
47	Experimental Research on Mansonâ€“Coffin Curves for the Frame Material of an Unconventional Vehicle. Materials, 2022, 15, 1768.	2.9	3
48	Analysis of the hydraulic arm for use on a light goods vehicle. , 2015, , 351-354.		2
49	Engineering design and strength analyses of main load-bearing parts of a mechanical rack system. Diagnostyka, 2018, 19, 97-104.	0.8	2
50	DESIGN AND STRENGTH ANALYSIS OF A CRANE HOOK WITH A 500 KG LIFTING CAPACITY. PernerÂ¬Â¥s Contacts, 2021, 16, .	0.1	2
51	Assessment of dynamic properties of a carriage using multibody simulation considering rigid and flexible tracks. IOP Conference Series: Materials Science and Engineering, 2019, 659, 012052.	0.6	1
52	Model for building traction information of suburban rolling stock on hydrogen fuel. MATEC Web of Conferences, 2019, 294, 01010.	0.2	1
53	Modification of a design of a wheel-tracked chassis of a mine clearing machine. AIP Conference Proceedings, 2019, , .	0.4	1
54	Influence of Suspension Parameters Changes of a Railway Vehicle on Output Quantities. LOGI - Scientific Journal on Transport and Logistics, 2019, 10, 20-29.	1.0	1

#	Article	IF	Citations
55	Dynamic Properties and Wear Analysis of a Rail Vehicle with Wheels' Self-Lubricating Coatings. Communications - Scientific Letters of the University of Zilina, 2021, 23, B22-B32.	0.6	1
56	An Application of a Magnetic Impulse for the Bending of Metal Sheet Specimens. Materials, 2022, 15, 3558.	2.9	1
57	Static analysis of tipping superstructure of single-axle tractor trialer. , 2022, , .		1
58	Analysis of driving properties of a three-wheeled vehicle with a newly designed steering system. MATEC Web of Conferences, 2019, 254, 03008.	0.2	0
59	Strength reanalysis and influence line equation of rack system drive force. MATEC Web of Conferences, 2019, 254, 02005.	0.2	0
60	Determining of the drive power of a transport machine for disabled persons using a computational model. IOP Conference Series: Materials Science and Engineering, 2019, 659, 012053.	0.6	0
61	Strength analysis of an off-road lorry frame. Scientific Journal of Silesian University of Technology Series Transport, 2021, 110, 23-33.	0.4	0
62	Static analysis of single-axle tractor trialer frame. , 2021, , .		0
63	Parametrization of effect of metro wagon basic structure door force model. , 2021, , .		0
64	The Dynamic and Strength Analysis of an Articulated Covered Wagon with the Circular Pipe Design. Symmetry, 2021, 13, 1398.	2.2	0
65	Design and Structural Analysis of a Rack System for Using in Agriculture. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2018, 66, 641-646.	0.4	0
66	Simulation analysis of the selected control algorithms for semiactive suspension. WUT Journal of Transportation Engineering, 2018, 121, 245-256.	0.2	0
67	Strength Analysis of a Freight Bogie Frame under the Defined Load Cases. Communications - Scientific Letters of the University of Zilina, 2018, 20, 58-62.	0.6	0
68	DESIGN OF A METRO DOOR SYSTEM AND DETERMINATION OF MAIN LOADS. Scientific Journal of Silesian University of Technology Series Transport, 2019, 105, 49-64.	0.4	0
69	Design of quick clamping device of peripheral attachments for skid-steer loader. , 2020, , .		0
70	Design of pedestal for mounting of hydraulic grapple on skidder. , 2020, , .		0
71	Design of a prototype of an engine mechanism with rotating cylinders. MATEC Web of Conferences, 2020, 318, 01004.	0.2	0
72	Engineering design of a manipulator for mounting an air suspension compressor to a car chassis. Scientific Journal of Silesian University of Technology Series Transport, 2020, 109, 5-16.	0.4	0

#	Article	IF	Citations
73	Design of the Power of an Electric Lifting Motor for a Single Girder Bridge Crane with a 500 Kg Load Capacity. Transport Technic and Technology, 2021, 17, 23-29.	0.2	0
74	Numerical analysis of metro door component transmitting loads to basic structure. , 2022, , .		0
75	Calculation of Basic Indicators of Running Safety on the Example of a Freight Wagon with the y25 Bogie. Communications - Scientific Letters of the University of Zilina, 2022, 24, B259-B266.	0.6	0
76	A Mathematical Model of Operation of a Semi-Trailer Tractor Powertrain. Communications - Scientific Letters of the University of Zilina, 2022, 24, B267-B274.	0.6	0