

Jerzy Malachowski

List of Publications by Year in descending order

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Version: 2024-02-01

115
papers

1,637
citations

318942

23
h-index

425179

34
g-index

123
all docs

123
docs citations

123
times ranked

1308
citing authors

#	ARTICLE	IF	CITATIONS
1	Method for Calculating the Required Number of Transport Vehicles Supplying Aviation Fuel to Aircraft during Combat Tasks. <i>Sustainability</i> , 2022, 14, 1619.	1.6	5
2	Shock-induced fracture of dolomite rock in small-scale blast tests. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2022, 14, 1823-1835.	3.7	10
3	CRT-600.01 Vascular Response Study of Novel Material Biodegradable-Polymer Scaffolds in the Porcine Coronary Restenosis Model: Insights Into Development of New Bioresorbable Scaffolds. <i>JACC: Cardiovascular Interventions</i> , 2022, 15, S50.	1.1	0
4	Reliability Analysis of Military Vehicles Based on Censored Failures Data. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 2622.	1.3	12
5	Investigation of dolomite™ rock brittle fracture using fully calibrated Karagozian Case Concrete model. <i>International Journal of Mechanical Sciences</i> , 2022, 221, 107197.	3.6	7
6	Performance evaluation of multilayered ceramic composite armors: New design and advanced predictive method. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2022, 236, 2516-2538.	0.7	2
7	Optimization of the Delivery Time within the Distribution Network, Taking into Account Fuel Consumption and the Level of Carbon Dioxide Emissions into the Atmosphere. <i>Energies</i> , 2022, 15, 5198.	1.6	5
8	Analysis of Light Utility Vehicle Readiness in Military Transportation Systems Using Markov and Semi-Markov Processes. <i>Energies</i> , 2022, 15, 5062.	1.6	13
9	BVS stent optimisation based on a parametric model with a multistage validation process. <i>Materials and Design</i> , 2021, 198, 109363.	3.3	19
10	Dolomite fracture modeling using the Johnson-Holmquist concrete material model: Parameter determination and validation. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2021, 13, 335-350.	3.7	26
11	Impact of Disabled Driver's Mass Center Location on Biomechanical Parameters during Crash. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 1427.	1.3	11
12	Use of Artificial Neural Networks to Predict Fuel Consumption on the Basis of Technical Parameters of Vehicles. <i>Energies</i> , 2021, 14, 2639.	1.6	36
13	Method of creating 3D models of small caliber cerebral arteries basing on anatomical specimens. <i>Journal of Biomechanics</i> , 2021, 125, 110590.	0.9	4
14	An Energy Efficiency Estimation Procedure for Small Wind Turbines at Chosen Locations in Poland. <i>Energies</i> , 2021, 14, 3706.	1.6	7
15	Assessment of the Impact of Decellularization Methods on Mechanical Properties of Biocomposites Used as Skin Substitute. <i>Materials</i> , 2021, 14, 4785.	1.3	7
16	Failure behavior of a concrete slab perforated by a deformable bullet. <i>Engineering Structures</i> , 2021, 245, 112832.	2.6	10
17	Mathematical Programming and Solution Approaches for Transportation Optimisation in Supply Network. <i>Energies</i> , 2021, 14, 7010.	1.6	7
18	Research of Vibrations of an Armoured Personnel Carrier Hull with FE Implementation. <i>Materials</i> , 2021, 14, 6807.	1.3	2

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19	Modelling of the Military Helicopter Operation Process in Terms of Readiness. Defence Science Journal, 2021, 71, 602-611.	0.5	11
20	Standard clinical computed tomography fails to precisely visualise presence, course and branching points of deep cerebral perforators. Folia Morphologica, 2021, , .	0.4	2
21	Local blast wave interaction with tire structure. Defence Technology, 2020, 16, 520-529.	2.1	18
22	Deformation Process of 3D Printed Structures Made from Flexible Material with Different Values of Relative Density. Polymers, 2020, 12, 2120.	2.0	38
23	Experimental testing and numerical simulations of blast-induced fracture of dolomite rock. Meccanica, 2020, 55, 2337-2352.	1.2	25
24	Experimental Tests, FEM Constitutive Modeling and Validation of PLGA Bioresorbable Polymer for Stent Applications. Materials, 2020, 13, 2003.	1.3	17
25	Reliability Analysis of Technical Means of Transport. Applied Sciences (Switzerland), 2020, 10, 3016.	1.3	10
26	Design of small wind turbine structure with optimized response in frequency domain. , 2020, , 361-388.		0
27	Determination and validation of Karagozian-Case Concrete constitutive model parameters for numerical modeling of dolomite rock. International Journal of Rock Mechanics and Minings Sciences, 2020, 129, 104302.	2.6	23
28	Fracture and fragmentation of dolomite rock using the JH-2 constitutive model: Parameter determination, experiments and simulations. International Journal of Impact Engineering, 2020, 140, 103543.	2.4	50
29	Experimental and numerical flow analysis through arteries with stent using particle image velocimetry and computational fluid dynamics method. Biocybernetics and Biomedical Engineering, 2020, 40, 740-751.	3.3	23
30	Application of the Bloch-Schmigalla Method to Optimize the Organization of the Process of Repairing Unmanned Ground Vehicles. Advances in Science and Technology Research Journal, 2020, 14, 39-48.	0.4	4
31	Numerical and experimental analysis of balloon angioplasty impact on flow hemodynamics improvement. Acta of Bioengineering and Biomechanics, 2020, 22, .	0.2	8
32	Development of Innovative Solutions for Intelligent Inspection of Products of Additive Manufacturing for Navy Supply. Challenges To National Defence in Contemporary Geopolitical Situation CNDCGS, 2020, 2020, 300-309.	0.0	0
33	Numerical and experimental analysis of balloon angioplasty impact on flow hemodynamics improvement. Acta of Bioengineering and Biomechanics, 2020, 22, 169-183.	0.2	1
34	Numerical Analysis of the Blood Flow in an Artery with Stenosis. Advances in Intelligent Systems and Computing, 2019, , 68-77.	0.5	0
35	Destress Blasting of Rock Mass: Multiscale Modelling and Simulation. Shock and Vibration, 2019, 2019, 1-11.	0.3	14
36	Modelling and testing of 3D printed cellular structures under quasi-static and dynamic conditions. Thin-Walled Structures, 2019, 145, 106385.	2.7	60

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37	A method of failure modeling for 3D printed cellular structures. Materials and Design, 2019, 174, 107802.	3.3	46
38	Identification of Mechanical Properties for Titanium Alloy Ti-6Al-4V Produced Using LENS Technology. Materials, 2019, 12, 886.	1.3	18
39	Static and Dynamic Loading Behavior of Ti6Al4V Honeycomb Structures Manufactured by Laser Engineered Net Shaping (LENSTM) Technology. Materials, 2019, 12, 1225.	1.3	46
40	LENS Ti-6Al-4V alloy material properties determination for LS-Dyna package. AIP Conference Proceedings, 2019, , .	0.3	4
41	Investigation on deformation process of cellular structures with gradient topology manufactured additively. AIP Conference Proceedings, 2019, , .	0.3	8
42	Numerical Modelling of Cylindrical Test for Determining Jones " Wilkins - Lee Equation Parameters. Lecture Notes in Mechanical Engineering, 2019, , 388-394.	0.3	4
43	Comparison of SPH and FEM in thermomechanical coupled problems. AIP Conference Proceedings, 2019, , .	0.3	3
44	Evolutionary computing methodology for small wind turbine supporting structures. International Journal of Advanced Manufacturing Technology, 2019, 100, 2741-2752.	1.5	10
45	Deformation of honeycomb cellular structures manufactured with Laser Engineered Net Shaping (LENS) technology under quasi-static loading: Experimental testing and simulation. Additive Manufacturing, 2019, 25, 307-316.	1.7	46
46	Sensitivity study on seat belt system key factors in terms of disabled driver behavior during frontal crash. Acta of Bioengineering and Biomechanics, 2019, 21, .	0.2	11
47	Influence of Elevated Temperature During Crimping on Results of Numerical Simulation of a Bioresorbable Stent Deployment Process. Advances in Intelligent Systems and Computing, 2019, , 81-89.	0.5	0
48	Modal Analyses of Small Wind Turbine. Lecture Notes in Mechanical Engineering, 2019, , 784-789.	0.3	0
49	Application of the Transport Problem from the Criterion of Time to Optimize Supply Network with Products "Fast-Running". Journal of KONBiN, 2019, 49, 127-137.	0.1	2
50	Sensitivity study on seat belt system key factors in terms of disabled driver behavior during frontal crash. Acta of Bioengineering and Biomechanics, 2019, 21, 169-180.	0.2	2
51	Modelling, and characterization of 3D printed cellular structures. Materials and Design, 2018, 142, 177-189.	3.3	135
52	Possibilities of rock constitutive modelling and simulations. AIP Conference Proceedings, 2018, , .	0.3	2
53	Analysis of artery blood flow before and after angioplasty. AIP Conference Proceedings, 2018, , .	0.3	2
54	Performance of steel pipe reinforced with composite sleeve. Composite Structures, 2018, 183, 199-211.	3.1	22

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55	Interaction of Low-Frequency Guided Waves with Discontinuities. <i>Engineering Materials</i> , 2018, , 45-61.	0.3	0
56	Analysis of mechanics of side impact test defined in UN/ECE Regulation 129. <i>Traffic Injury Prevention</i> , 2018, 19, 256-263.	0.6	8
57	Methodology of shell structure reinforcement layout optimization. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	0
58	Evaluation of the response of fibre reinforced composite repair of steel pipeline subjected to puncture from excavator tooth. <i>Composite Structures</i> , 2018, 202, 1126-1135.	3.1	17
59	Improved child-resistant system for better side impact protection. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 97, 3925-3935.	1.5	16
60	Modelling of guillotine cutting of multi-layered aluminum sheets. <i>Journal of Manufacturing Processes</i> , 2018, 34, 374-388.	2.8	25
61	The effects of types of guidewires and pressure applied during stent implantation in the main vessel on the incidence of damage to coronary guidewires during angioplasty of coronary bifurcation lesions – Wide Beast study. <i>Journal of Interventional Cardiology</i> , 2018, 31, 599-607.	0.5	4
62	Airless Tire Conceptions Modeling and Simulations. <i>Lecture Notes in Mechanical Engineering</i> , 2017, , 293-301.	0.3	16
63	Numerical analysis of crimping and inflation process of balloon-expandable coronary stent using implicit solution. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2017, 33, e2890.	1.0	23
64	Experimental and numerical study of steel pipe with part-wall defect reinforced with fibre glass sleeve. <i>International Journal of Pressure Vessels and Piping</i> , 2017, 149, 108-119.	1.2	40
65	Numerical Prediction of the Parameters of a Yield Criterion for Fibrous Composites. <i>Mechanics of Composite Materials</i> , 2017, 53, 589-600.	0.9	12
66	Optimum design of a small wind turbine. , 2017, , 469-472.		1
67	Small Wind Turbines: Specification, Design, and Economic Evaluation. , 2016, , .		4
68	Numerical optimization and design study of small wind turbine mast structure. , 2016, , .		0
69	Numerical analysis of small wind turbine diffuser using fluid structure interaction. , 2016, , .		0
70	Modeling of abrasive wear by the meshless smoothed particle hydrodynamics method. <i>Journal of Friction and Wear</i> , 2016, 37, 94-99.	0.1	11
71	Numerical Analysis of Child Restraint System Equipped with Built-in Belts Pretensioner During Frontal Impact. <i>Springer Proceedings in Mathematics and Statistics</i> , 2016, , 27-38.	0.1	0
72	Experimental and Numerical Testing of Gas Pipeline Subjected to Excavator Elements Interference. <i>Journal of Pressure Vessel Technology, Transactions of the ASME</i> , 2016, 138, .	0.4	5

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73	Numerical and experimental failure analysis of rifle extractor. <i>Engineering Failure Analysis</i> , 2016, 62, 112-127.	1.8	10
74	Numerical and experimental testing of vehicle tyre under impulse loading conditions. <i>International Journal of Mechanical Sciences</i> , 2016, 106, 346-356.	3.6	42
75	Numerical Simulation of Ultrasonic Torsional Guided Wave Propagation for Pipes with Defects. <i>Springer Proceedings in Physics</i> , 2016, , 475-488.	0.1	6
76	Numerical analysis of stent expansion process in coronary artery stenosis with the use of non-compliant balloon. <i>Biocybernetics and Biomedical Engineering</i> , 2016, 36, 145-156.	3.3	24
77	Detailed tyre FE modelling with multistage validation for dynamic analysis. <i>Materials and Design</i> , 2016, 96, 68-79.	3.3	48
78	Aero-elastic coupled numerical analysis of small wind turbine-generator modelling. <i>Wind and Structures, an International Journal</i> , 2016, 23, 577-594.	0.8	5
79	Numerical Simulation of Abrasive Wear Using FEM-SPH Hybrid Approach. <i>Springer Proceedings in Mathematics and Statistics</i> , 2016, , 155-167.	0.1	0
80	Multibody rigid models and 3D FE models in numerical analysis of transport aircraft main landing gear. <i>Bulletin of the Polish Academy of Sciences: Technical Sciences</i> , 2015, 63, 745-757.	0.8	4
81	Numerical study of selected military vehicle chassis subjected to blast loading in terms of tire strength improving. <i>Bulletin of the Polish Academy of Sciences: Technical Sciences</i> , 2015, 63, 867-878.	0.8	23
82	A child seat numerical model validation in the static and dynamic work conditions. <i>Archives of Civil and Mechanical Engineering</i> , 2015, 15, 361-375.	1.9	27
83	Modern small wind turbine design solutions comparison in terms of estimated cost to energy output ratio. <i>Renewable Energy</i> , 2015, 83, 1166-1173.	4.3	33
84	Blast loading influence on load carrying capacity of I-column. <i>Engineering Structures</i> , 2015, 104, 107-115.	2.6	26
85	Investigation of parameters influencing the efficiency of small wind turbines. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2015, 146, 29-38.	1.7	46
86	Optimization of protective panel for critical supporting elements. <i>Composite Structures</i> , 2015, 134, 493-505.	3.1	30
87	Numerical Study of Modular 5.56 mm Standard Assault Rifle Referring to Dynamic Characteristics. <i>Defence Science Journal</i> , 2015, 65, 431.	0.5	12
88	Dynamic behaviour of Various Fibre Systems During Impact Interaction – Numerical Approach. <i>Fibres and Textiles in Eastern Europe</i> , 2015, 23, 72-82.	0.2	16
89	LS-DYNA CONTACT PROCEDURE ANALYSIS FOR SELECTED MECHANICAL SYSTEMS. <i>Journal of KONES</i> , 2015, 22, 193-202.	0.2	2
90	Investigation of the Stress-Strain State of Seamless Pipe in the Initial State. <i>Archive of Mechanical Engineering</i> , 2014, 61, 595-607.	0.7	3

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91	Thermovision in the Validation Process of Numerical Simulation of Braking. Metrology and Measurement Systems, 2014, 21, 329-340.	1.4	7
92	SPLIT HOPKINSON PRESSURE BAR IMPULSE EXPERIMENTAL MEASUREMENT WITH NUMERICAL VALIDATION. Metrology and Measurement Systems, 2014, 21, 47-58.	1.4	20
93	Field test and numerical studies of the scissors-AVLB type bridge. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2014, 62, 103-112.	0.8	0
94	Finite element analysis of the percutaneous coronary intervention in a coronary bifurcation. Acta of Bioengineering and Biomechanics, 2014, 16, 23-31.	0.2	5
95	IDENTIFICATION OF LAYERS DISTRIBUTION IN THE COMPOSITE COUPON USING FINITE ELEMENT METHOD AND THREE POINT BENDING TEST. Acta Mechanica Et Automatica, 2013, 7, 160-165.	0.3	3
96	DYNAMIC TESTING OF COPPER MATERIAL – NUMERICAL APPROACH. Acta Mechanica Et Automatica, 2013, 7, 196-202.	0.3	3
97	Load carrying capacity numerical study of I-beam pillar structure with blast protective panel. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2013, 61, 451-457.	0.8	2
98	Numerical study for determination of pulse shaping design variables in SHPB apparatus. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2013, 61, 459-466.	0.8	21
99	NUMERICAL ASSESSMENT OF THE SELECTED SUPPORTING ELEMENT CARRYING CAPACITY OF CRITICAL INFRASTRUCTURE FACILITY / SZACOWANIE NUMERYCZNE NOŚNOŚCI WYBRANEGO ELEMENTU KONSTRUKCYJNEGO OBIEKTU INFRASTRUKTURY KRYTYCZNEJ. Journal of KONBiN, 2013, 26, 29-42.	0.1	2
100	SAFETY OF CRITICAL INFRASTRUCTURES - CHOSEN MODELING STUDIES OF ENERGY INFRASTRUCTURE ELEMENTS / BEZPIECZEŃSTWO INFRASTRUKTURY KRYTYCZNEJ – WYBRANE BADANIA MODELOWE ELEMENTÓW INFRASTRUKTURY ENERGETYCZNEJ. Journal of KONBiN, 2013, 26, 13-28.	0.1	0
101	Thermal measurement of brake pad lining surfaces during the braking process. Proceedings of SPIE, 2012, , .	0.8	3
102	Long lasting time outdoor atmospheric corrosion tests: electrochemical analysis. WIT Transactions on Engineering Sciences, 2011, , .	0.0	0
103	Stress State Investigations for a Tube in the Contact Area With Rigid Saddle. , 2007, , .		1
104	Experimental Evaluation of Dynamic Effects for a Selected Highway Bridge. Journal of Performance of Constructed Facilities, 2006, 20, 253-260.	1.0	39
105	Finite element analysis of vehicle–bridge interaction. Finite Elements in Analysis and Design, 2006, 42, 950-959.	1.7	91
106	Numerical Assessment of Pipe Effort in Large Deformed Areas. , 2006, , .		1
107	Numerical and Experimental Research of Pipelines Safety Including Aspect of Protection From Terroristic Threat or Warfare Conditions. , 2005, , 339.		0
108	Laboratory Scale Experimental Simulation of a Pipe Rested on a Saddle Supporting System for Verification of Numerical Modeling. , 2004, , .		0

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109	Computer Simulation of Pipeline Deformations on the Basis of Data From an Intelligent Caliper Inspection Tool. , 2003, , 309.		0
110	Finite element simulation of vickers microindentation on alumina ceramics. Ceramics International, 1998, 24, 359-364.	2.3	17
111	Research of Elastomeric Protective Layers Subjected to Blast Wave. Applied Mechanics and Materials, 0, 82, 680-685.	0.2	2
112	Numerical Analysis of Vehicle Suspension System Response Subjected to Blast Wave. Applied Mechanics and Materials, 0, 82, 728-733.	0.2	8
113	Rubber Structural Coupon Behaviour Study under Pressure Impulse. Solid State Phenomena, 0, 198, 394-399.	0.3	0
114	Tire rubber testing procedure over a wide range of strain rates. Journal of Theoretical and Applied Mechanics, 0, , 727.	0.2	17
115	Simulation model for analysis and evaluation of selected measures of the helicopter's readiness. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 0, , 095441002110691.	0.7	4