J Machado

List of Publications by Year
in descending order

173	915	567281 15	677142 22
papers	citations	h-index	g-index

188	188	188	703
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Methodology of Improvement of Manufacturing Productivity Through Increasing Operational Efficiency of the Production Process. Lecture Notes in Mechanical Engineering, 2018, , 23-32.	0.4	38
2	Integrated process planning and scheduling in networked manufacturing systems for I4.0: a review and framework proposal. Wireless Networks, 2021, 27, 1587-1599.	3.0	34
3	A Formal Methodology for Accomplishing IEC 61850 Real-Time Communication Requirements. IEEE Transactions on Industrial Electronics, 2017, 64, 6582-6590.	7.9	33
4	Collaborative framework for virtual organisation synthesis based on a dynamic multi-criteria decision model. International Journal of Computer Integrated Manufacturing, 2018, 31, 857-868.	4.6	33
5	Yarn features extraction using image processing and computer vision â€“ A study with cotton and polyester yarns. Measurement: Journal of the International Measurement Confederation, 2015, 68, 1-15.	5.0	30
6	An Overview of Industrial Communication Networks. Mechanisms and Machine Science, 2015, , 933-940.	0.5	27
7	Shortening changeover time — An industrial study. , 2015, , .		25
8	The Tool Supporting Decision Making Process in Area of Job-Shop Scheduling. Advances in Intelligent Systems and Computing, 2017, , 490-498.	0.6	25
9	LOGIC CONTROLLERS DEPENDABILITY VERIFICATION USING A PLANT MODEL. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 37-42.	0.4	23
10	Safe controllers design for industrial automation systems. Computers and Industrial Engineering, 2011, 60, 635-653.	6.3	22
11	RePhyS: A Multidisciplinary Experience in Remote Physiological Systems Laboratory. International Journal of Online and Biomedical Engineering, 2013, 9, 21.	1.4	21
12	Web-Assisted Laboratory for Control Education: Remote and Virtual Environments. Communications in Computer and Information Science, 2012, , 62-72.	0.5	19
13	Simulation of cyber physical systems behaviour using timed plant models. Mechatronics, 2018, 54, 175-185.	3.3	19
14	Pattern-based Analysis of Automated Production Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 972-977.	0.4	18
15	Cycle Time Reduction in Deck Roller Assembly Production Unit with Value Stream Mapping Analysis. Advances in Intelligent Systems and Computing, 2017, , 509-518.	0.6	17
16	A generic interface and a framework designed for industrial metrology integration for the Internet of Things. Computers in Industry, 2022, 138, 103632.	9.9	17
17	Brain computer interface systems using non-invasive electroencephalogram signal: A literature review. , 2017, , .		16
18	Job shop schedules analysis in the context of industry 4.0. , 2017, , .		16

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19	A Collaborative Multiplicative Holt-Winters Forecasting Approach with Dynamic Fuzzy-Level Component. Applied Sciences (Switzerland), 2018, 8, 530.	2.5	16
20	Literature review on autonomous production control methods. Enterprise Information Systems, 2020, 14, 1219-1231.	4.7	16
21	Design and Development of an Industrial Network Laboratory. International Journal of Emerging Technologies in Learning, 0, 6, 21-26.	1.3	15
22	Comparative Simulation Study of Production Scheduling in the Hybrid and the Parallel Flow. Management and Production Engineering Review, 2017, 8, 69-80.	1.4	14
23	Modeling and simulating the controller behavior of an Automated People Mover using IEC 61850 communication requirements. , 2011, , .		13
24	A generic approach to build plant models for DES verification purposes. , 2006, , .		12
25	Blood type classification using computer vision and machine learning. Neural Computing and Applications, 2017, 28, 2029-2040.	5.6	12
26	Property Patterns for the Formal Verification of Automated Production Systemsstar;. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 5107-5112.	0.4	11
27	Virtual Reality Based Ecodesign. Ecoproduction, 2017, , 119-135.	0.8	11
28	Using timed automata for modeling, simulating and verifying networked systems controllerâ€™s specifications. Neural Computing and Applications, 2017, 28, 1031-1041.	5.6	10
29	Bath-Ambienceâ€"A Mechatronic System for Assisting the Caregivers of Bedridden People. Sensors, 2017, 17, 1156.	3.8	10
30	Impact of UTAUT Predictors on the Intention and Usage of Electronic Health Records and Telemedicine from the Perspective of Clinical Staffs. Lecture Notes in Electrical Engineering, 2019, , 172-177.	0.4	10
31	A Hybrid Multi-Objective Evolutionary Algorithm-Based Semantic Foundation for Sustainable Distributed Manufacturing Systems. Applied Sciences (Switzerland), 2021, 11, 6314.	2.5	10
32	Development of cyber physical system based manufacturing system design for process optimization. IOP Conference Series: Materials Science and Engineering, 2020, 997, 012048.	0.6	10
33	Determination of human blood type using image processing techniques. Measurement: Journal of the International Measurement Confederation, 2017, 97, 165-173.	5.0	9
34	Deaf people feeling music rhythm by using a sensing and actuating device. Sensors and Actuators A: Physical, 2017, 267, 431-442.	4.1	8
35	Statistical Reliability Assessment for Small Sample of Failure Data of Dumper Diesel Engines Based on Power Law Process and Maximum Likelihood Estimation. Applied Sciences (Switzerland), 2021, 11, 5387.	2.5	8
36	A Specification Patterns System for Discrete Event Systems Analysis. International Journal of Advanced Robotic Systems, 2013, 10, 315.	2.1	7

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37	Analysis of the Effect of Shape Factor on Corkâ€“Rubber Composites under Small Strain Compression. Applied Sciences (Switzerland), 2020, 10, 7177.	2.5	7
38	Issues in remote laboratory developments for biomedical engineering education. , 2013, , .		6
39	Mechatronic system for assistance on bath of bedridden elderly people. , 2015, , .		6
40	An Innovative Approach for Modelling Urban Road Traffic Using Timed Automata and Formal Methods. Journal of Advanced Transportation, 2018, 2018, 1-15.	1.7	6
41	Computer vision techniques for detecting yarn defects. , 2018, , 123-145.		6
42	A Systematic Simulation-Based Multi-Criteria Decision-Making Approach for the Evaluation of Semiâ€“Fully Flexible Machine System Process Parameters. Electronics (Switzerland), 2022, 11, 233.	3.1	6
43	A mechatronic device for spasticity quantification. , 2011, , .		5
44	Obtaining Plant Models for Formal Verification Tasks from 3D CAD Models: Which is the Best Approach?. Advanced Materials Research, 2012, 630, 283-290.	0.3	5
45	HiL simulation workbench for testing and validating PLC programs. , 2013, , .		5
46	The Conceptual Design of a Mechatronic System to Handle Bedridden Elderly Individuals. Sensors, 2016, 16, 725.	3.8	5
47	A New Methodology for Use by a Single Caregiver to Bathe Bedridden Elderly Persons Using Advanced Mechatronic Systems. Healthcare (Switzerland), 2019, 7, 124.	2.0	5
48	Meta-Analysis and Forest Plots for Sustainability of Heavy Load Carrier Equipment Used in the Industrial Mining Environment. Sustainability, 2021, 13, 8672.	3.2	5
49	The Influence of Cork and Manufacturing Parameters on the Properties of Corkâ€“Rubber Composites for Vibration Isolation Applications. Sustainability, 2021, 13, 11240.	3.2	5
50	Decision Making Models for Sustainable Supply Chain in Industry 4.0: Opportunities and Future Research Agenda. Lecture Notes in Mechanical Engineering, 2023, , 175-185.	0.4	5
51	Design of a mechatronic system for human blood typing in emergency situations. , 2012, , .		4
52	Development of a Medical Care Terminal for Efficient Monitoring of Bedridden Subjects. Journal of Engineering (United States), 2016, 2016, 1-9.	1.0	4
53	Telefacturing Based Distributed Manufacturing Environment for Optimal Manufacturing Service by Enhancing the Interoperability in the Hubs. Journal of Engineering (United States), 2017, 2017, 1-15.	1.0	4
54	Production Flow Improvement in a Textile Industry. Advances in Intelligent Systems and Computing, 2018, , 224-233.	0.6	4

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55	Modelling and Simulation of a Straight Line Motion Mechanism for Industrial Application. , 2018, , .		4
56	Development of a System for Supporting Industrial Management. Lecture Notes in Mechanical Engineering, 2020, , 209-215.	0.4	4
57	Performance Evaluation of Different Mechanisms of Production Activity Control in the Context of Industry 4.0. Lecture Notes in Networks and Systems, 2020, , 82-103.	0.7	4
58	Development of Dependable Controllers in the Context of Machines Design. Lecture Notes in Mechanical Engineering, 2014, , 125-131.	0.4	4
59	Modelling and implementing the control of automated production systems using statecharts and PLC programming languages. , 2001, , .		3
60	Industrial Network Platform for Monitoring and Control of Automated Manufacturing Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 168-173.	0.4	3
61	Biomedical device for spasticity quantification based on the velocity dependence of the Stretch Reflex threshold. , 2011, , .		3
62	Improved biomedical device for spasticity quantification. , 2013, , .		3
63	Students' perspectives on remote physiological signals acquisition experiments. , 2013, , .		3
64	System for Assistance on Bath of Bedridden Elderly People. , 2014, , .		3
65	E-health decision support system for differential diagnosis. , 2014, , .		3
66	PAIR: The Remote Industrial Automation Trainer. , 2014, , .		3
67	Development and Optimization of a Paper Punching System. , 2015, , .		3
68	Cloud-based framework for advanced maintenance tasks. , 2015, , .		3
69	Prototype for determination of pre-transfusion tests based on image processing techniques. , 2015, , .		3
70	Methods time measurement on the optimization of a productive process: A case study. , 2017, , .		3
71	Modelling cyber-physical systems: some issues and directions. IOP Conference Series: Materials Science and Engineering, 2018, 444, 042007.	0.6	3
72	Mechanical Design in Industry 4.0: Development of a Handling System Using a Modular Approach. Lecture Notes in Electrical Engineering, 2019, , 508-514.	0.4	3

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73	Gait stability of diabetic patients is altered with the rigid rocker shoes. Clinical Biomechanics, 2019, 69, 197-204.	1.2	3
74	Modeling of Dynamic Behavior of AGV systems. , 2019, , .		3
75	Application of artificial neural networks to predict mechanical behaviour of cork-rubber composites. Neural Computing and Applications, 2021, 33, 14069.	5.6	3
76	Intelligent Platform for Supervision and Production Activity Control in Real Time. Lecture Notes in Mechanical Engineering, 2018, , 151-159.	0.4	3
77	A Systematic Analysis of Printed Circuit Boards Bending during In-Circuit Tests. Machines, 2022, 10, 135.	2.2	3
78	Solving the problem of scheduling the production process based on heuristic algorithms. Journal of Universal Computer Science, 2022, 28, 292-310.	0.8	3
79	Identification of the Critical Enablers for Perishable Food Supply Chain Using Deterministic Assessment Models. Applied Sciences (Switzerland), 2022, 12, 4503.	2.5	3
80	A new modelling approach for predicting process evolution of cork-rubber composites slabs vulcanization. Scientific Reports, 2022, 12, 8002.	3.3	3
81	Using advanced simulation techniques to improve industrial controller's dependability. , 2011, , .		2
82	Remote physiological data acquisition: From the human body to electromechanical simulators. , 2013, , .		2
83	Development of controller strategies for a robotized filament winding equipment. , 2013, , .		2
84	Development, Test and Validation of a Mechatronic Device for Spasticity Quantification. International Journal of Advanced Robotic Systems, 2013, 10, 259.	2.1	2
85	Mechanical simulation model of the systemic circulation. Measurement: Journal of the International Measurement Confederation, 2015, 66, 212-221.	5.0	2
86	Industrial controlling process using the remote industrial automation trainer PAIR. AIP Conference Proceedings, 2015, , .	0.4	2
87	Mechatronic system for performing blood pre-transfusion tests. Sensors and Actuators A: Physical, 2016, 246, 81-90.	4.1	2
88	Formal verification considering a systematic modeling approach for function blocks. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 4107-4113.	1.6	2
89	Formal Analysis of an Urban Road Traffic Model. Lecture Notes in Electrical Engineering, 2017, , 533-544.	0.4	2
90	Sensors and Actuators on Determining Parameters for Being Considered in Selection of Elastomers for Biomimetic Hands. Sensors, 2017, 17, 1190.	3.8	2

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91	Automatic Assist in Estimating the Production Capacity of Final Machining for Cast Iron Machine Parts. Advances in Intelligent Systems and Computing, 2018, , 254-263.	0.6	2
92	An Increase in Wear Resistance Frictional Contact of Functional Surfaces for Plunger Pairs. Lecture Notes in Mechanical Engineering, 2021, , 84-94.	0.4	2
93	Issues to be considered on obtaining plant models for formal verification purposes. IOP Conference Series: Materials Science and Engineering, 2016, 147, 012050.	0.6	2
94	Simulation of Vertical and Horizontal Integration of Cyber-Physical Systems. , 2020, , .		2
95	Systems Engineering: Availability and Reliability. Applied Sciences (Switzerland), 2022, 12, 2504.	2.5	2
96	A simulation strategy to determine the mechanical behaviour of cork-rubber composite pads for vibration isolation. Eksploatacja I Niezawodnosc, 2022, 24, 80-88.	2.0	2
97	The Behaviour of a Rod (Beam) Under the Influence of an External Power Load. Lecture Notes in Mechanical Engineering, 2022, , 13-22.	0.4	2
98	From SFC Specification to C Programming Language on the Context of Aerospace Systems Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 46-51.	0.4	1
99	Handling incomplete information in an evolutionary environment. , 2010, , .		1
100	A simulation platform for automation teaching. , 2013, , .		1
101	Modeling and formal analysis of urban road traffic. , 2013, , .		1
102	Conceptual Design of a Mechatronic System for Supporting Basic Quality of Life of Bedridden Elderly People. Applied Mechanics and Materials, 2014, 658, 483-488.	0.2	1
103	Mechatronic System for ABO Human Blood Typing. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.7	1
104	Remote physiological signals acquisition: Didactic experiments. , 2014, , .		1
105	Modelica modeling language as a tool on control engineering education: Simulation of a two-tank system. , 2014, , .		1
106	Design of a Conceptual Bed Mattress for Reducing Pressure on Bony Prominences. , 2015, , .		1
107	Ergonomics and Usability in the Development of a Portable Virtual Gaming Device Applied in Physiotherapy. Transactions of Famena, 2016, 40, 95-106.	0.6	1
108	Innovative Mechatronic Approach to Redesign a Punch and Bind Machine. , 2016, , .		1

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109	A Faster and More Secure Human Blood Type Determining Productâ€"Concept Design. Journal of Medical Devices, Transactions of the ASME, 2016, 10, .	0.7	1
110	E-ducAtion: Multidisciplinary platform to support the teaching/learning process in Portuguese 1st cycle schools. , 2017, , .		1
111	Development of an Innovative Coupling System for Industrial Vehicles: An AGV Oriented Approach. , 2017, , .		1
112	Rocker outsole shoes and margin of stability during walking: A preliminary study. , 2017, , .		1
113	Innovative coupling system for industrial vehicles: An AGV oriented approach and development a new coupling system for improving trailer trajectory accuracy of AGV vehicles. , 2017, , .		1
114	Optimized punches geometry for paper punching systems: An industrial approach. , 2017, , .		1
115	A design strategy for obtaining reliable controllers for critical mechanical systems. Mechatronics, 2018, 54, 186-202.	3.3	1
116	A Text Mining Based Supervised Learning Algorithm for Classification of Manufacturing Suppliers. Advances in Intelligent Systems and Computing, 2018, , 236-244.	0.6	1
117	Dynamic simulation of the CAD model in SimMechanics with multiple uses. Turkish Journal of Electrical Engineering and Computer Sciences, 2018, 26, .	1.4	1
118	Investigation of Copper and Zinc Contamination on the Work Piece Surface with WEDM. Lecture Notes in Electrical Engineering, 2019, , 608-615.	0.4	1
119	Model Proposal to Evaluate the Quality of a Production Planning and Control Software in an Industrial Context. Lecture Notes in Mechanical Engineering, 2019, , 38-47.	0.4	1
120	Tools Implementation in Management of Continuous Improvement Processes. Lecture Notes in Mechanical Engineering, 2019, , 348-357.	0.4	1
121	A General Overview of E-Maintenance and Possible Applications. Advances in Systems Analysis, Software Engineering, and High Performance Computing Book Series, 2021, , 196-218.	0.5	1
122	Hardware Passwords Manager Based on Biometric Authentication. Engineering Proceedings, 2021, 6, .	0.4	1
123	Metrology Information in Cyber-Physical Systems. Lecture Notes in Mechanical Engineering, 2022, , 285-292.	0.4	1
124	Modelling and Design of a Tridimensional Compliant Leg for Bioloid Quadruped. Applied Mathematics and Information Sciences, 2014, 8, 1501-1507.	0.5	1
125	Measuring the Punching Profile of a Punch And Bind Machine. Lecture Notes in Mechanical Engineering, 2018, , 727-732.	0.4	1
126	Influence of the Indentation Speed on Viscoelastic Behavior of the Human Finger. Lecture Notes in Electrical Engineering, 2019, , 143-150.	0.4	1

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127	Simulation of Temperature Evolution of Cork Composites During Moulding Process. International Journal of Simulation Modelling, 2020, 19, 583-594.	1.3	1
128	Methods for Modeling Urban Road Traffic Using Timed Automata. Lecture Notes in Mechanical Engineering, 2020, , 97-107.	0.4	1
129	Production Planning and Setup Time Optimization: An Industrial Case Study. Lecture Notes in Mechanical Engineering, 2020, , 220-230.	0.4	1
130	Influence of the Cutting Temperature on the Surface Layer Quality When Grinding Sintered Porous Materials. Lecture Notes in Mechanical Engineering, 2022, , 455-465.	0.4	1
131	Design of a Vision System for Needlesâ€™ Beds Positioning Inspection: An Industrial Application. Lecture Notes in Mechanical Engineering, 2022, , 138-153.	0.4	1
132	Algorithmization of Functional-Modular Design of Packaging Equipment Using the Optimization Synthesis Principles. Lecture Notes in Mechanical Engineering, 2022, , 143-154.	0.4	1
133	A NEW PLANT MODELLING APPROACH FOR FORMAL VERIFICATION PURPOSES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 167-172.	0.4	0
134	Simulation Aspects on the Design of Automated Manufacturing Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 308-313.	0.4	0
135	Hybrid plant modeling for discrete controllers analysis: A case study. , 2010, , .		0
136	The role of Superior Education Institutions on post-secondary (non superior) education. , 2010, , .		0
137	Design and modelling of a 3D compliant leg for Bioloid. , 2012, , .		0
138	Evaluation of the mechanical system to produce file cutting edges in a industrial machine: Theoretical and experimental approaches. , 2012, , .		0
139	A systematized approach for obtaining a dependable structured specification for an industrial automation system. , 2012, , .		0
140	Remote physiological systems (RePhyS) laboratory: A didactic learning environment. , 2013, , .		0
141	Mechatronic medical device for wrist rehabilitation. , 2013, , .		0
142	A multidisciplinary experience in Remote Physiological Systems laboratory. , 2013, , .		0
143	Reintrepreting the cardiovascular system as a mechanical model. , 2013, , .		0
144	Using ICT techniques for improving mechatronic systems' dependability. , 2013, , .		0

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145	Preface of the "Symposium on dependable mechatronic systems". , 2013, , .		0
146	Modeling and Simulation of Physical Parameters of Human Respiratory System. Applied Mechanics and Materials, 0, 658, 447-452.	0.2	0
147	CAD Information Handling for Obtaining Dependable Manufacturing Systems. , 2015, , .		0
148	Preface of the â€œSymposium on dependable mechatronic systemsâ€• AIP Conference Proceedings, 2015, , .	0.4	0
149	QR codes and Java applied to physiological data acquisition in biomedical engineering education. AIP Conference Proceedings, 2015, , .	0.4	0
150	Design and development of a portable projection and natural interface device for virtual games applied to physiotherapy. AIP Conference Proceedings, 2015, , .	0.4	0
151	Development of an automatic system for the measurement of force and stroke parameters of car radio keypads. Measurement: Journal of the International Measurement Confederation, 2017, 100, 84-92.	5.0	0
152	Behavior of the Elastomers Used in Prehension Systems for Small Cylindrical Objects. Lecture Notes in Electrical Engineering, 2017, , 495-505.	0.4	0
153	SmartBath: A New Bathing Concept for Disabled People. Lecture Notes in Electrical Engineering, 2017, , 461-470.	0.4	0
154	A Simulation Platform Prototype for Evaluating Alternative Scenarios of Members Integration in Virtual Organizations. Lecture Notes in Electrical Engineering, 2017, , 521-531.	0.4	0
155	Smartbath: Water temperature control system. , 2017, , .		0
156	Acoustic simulation of a steering sensor for geometric design optimization. , 2017, , .		0
157	Design, implementation and preliminary tests of E-ducation platform. , 2017, , .		0
158	Mechanical Design of a Standing Frame adapted for Children with mental deficiency. Procedia CIRP, 2018, 70, 278-283.	1.9	0
159	Friction Properties of Polyoxymethylene (POM) Materials in Dry and Lubricated Conditions. Lecture Notes in Electrical Engineering, 2019, , 568-573.	0.4	0
160	Modelling of Thermal Properties and Temperature Evolution of Cork Composites During Moulding Process: Model Development. Lecture Notes in Mechanical Engineering, 2022, , 274-284.	0.4	0
161	Production Scheduling of Semiconductor Wafer Fabrication Facilities Using Real-Time Combinatorial Dispatching Rule. Lecture Notes in Networks and Systems, 2022, , 78-90.	0.7	0
162	A Systematic Analysis of an Industrial Pickup and Placement Production System. EAI/Springer Innovations in Communication and Computing, 2022, , 479-491.	1.1	0

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163	Assessing Remote Physiological Signals Acquisition Experiments. , 2014, , .		0
164	Prototype Implementation and Automatic Determination of Pre-Transfusion Tests Based on Image Processing. , 2016, , 331-345.		0
165	Velocity and Brightness Control in Prototype for Blood Type Determination. Lecture Notes in Electrical Engineering, 2017, , 311-321.	0.4	0
166	Mechatronic System for the Promotion of Physical Activity in People with Motor Limitations: First Insights. Lecture Notes in Electrical Engineering, 2019, , 267-274.	0.4	0
167	Mechatronic System Using a Straight-Line Motion Mechanism for AGV Application. Lecture Notes in Electrical Engineering, 2019, , 284-291.	0.4	0
168	Mechatronic System for the Promotion of Physical Activity in People with Motor Limitations. Lecture Notes in Networks and Systems, 2019, , 83-94.	0.7	0
169	A Methodology for Modelling Tugger Train Systems Using Modelica. , 2019, , .		0
170	Energy Efficient Network Manufacturing System Using Controlled Elitist Non-dominated Sorting Genetic Algorithm. Lecture Notes in Networks and Systems, 2020, , 188-206.	0.7	0
171	RAPID PROTOTYPING BOOST IN RESEARCH AND DEVELOPMENT. International Journal of Mechatronics and Applied Mechanics, 2020, 1, .	0.2	0
172	Development of an Innovative Mechatronic Binder Machine. Sensors, 2022, 22, 741.	3.8	0
173	A Novel Route to Optimize Placement Equipment Kinematics by Coupling Capacitive Accelerometers. Sensors, 2022, 22, 3423.	3.8	0