Manuel F Silva

List of Publications by Year
in descending order

98 papers	1,312 citations	567281 15 h-index	395702 33 g-index
111 all docs	111 docs citations	111 times ranked	1005 citing authors

#	Article	IF	Citations
1	Robotics and the European Project Semester. Advances in Higher Education and Professional Development Book Series, 2022, , 205-219.	0.2	0
2	SCARA Self Posture Recognition Using a Monocular Camera. IEEE Access, 2022, 10, 25883-25891.	4.2	2
3	Active Learning Strategies for Sustainable Engineering. Advances in Higher Education and Professional Development Book Series, 2022, , 146-164.	0.2	0
4	Automatic Segmentation of Monofilament Testing Sites in Plantar Images for Diabetic Foot Management. Bioengineering, 2022, 9, 86.	3.5	7
5	A survey on localization, mapping, and trajectory planning for quadruped robots in vineyards. , 2022, , .		4
6	Bin Picking Approaches Based on Deep Learning Techniques: A State-of-the-Art Survey. , 2022, , .		9
7	Gerber File Parsing for Conversion to Bitmap Imageâ€“The VINCI7D Case Study. IEEE Access, 2022, 10, 69659-69679.	4.2	0
8	TEACHING EMBEDDED/IOT TO ALL ENGINEERS. EDULEARN Proceedings, 2022, , .	0.0	1
9	Autonomous wheelchair for patientâ€™s transportation on healthcare institutions. SN Applied Sciences, 2021, 3, 354.	2.9	13
10	Advances in Forest Robotics: A State-of-the-Art Survey. Robotics, 2021, 10, 53.	3.5	39
11	Design, Modeling, and Simulation of a Wing Sail Land Yacht. Applied Sciences (Switzerland), 2021, 11, 2760.	2.5	1
12	Advances in Agriculture Robotics: A State-of-the-Art Review and Challenges Ahead. Robotics, 2021, 10, 52.	3.5	130
13	Editorial of the topical collection â€œstate of the art on autonomous robot systems and competitionsâ€• SN Applied Sciences, 2021, 3, 1.	2.9	0
14	Engineering Education for Sustainable Development: The European Project Semester Approach. IEEE Transactions on Education, 2020, 63, 108-117.	2.4	28
15	Sail Carâ€”An EPSÂ©ISEP 2019 Project. , 2020, , .		3
16	AdaptPack Studio: an automated intelligent framework for offline factory programming. Industrial Robot, 2020, 47, 697-704.	2.1	5
17	Driverless Wheelchair for Patientâ€™s On-Demand Transportation in Hospital Environment*. , 2020, , .		3
18	Airfoil Selection and Wingsail Design for an Autonomous Sailboat. Advances in Intelligent Systems and Computing, 2020, , 305-316.	0.6	2

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19	Smart Companion Pillow â€“ An EPS@ISEP 2019 Project. Advances in Intelligent Systems and Computing, 2020, , 465-476.	0.6	0
20	A Survey on Path Planning Algorithms for Mobile Robots. , 2019, , .		28
21	AdaptPack Studio: Automatic Offline Robot Programming Framework for Factory Environments. , 2019, , .		4
22	Converting Robot Offline Programs to Native Code Using the AdaptPack Studio Translators. , 2019, , .		3
23	Rigid wing sailboats: A state of the art survey. Ocean Engineering, 2019, 187, 106150.	4.3	33
24	Fostering Professional Competencies in Engineering Undergraduates with EPS@ISEP. Education Sciences, 2019, 9, 119.	2.6	16
25	Introduction to the Special Issue â€œRobotica 2016â€• Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 93, 417-417.	3.4	0
26	Vertical Farmingâ€”An EPS@ISEP 2018 Project. Advances in Intelligent Systems and Computing, 2019, , 428-438.	0.6	0
27	Learning Engineering with EPS@ISEP: Developing Projects for Smart Sustainable Cities. International Journal of Engineering Pedagogy, 2019, 9, 33.	1.1	10
28	Solar Dehydrator. , 2019, , .		3
29	Multipurpose Urban Sensing Equipmentâ€”An EPS@ISEP 2018 Project. Advances in Intelligent Systems and Computing, 2019, , 415-427.	0.6	0
30	Water Intellibuoyâ€”An EPS@ISEP 2018 Project. Advances in Intelligent Systems and Computing, 2019, , 439-449.	0.6	1
31	Waste to Fungi. , 2019, , .		0
32	Modelling, Trajectory Planning and Control of a Quadruped Robot Using MatlabÂ®/Simulinkâ„¢. Advances in Intelligent Systems and Computing, 2018, , 756-767.	0.6	5
33	Outdoor Intelligent Shader. , 2018, , .		0
34	Application for automatic programming of palletizing robots. , 2018, , .		14
35	Collaborative Learning with Sustainability-driven Projects: A Summary of the EPS@ISEP Programme. International Journal of Engineering Pedagogy, 2018, 8, 106.	1.1	13
36	Escargot Nursery â€“ An EPS@ISEP 2017 Project. Advances in Intelligent Systems and Computing, 2018, , 884-895.	0.6	0

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37	Offline Programming of Collision Free Trajectories for Palletizing Robots. Advances in Intelligent Systems and Computing, 2018, , 680-691.	0.6	4
38	Designing a Robotic Welding Cell for Bus Body Frame Using a Sustainable Way. Procedia Manufacturing, 2017, 11, 207-214.	1.9	10
39	Balcony Greenhouse. , 2017, , .		1
40	Self-Oriented Solar Mirror. , 2017, , .		0
41	Didactic Robotic Fish â€“ An EPS@ISEP 2016 Project. Advances in Intelligent Systems and Computing, 2017, , 239-253.	0.6	2
42	BIOLOGICAL INSPIRED APPROACH FOR THE INSPECTION OF STRUCTURES IN THE SPLASH ZONE. , 2017, , .		0
43	USING ROBOTICS TO TEACH SYSTEMS ENGINEERING: A HANDS-ON LEARNING COURSE EXAMPLE. , 2017, , .		0
44	Learning sustainability by developing a solar dryer for microalgae retrieval. Journal of Technology and Science Education, 2016, 5, .	1.2	2
45	Design of sustainable domes in the context of EPS@ISEP. , 2016, , .		1
46	Developing an aquaponics system to learn sustainability and social compromise skills. Journal of Technology and Science Education, 2016, 5, .	1.2	4
47	Development of an application for balancing product flow lines through genetic algorithms. International Journal of Business Excellence, 2016, 9, 310.	0.3	0
48	Off-Line Programming of Grinding Robots at Grohe Portugal. , 2016, , .		0
49	Educating global engineers with EPS@ISEP: The â€œpet trackerâ€•project experience. , 2016, , .		2
50	Prototyping Small Robots for Junior Competitions: MicroFactory Case study. IFAC-PapersOnLine, 2016, 49, 121-126.	0.9	1
51	LSA Portraiture Robot. Advances in Intelligent Systems and Computing, 2016, , 341-352.	0.6	0
52	Design and implementation of a biologically inspired swimming robot an EPS@ISEP 2014 spring project. , 2015, , .		2
53	Aquaponics system an EPS@ISEP 2014 spring project. , 2015, , .		2
54	Design and implementation of a biologically inspired flying robot an EPS@ISEP 2014 spring project. , 2015, , .		1

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55	Implementation of a novel industrial robotics course and its evaluation by students. , 2015, , .		2
56	Development of biomimetic robots in the EPS engineering programme capstone project. , 2015, , .		7
57	Design and development of a solar dryer for microalgae retrieval an EPS@ISEP 2013 spring project. , 2015, , .		1
58	A robot in the classroom. , 2015, , .		2
59	The European Project Semester at ISEP: the challenge of educating global engineers. European Journal of Engineering Education, 2015, 40, 328-346.	2.3	25
60	Towards Active Course Marks for Autonomous Sailing Competitions. , 2015, , 67-75.		1
61	Biomechanical study of the Spider Crab as inspiration for the development of a biomimetic robot. Biomaterials and Biomechanics in Bioengineering, 2015, 2, 249-269.	0.4	0
62	Development and simulation on V-REP of an algorithm for the RoboCup@Work BNT. , 2014, , .		2
63	Neural control of an autonomous robot. , 2014, , .		1
64	Smart Object for 3D Interaction. Lecture Notes in Electrical Engineering, 2014, , 49-61.	0.4	0
65	An industrial robotics course based on a graphical simulation package. , 2013, , .		3
66	The European project semester at ISEP learning to learn engineering. , 2013, , .		4
67	Biomechanical modeling and simulation of the spider crab (maja brachydactyla). , 2013, , .		2
68	Multi-legged Walking Robot Modelling in MATLAB/SimmechanicsTM and Its Simulation. , 2013, , .		8
69	Development of an AGV Controlled by Fuzzy Logic. Intelligent Systems, Control and Automation: Science and Engineering, 2013, , 313-322.	0.5	0
70	Simulation and Control of a Spider Crab Biomechanical Model. , 2013, , .		0
71	A literature review on the optimization of legged robots. JVC/Journal of Vibration and Control, 2012, 18, 1753-1767.	2.6	66
72	Climbing Robot for Ferromagnetic Surfaces with Dynamic Adjustment of the Adhesion System. Journal of Robotics, 2012, 2012, 1-16.	0.9	12

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73	Application of Fractional Calculus in Engineering. Springer Proceedings in Mathematics, 2011, , 619-629.	0.5	6
74	Realization of Fractional-Order Controllers: Analysis, Synthesis and Application to the Velocity Control of a Servo System. Nonlinear Physical Science, 2011, , 43-82.	0.2	1
75	QUADRUPED ROBOT OPTIMIZATION USING A GENETIC ALGORITHM. , 2011, , .		2
76	Fuzzy Control Architecture for a Mobile Robot System. , 2011, , .		3
77	Human-Machine Interface for the Control of a Climbing Robot. , 2011, , .		0
78	Some Applications of Fractional Calculus in Engineering. Mathematical Problems in Engineering, 2010, 2010, 1-34.	1.1	162
79	Architecture of an wheeled climbing robot with dynamic adjustment of the adhesion system. , 2010, , .		11
80	Control and Dynamics of Fractional Order Systems. Studies in Computational Intelligence, 2009, , 235-251.	0.9	2
81	Tuning and Application of Integer and Fractional Order PID Controllers. , 2009, , 245-255.		14
82	A Survey of Technologies for Climbing Robots Adhesion to Surfaces. , 2008, , .		37
83	Discretization of Complex-order Algorithms for Control Applications. JVC/Journal of Vibration and Control, 2008, 14, 1349-1361.	2.6	12
84	Kinematic and dynamic performance analysis of artificial legged systems. Robotica, 2008, 26, 19-39.	1.9	28
85	Using Fractional Derivatives in Joint Control of Hexapod Robots. JVC/Journal of Vibration and Control, 2008, 14, 1473-1485.	2.6	12
86	A Historical Perspective of Legged Robots. JVC/Journal of Vibration and Control, 2007, 13, 1447-1486.	2.6	66
87	Introduction to the Special Issue on Modeling and Control of Artificial Locomotion Systems. JVC/Journal of Vibration and Control, 2006, 12, 1291-1291.	2.6	1
88	DISCRETIZATION OF COMPLEX-ORDER DIFFERINTEGRALS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 274-279.	0.4	2
89	COMPARISON OF DIFFERENT ORDERS PADÃ‰ FRACTIONAL ORDER PD05 CONTROL ALGORITHM IMPLEMENTATIONS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 373-378.	0.4	3
90	FRACTIONAL PDÎ± CONTROL OF AN HEXAPOD ROBOT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 370-375.	0.4	1

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91	Time domain design of fractional differintegrators using least-squares. Signal Processing, 2006, 86, 2567-2581.	3.7	148
92	Complex-order dynamics in hexapod locomotion. Signal Processing, 2006, 86, 2785-2793.	3.7	31
93	Fractional Order PDÎ±Joint Control of Legged Robots. JVC/Journal of Vibration and Control, 2006, 12, 1483-1501.	2.6	51
94	Modelling and simulation of artificial locomotion systems. Robotica, 2005, 23, 595-606.	1.9	37
95	Fractional Order Control of a Hexapod Robot. Nonlinear Dynamics, 2004, 38, 417-433.	5.2	101
96	Comparison of Fractional and Integer Order Control of an Hexapod Robot. , 2003, , 667.		16
97	POWER ANALYSIS OF MULTI-LEGGED SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 287-292.	0.4	5
98	Performance analysis of multi-legged systems. , 0, , .		1