

# Antônio P Moreira

## List of Publications by Year in descending order

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Version: 2024-02-01

151  
papers

2,199  
citations

304743

22  
h-index

330143

37  
g-index

168  
all docs

168  
docs citations

168  
times ranked

1780  
citing authors

#	ARTICLE	IF	CITATIONS
1	Advances in Agriculture Robotics: A State-of-the-Art Review and Challenges Ahead. <i>Robotics</i> , 2021, 10, 52.	3.5	130
2	Machines and control systems for friction stir welding: A review. <i>Materials and Design</i> , 2016, 90, 256-265.	7.0	87
3	High-level programming and control for industrial robotics: using a handheld accelerometer-based input device for gesture and posture recognition. <i>Industrial Robot</i> , 2010, 37, 137-147.	2.1	73
4	Evaluating the Single-Shot MultiBox Detector and YOLO Deep Learning Models for the Detection of Tomatoes in a Greenhouse. <i>Sensors</i> , 2021, 21, 3569.	3.8	72
5	Accelerometer-based control of an industrial robotic arm. , 2009, , .		64
6	Object recognition using laser range finder and machine learning techniques. <i>Robotics and Computer-Integrated Manufacturing</i> , 2013, 29, 12-22.	9.9	62
7	Collaborative Welding System using BIM for Robotic Reprogramming and Spatial Augmented Reality. <i>Automation in Construction</i> , 2019, 106, 102825.	9.8	61
8	Map-Matching Algorithms for Robot Self-Localization: A Comparison Between Perfect Match, Iterative Closest Point and Normal Distributions Transform. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2019, 93, 533-546.	3.4	61
9	Practical Approach of Modeling and Parameters Estimation for Omnidirectional Mobile Robots. <i>IEEE/ASME Transactions on Mechatronics</i> , 2009, 14, 377-381.	5.8	60
10	Multi-robot nonlinear model predictive formation control: Moving target and target absence. <i>Robotics and Autonomous Systems</i> , 2013, 61, 1502-1515.	5.1	57
11	Integrated tasks assignment and routing for the estimation of the optimal number of AGVS. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 82, 719-736.	3.0	56
12	High-level robot programming based on CAD: dealing with unpredictable environments. <i>Industrial Robot</i> , 2012, 39, 294-303.	2.1	50
13	Real-time and continuous hand gesture spotting: An approach based on artificial neural networks. , 2013, , .		50
14	Towards a Reliable Robot for Steep Slope Vineyards Monitoring. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2016, 83, 429-444.	3.4	45
15	CAD-based off-line robot programming. , 2010, , .		44
16	IntellWheels: Modular development platform for intelligent wheelchairs. <i>Journal of Rehabilitation Research and Development</i> , 2011, 48, 1061.	1.6	42
17	Localization of Mobile Robots Using an Extended Kalman Filter in a LEGO NXT. <i>IEEE Transactions on Education</i> , 2012, 55, 135-144.	2.4	40
18	Advances in Forest Robotics: A State-of-the-Art Survey. <i>Robotics</i> , 2021, 10, 53.	3.5	39

#	ARTICLE	IF	CITATIONS
19	Preface for the special issue on robotics in smart manufacturing. International Journal of Advanced Manufacturing Technology, 2016, 85, 1-1.	3.0	35
20	A Localization Method Based on Map-Matching and Particle Swarm Optimization. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 77, 313-326.	3.4	32
21	Concept and Design of the Intellwheels Platform for Developing Intelligent Wheelchairs. Lecture Notes in Electrical Engineering, 2009, , 191-203.	0.4	31
22	Augmented Reality for Human-Robot Collaboration and Cooperation in Industrial Applications: A Systematic Literature Review. Sensors, 2022, 22, 2725.	3.8	29
23	Formation control driven by cooperative object tracking. Robotics and Autonomous Systems, 2015, 63, 68-79.	5.1	28
24	Stereo-based real-time 6-DoF work tool tracking for robot programming by demonstration. International Journal of Advanced Manufacturing Technology, 2016, 85, 57-69.	3.0	28
25	Multi-Robot nonlinear model predictive formation control: the obstacle avoidance problem. Robotica, 2016, 34, 549-567.	1.9	27
26	Robust human position estimation in cooperative robotic cells. Robotics and Computer-Integrated Manufacturing, 2021, 67, 102035.	9.9	24
27	Accuracy and Repeatability Tests on HoloLens 2 and HTC Vive. Multimodal Technologies and Interaction, 2021, 5, 47.	2.5	24
28	A low-cost laser scanning solution for flexible robotic cells: spray coating. International Journal of Advanced Manufacturing Technology, 2012, 58, 1031-1041.	3.0	23
29	Object recognition and pose estimation for industrial applications: A cascade system. Robotics and Computer-Integrated Manufacturing, 2014, 30, 605-621.	9.9	20
30	Robotic grasping: from wrench space heuristics to deep learning policies. Robotics and Computer-Integrated Manufacturing, 2021, 71, 102176.	9.9	20
31	A nonlinear model predictive control strategy for trajectory tracking of a four-wheeled omnidirectional mobile robot. Optimal Control Applications and Methods, 2008, 29, 335-352.	2.1	19
32	Perception-driven multi-robot formation control. , 2013, , .		19
33	Evaluation of Depth Sensors for Robotic Applications. , 2015, , .		18
34	The SPIDERobot: A Cable-Robot System for On-site Construction in Architecture. , 2016, , 230-239.		17
35	Persistently-exciting signal generation for Optimal Parameter Estimation of constrained nonlinear dynamical systems. ISA Transactions, 2018, 77, 231-241.	5.7	17
36	Shared control for obstacle avoidance in intelligent wheelchairs. , 2010, , .		16

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37	Intelligent state changing applied to multi-robot systems. Robotics and Autonomous Systems, 2013, 61, 115-124.	5.1	16
38	Self-localisation of indoor mobile robots using multi-hypotheses and a matching algorithm. Mechatronics, 2013, 23, 727-737.	3.3	16
39	Nonlinear Model Predictive Formation Control: An Iterative Weighted Tuning Approach. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 80, 441-454.	3.4	16
40	Homing a robot with range-only measurements under unknown drifts. Robotics and Autonomous Systems, 2015, 67, 3-13.	5.1	16
41	IntellWheels MMI: A Flexible Interface for an Intelligent Wheelchair. Lecture Notes in Computer Science, 2010, , 296-307.	1.3	16
42	Kalman filter-based yaw angle estimation by fusing inertial and magnetic sensing: a case study using low cost sensors. Sensor Review, 2015, 35, 244-250.	1.8	15
43	Smarter Robotic Sprayer System for Precision Agriculture. Electronics (Switzerland), 2021, 10, 2061.	3.1	15
44	Programming Robots by Demonstration Using Augmented Reality. Sensors, 2021, 21, 5976.	3.8	15
45	Comprehensive Review of the Dispatching, Scheduling and Routing of AGVs. Lecture Notes in Electrical Engineering, 2015, , 505-514.	0.4	15
46	Fast 3D Map Matching Localisation Algorithm. Journal of Automation and Control Engineering, 2013, 1, 110-114.	0.3	15
47	Intelligent Wheelchair Driving: Bridging the Gap Between Virtual and Real Intelligent Wheelchairs. Lecture Notes in Computer Science, 2015, , 445-456.	1.3	14
48	A Nonlinear Model Predictive Control of an Omni-Directional Mobile Robot. , 2007, , .		13
49	Modelling a biomass supply chain through discrete-event simulation—This work was supported by the FCT - Funda�o para a Cincia e Tecnologia through the PhD Studentship SFRH/BD/98032/2013, program POPH - Programa Operacional Potencial Humano and FSE - Fundo Social Europeu.. IFAC-PapersOnLine, 2016, 49, 84-89.	0.9	13
50	Autonomous wheelchair for patient's transportation on healthcare institutions. SN Applied Sciences, 2021, 3, 354.	2.9	13
51	Development of an Omnidirectional Kick for a NAO Humanoid Robot. Lecture Notes in Computer Science, 2012, , 571-580.	1.3	13
52	Enhancing dynamic videos for surveillance and robotic applications: The robust bilateral and temporal filter. Signal Processing: Image Communication, 2014, 29, 80-95.	3.2	12
53	Time enhanced A*: Towards the development of a new approach for Multi-Robot Coordination. , 2015, , .		12
54	Assessment of Robotic Picking Operations Using a 6 Axis Force/Torque Sensor. IEEE Robotics and Automation Letters, 2016, 1, 768-775.	5.1	12

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55	Digital Twin based What-if Simulation for Energy Management. , 2021, , .		12
56	Flexible Work Cell Simulator Using Digital Twin Methodology for Highly Complex Systems in Industry 4.0. Advances in Intelligent Systems and Computing, 2018, , 541-552.	0.6	12
57	Robot path simulation: a low cost solution based on CAD. , 2010, , .		11
58	Unsupervised flow-based motion analysis for an autonomous moving system. Image and Vision Computing, 2014, 32, 391-404.	4.5	11
59	Visual motion perception for mobile robots through dense optical flow fields. Robotics and Autonomous Systems, 2017, 87, 1-14.	5.1	11
60	Indoor Localization System based on Artificial Landmarks and Monocular Vision. Telkomnika (Telecommunication Computing Electronics and Control), 2014, 10, 609.	0.8	11
61	IntellWheels: Intelligent wheelchair with user-centered design. , 2013, , .		10
62	Multi-Robot Systems Formation Control with Obstacle Avoidance. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5703-5708.	0.4	10
63	TRAJECTORY TRACKING FOR OMNI-DIRECTIONAL MOBILE ROBOTS BASED ON RESTRICTIONS OF THE MOTOR'S VELOCITIES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 121-125.	0.4	9
64	A Flow-based Motion Perception Technique for an Autonomous Robot System. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 75, 475-492.	3.4	9
65	Robust mobile robot localization based on a security laser: an industry case study. Industrial Robot, 2016, 43, 596-606.	2.1	9
66	Multiple manipulators path planning using double A*. Industrial Robot, 2016, 43, 657-664.	2.1	9
67	Modeling and Simulation of the EMG30 Geared Motor with Encoder Resorting to SimTwo: The Official Robot@Factory Simulator. Lecture Notes in Mechanical Engineering, 2013, , 307-314.	0.4	9
68	Incremental scenario representations for autonomous driving using geometric polygonal primitives. Robotics and Autonomous Systems, 2016, 83, 312-325.	5.1	8
69	A* search algorithm optimization path planning in mobile robots scenarios. AIP Conference Proceedings, 2019, , .	0.4	8
70	Reconfigurable Grasp Planning Pipeline with Grasp Synthesis and Selection Applied to Picking Operations in Aerospace Factories. Robotics and Computer-Integrated Manufacturing, 2021, 67, 102032.	9.9	8
71	Incremental texture mapping for autonomous driving. Robotics and Autonomous Systems, 2016, 84, 113-128.	5.1	7
72	WirelessSyncroVision: Wireless synchronization for industrial stereoscopic systems. International Journal of Advanced Manufacturing Technology, 2016, 82, 909-919.	3.0	7

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73	Robotics in Smart Manufacturing. Communications in Computer and Information Science, 2013, , .	0.5	7
74	Recommendation System using Reinforcement Learning for What-If Simulation in Digital Twin. , 2021, , .		7
75	Robust and real-time teaching of industrial robots for mass customisation manufacturing using stereoscopic vision. , 2009, , .		6
76	CAD-based robot programming: The role of Fuzzy-PI force control in unstructured environments. , 2010, , .		6
77	Coordination of Marine Robots Under Tracking Errors and Communication Constraints. IEEE Journal of Oceanic Engineering, 2016, 41, 27-39.	3.8	6
78	A Multilayer Model Predictive Control Methodology Applied to a Biomass Supply Chain Operational Level. Complexity, 2017, 2017, 1-10.	1.6	6
79	Recursive Approach of Sub-Optimal Excitation Signal Generation and Optimal Parameter Estimation. International Journal of Control, Automation and Systems, 2020, 18, 1965-1974.	2.7	6
80	Framework Using ROS and SimTwo Simulator for Realistic Test of Mobile Robot Controllers. Lecture Notes in Electrical Engineering, 2015, , 751-759.	0.4	6
81	Fuzzy-PI Force Control for Industrial Robotics. Communications in Computer and Information Science, 2010, , 322-329.	0.5	6
82	Overview of MPC applications in supply chains: Potential use and benefits in the management of forest-based supply chains. Forest Systems, 2015, 24, e039.	0.3	6
83	Revisiting Lucas-Kanade and Horn-Schunck. Journal of Computer Engineering and Informatics, 2013, 1, 23-29.	0.4	6
84	Active Perception Fruit Harvesting Robots – A Systematic Review. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 105, .	3.4	6
85	An architecture for visual motion perception of a surveillance-based autonomous robot. , 2014, , .		5
86	Cable robot for non-standard architecture and construction: A dynamic positioning system. , 2015, , .		5
87	2D Cloud Template Matching - A Comparison between Iterative Closest Point and Perfect Match. , 2016, , .		5
88	Online Robot Teleoperation Using Human Hand Gestures: A Case Study for Assembly Operation. Advances in Intelligent Systems and Computing, 2016, , 93-104.	0.6	5
89	Optimal automatic path planner and design for high redundancy robotic systems. Industrial Robot, 2019, 47, 131-139.	2.1	5
90	New Approach for Beacons Based Mobile Robot Localization using Kalman Filters. Procedia Manufacturing, 2020, 51, 512-519.	1.9	5

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91	Development of an Autonomous Mobile Towing Vehicle for Logistic Tasks. <i>Advances in Intelligent Systems and Computing</i> , 2020, , 669-681.	0.6	5
92	MODEL'S PARAMETERS EXPERIMENTAL IDENTIFICATION OF A FOUR WHEELED OMNI-DIRECTIONAL MOBILE ROBOT. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006, 39, 230-235.	0.4	4
93	Design of a mobile robot for RoboCup Middle Size League. , 2009, , .		4
94	A set of novel modifications to improve algorithms from the A* family applied in mobile robotics. <i>Journal of the Brazilian Computer Society</i> , 2013, 19, 167-179.	1.3	4
95	Robust Mobile Robot Localization Based on Security Laser Scanner. , 2015, , .		4
96	Soft Computing Optimization for the Biomass Supply Chain Operational Planning. , 2018, , .		4
97	Boccia game simulator: <scp>S</scp>erious game adapted for people with disabilities. <i>Expert Systems</i> , 2019, 36, e12299.	4.5	4
98	Improving a position controller for a robotic joint. , 2021, , .		4
99	Tracking and Identifying in Real Time the Robots of a F-180 Team. <i>Lecture Notes in Computer Science</i> , 2000, , 286-291.	1.3	4
100	Shop Floor Scheduling in a Mobile Robotic Environment. <i>Lecture Notes in Computer Science</i> , 2011, , 377-391.	1.3	4
101	Towards Extraction of Topological Maps from 2D and 3D Occupancy Grids. <i>Lecture Notes in Computer Science</i> , 2013, , 307-318.	1.3	4
102	Architecture Control and Model Identification of a Omni-Directional Mobile Robot. , 2005, , .		3
103	Target controlled infusion algorithms for anesthesia: Theory vs practical implementation. , 2009, 2009, 6234-7.		3
104	Flexible Internal Logistics Based on AGV System's: A Case Study. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010, 43, 248-255.	0.4	3
105	HUMANOID LOW-LEVEL CONTROLLER DEVELOPMENT BASED ON A REALISTIC SIMULATION. <i>International Journal of Humanoid Robotics</i> , 2010, 07, 587-607.	1.1	3
106	A visual place recognition procedure with a Markov chain based filter. , 2014, , .		3
107	Model Predictive Control Applied to a Supply Chain Management Problem. <i>Lecture Notes in Electrical Engineering</i> , 2017, , 167-177.	0.4	3
108	Driverless Wheelchair for Patientâ€™s On-Demand Transportation in Hospital Environment*. , 2020, , .		3

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109	Streaming Image Sequences for Vision-Based Mobile Robots. Lecture Notes in Electrical Engineering, 2015, , 637-646.	0.4	3
110	Realistic Boccia Game Simulator Adapted for People with Disabilities or Motor Disorders: Architecture and Preliminary Usability Study. Advances in Intelligent Systems and Computing, 2017, , 165-176.	0.6	3
111	Autonomous Interactive Object Manipulation and Navigation Capabilities for an Intelligent Wheelchair. Lecture Notes in Computer Science, 2017, , 473-485.	1.3	3
112	Humanoid robot simulation with a joint trajectory optimized controller. , 2008, , .		2
113	Increasing flexibility in footwear industrial cells. , 2014, , .		2
114	Iterative weighted tuning for a nonlinear model predictive formation control. , 2014, , .		2
115	Development of a 3D model based part recognition system for industrial applications: Main challenges. , 2015, , .		2
116	Omnidirectional robot modeling and simulation. , 2020, , .		2
117	5dpo-2000 Team Description. Lecture Notes in Computer Science, 2000, , 754-757.	1.3	2
118	REALISTIC HUMANOID ROBOT SIMULATION WITH AN OPTIMIZED CONTROLLER: A POWER CONSUMPTION MINIMIZATION APPROACH. , 2008, , .		2
119	A Generic Framework for Multi-robot Formation Control. Lecture Notes in Computer Science, 2012, , 294-305.	1.3	2
120	Humanoid Gait Optimization Resorting to an Improved Simulation Model. International Journal of Advanced Robotic Systems, 2013, 10, 67.	2.1	2
121	A Survey of high-level teleoperation, monitoring and task assignment to Autonomous Mobile Robots. , 2022, , .		2
122	OptiOdom: a Generic Approach for Odometry Calibration of Wheeled Mobile Robots. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 105, .	3.4	2
123	A nonlinear mobile robot modeling applied to a model predictive controller. , 2009, , .		1
124	Attracting Students to Engineering: Using Intuitive HRIs for Educational Purposes. Communications in Computer and Information Science, 2010, , 250-257.	0.5	1
125	Proposal of a new real-time cooperative challenge in mobile robotics. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9836-9841.	0.4	1
126	Robot&#x0040;factory: Localization method based on map-matching and Particle Swarm Optimization. , 2013, , .		1



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127	Evaluation of sensors and algorithms for person detection for personal robots. , 2013, , .		1
128	New marker for real-time industrial robot programming by motion imitation. , 2014, , .		1
129	Multimodal Interaction and Serious Game for Assistive Robotic Devices in a Simulated Environment. , 2016, , .		1
130	Enhanced Performance Real-Time Industrial Robot Programming by Demonstration using Stereoscopic Vision and an IMU sensor. , 2020, , .		1
131	A kinesthetic teaching approach for automating micropipetting repetitive tasks. International Journal of Advanced Manufacturing Technology, 2022, 118, 651-663.	3.0	1
132	Real-Time Tracking System for a Moored Oil Tanker: A Kalman Filter Approach. Lecture Notes in Mechanical Engineering, 2013, , 749-760.	0.4	1
133	ARCHITECTURE OF COOPERATION FOR MULTI-ROBOT SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 45-50.	0.4	0
134	Analysis of the Behavior of Moored Tankers. , 2008, , .		0
135	Anaesthesia Synchronization Software: Target Controlled Infusion system evaluation. , 2010, 2010, 6777-80.		0
136	Global Localisation Algorithm from a Multiple Hypotheses Set. , 2012, , .		0
137	Modular pick and place simulator using ROS framework. , 2015, , .		0
138	Special Issue Robótica 2014. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 80, 363-364.	3.4	0
139	Predictive model based architecture for energy biomass supply chains tactical decisions * *This work was supported by the FCT - Fundação para a Ciência e Tecnologia through the PhD Studentship SFRH/BD/98032/2013, program POPH - Programa Operacional Potencial Humano and FSE - Fundo Social Europeu.. IFAC-PapersOnline, 2017, 50, 7681-7686.	0.9	0
140	Model Predictive Control of a Conveyor-Based Drying Process Applied to Cork Stoppers. Lecture Notes in Electrical Engineering, 2017, , 617-627.	0.4	0
141	Collision Avoidance for Multi-robot Systems with Coincident Paths Based on Fictitious Collision Points Using Nonlinear Formulation. Advances in Intelligent Systems and Computing, 2018, , 60-71.	0.6	0
142	New Approach to Supervise Localization Algorithms. , 2019, , .		0
143	Low-Cost and Reduced-Size 3D-Cameras Metrological Evaluation Applied to Industrial Robotic Welding Operations. , 2021, , .		0
144	Indoor Localization System based on Artificial Landmarks and Monocular Vision. Telkomnika (Telecommunication Computing Electronics and Control), 2012, 10, .	0.8	0

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145	Robust and Fast Algorithm for Artificial Landmark Detection in an Industrial Environment. Journal of Automation and Control Engineering, 2013, 1, 156-159.	0.3	0
146	A Centralized Approach to the Coordination of Marine Robots. Lecture Notes in Electrical Engineering, 2015, , 567-576.	0.4	0
147	Detecting Motion Patterns in Dense Flow Fields: Euclidean Versus Polar Space. Lecture Notes in Computer Science, 2015, , 487-492.	1.3	0
148	A Comparison Procedure for IMUs Performance. Lecture Notes in Computer Science, 2019, , 331-344.	1.3	0
149	Autonomous Robot Navigation for Automotive Assembly Task: An Industry Use-Case. Advances in Intelligent Systems and Computing, 2020, , 645-656.	0.6	0
150	Human Detector Smart Sensor for Autonomous Disinfection Mobile Robot. Communications in Computer and Information Science, 2021, , 171-186.	0.5	0
151	Gerber File Parsing for Conversion to Bitmap Image – The VINCI7D Case Study. IEEE Access, 2022, 10, 69659-69679.	4.2	0