Jorge Pomares

List of Publications by Year
in descending order

70 papers	1,031 citations	566801 15 h-index	454577 30 g-index
71 all docs	71 docs citations	71 times ranked	896 citing authors

#	Article	IF	Citations
1	A nonlinear optimal control approach for underactuated power-line inspection robots. Robotica, 2022, 40, 1979-2009.	1.3	5
2	Direct visual servoing and interaction control for a two-arms on-orbit servicing spacecraft. Acta Astronautica, 2022, 192, 368-378.	1.7	4
3	Trajectory Optimization and Control of a Free-Floating Two-Arm Humanoid Robot. Journal of Guidance, Control, and Dynamics, 2022, 45, 1661-1675.	1.6	2
4	ARMIA: A Sensorized Arm Wearable for Motor Rehabilitation. Biosensors, 2022, 12, 469.	2.3	7
5	Nonlinear Optimal Control for the Wheeled Inverted Pendulum System. Robotica, 2020, 38, 29-47.	1.3	21
6	Nonlinear optimal control for the 3-DOF laboratory helicopter. , 2020, , .		3
7	A nonlinear optimal control method for the ballbot autonomous vehicle. , 2020, , .		0
8	Nonlinear Optimal Control for Underactuated Offshore Cranes. , 2020, , .		1
9	Image-Based Visual Servoing Control for Spacecraft Formation Flying. , 2020, , .		2
10	A Nonlinear Optimal Control Approach for a Lower-Limb Robotic Exoskeleton. International Journal of Humanoid Robotics, 2020, 17, 2050018.	0.6	6
11	Nonâ€linear optimal control for multiâ€DOF electroâ€hydraulic robotic manipulators. IET Cyber-Systems and Robotics, 2020, 2, 96-106.	1.1	8
12	Geometrically Finding Best Grasping Points on Single Novel 3D Point Cloud. Lecture Notes in Electrical Engineering, 2020, , 497-512.	0.3	0
13	Optimal Image-Based Guidance of Mobile Manipulators using Direct Visual Servoing. Electronics (Switzerland), 2019, 8, 374.	1.8	10
14	Fast geometry-based computation of grasping points on three-dimensional point clouds. International Journal of Advanced Robotic Systems, 2019, 16, 172988141983184.	1.3	30
15	Visual Servoing in Robotics. Electronics (Switzerland), 2019, 8, 1298.	1.8	5
16	Evaluation of Optimal Vibrotactile Feedback for Force-Controlled Upper Limb Myoelectric Prostheses. Sensors, 2019, 19, 5209.	2.1	3
17	Nonlinear optimal control for a spherical rolling robot. International Journal of Intelligent Robotics and Applications, 2019, 3, 221-237.	1.6	8
18	DEVELOPMENT OF HYBRID LABORATORIES OF INDUSTRIAL SYSTEMS FOR INTERACTIVE LEARNING OF AUTOMATION AND CONTROL. , 2019, , .		1

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19	Concurrent image-based visual servoing with adaptive zooming for non-cooperative rendezvous maneuvers. Advances in Space Research, 2018, 61, 862-878.	1.2	11
20	A nonlinear optimal control approach for the spherical robot. , 2018, , .		1
21	Spacecraft visual servoing with adaptive zooming for non-cooperative rendezvous. , 2018, , .		2
22	Using Geometry to Detect Grasping Points on 3D Unknown Point Cloud. , 2017, , .		14
23	FPGA-based visual control system using dynamic perceptibility. Robotics and Computer-Integrated Manufacturing, 2016, 41, 13-22.	6.1	12
24	Bibliometric indicators in the study of Asperger syndrome between 1990 and 2014. Scientometrics, 2016, 109, 377-388.	1.6	10
25	Design and application of an immersive virtual reality system to enhance emotional skills for children with autism spectrum disorders. Computers and Education, 2016, 98, 192-205.	5.1	148
26	Image-based control of satellite-mounted robot manipulators. , 2016, , .		0
27	FPGA-based architecture for direct visual control robotic systems. Mechatronics, 2016, 39, 204-216.	2.0	19
28	Direct image-based visual servoing of free-floating space manipulators. Aerospace Science and Technology, 2016, 55, 1-9.	2.5	35
29	FPGA-based visual control of robot manipulators using dynamic perceptibility. , 2015, , .		0
30	FPGA-based framework for dynamic visual servoing of robot manipulators. , 2015, , .		1
31	Experiences on using Arduino for laboratory experiments of Automatic Control and Robotics. IFAC-PapersOnLine, 2015, 48, 105-110.	0.5	52
32	Direct visual servoing framework based on optimal control for redundant joint structures. International Journal of Precision Engineering and Manufacturing, 2015, 16, 267-274.	1.1	7
33	Control of Redundant Joint Structures Using Image Information During the Tracking of Non-Smooth Trajectories. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 78, 33-46.	2.0	1
34	Optimal control for robot-hand manipulation of an object using dynamic visual servoing. , 2014, , .		5
35	Control Framework for Dexterous Manipulation Using Dynamic Visual Servoing and Tactile Sensorsâ€™ Feedback. Sensors, 2014, 14, 1787-1804.	2.1	45
36	A Survey on FPGA-Based Sensor Systems: Towards Intelligent and Reconfigurable Low-Power Sensors for Computer Vision, Control and Signal Processing. Sensors, 2014, 14, 6247-6278.	2.1	71

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37	Dynamic Visual Servoing With Chaos Control for Redundant Robots. IEEE/ASME Transactions on Mechatronics, 2014, 19, 423-431.	3.7	15
38	Event-Based Visual Servoing with Featuresâ€™ Prediction. Advances in Intelligent Systems and Computing, 2014, , 679-691.	0.5	1
39	Java software platform for the development of advanced robotic virtual laboratories. Computer Applications in Engineering Education, 2013, 21, E14.	2.2	19
40	Direct visual servoing of a redundant robot with chaos compensation. , 2013, , .		0
41	Inclusion of immersive virtual learning environments and visual control systems to support the learning of students with Asperger syndrome. Computers and Education, 2013, 62, 88-101.	5.1	74
42	Dynamic visual servo control of a 4-axis joint tool to track image trajectories during machining complex shapes. Robotics and Computer-Integrated Manufacturing, 2013, 29, 261-270.	6.1	6
43	Web-Based Monitoring and Control of Industrial Processes Used for Control Education. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 162-167.	0.4	8
44	Visual control of a multi-robot coupled system: Application to collision avoidance in human-robot interaction. , 2011, , .		1
45	Direct Visual Servoing to Track Trajectories in Human-Robot Cooperation. International Journal of Advanced Robotic Systems, 2011, 8, 44.	1.3	7
46	A Multi-Sensorial Hybrid Control for Robotic Manipulation in Human-Robot Workspaces. Sensors, 2011, 11, 9839-9862.	2.1	9
47	Practical experiences using RobUALab.ejs: a virtual and remote laboratory for Robotics e-learning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 42, 1-6.	0.4	3
48	Visual Control of Robots Using Range Images. Sensors, 2010, 10, 7303-7322.	2.1	8
49	Analysis and Adaptation of Integration Time in PMD Camera for Visual Servoing. , 2010, , .		8
50	Direct visual servo control of a robot to track trajectories in supervision tasks. , 2010, , .		4
51	Survey of Visual and Force/Tactile Control of Robots for Physical Interaction in Spain. Sensors, 2009, 9, 9689-9733.	2.1	18
52	A cooperative robotic system based on multiple sensors to construct metallic structures. International Journal of Advanced Manufacturing Technology, 2009, 45, 616-630.	1.5	6
53	Automatic robotic tasks in unstructured environments using an image path tracker. Control Engineering Practice, 2009, 17, 597-608.	3.2	15
54	Visual servoing path tracking for safe human-robot interaction. , 2009, , .		4

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55	Improving detection of surface discontinuities in visualâ€“force control systems. Image and Vision Computing, 2008, 26, 1435-1447.	2.7	6
56	Image Motion Estimator to Track Trajectories Specified With Respect to Moving Objects. , 2008, , 207-217.		0
57	A new time-independent image path tracker to guide robots using visual servoing. , 2007, , .		4
58	Flexible multi-sensorial system for automatic disassembly using cooperative robots. International Journal of Computer Integrated Manufacturing, 2007, 20, 757-772.	2.9	58
59	Adaptive Visual Servoing by Simultaneous Camera Calibration. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	14
60	A Robust Approach to Control Robot Manipulators by Fusing Visual and Force Information. Journal of Intelligent and Robotic Systems: Theory and Applications, 2007, 48, 437-456.	2.0	14
61	An Uncalibrated Approach to Track Trajectories using Visualâ€“Force Control. , 2007, , 103-108.		0
62	Multi-Sensorial System for the Generation of Disassembly Trajectories. , 2006, , .		1
63	Visual - Force Control and Structured Light Fusion to Improve Recognition of Discontinuities in Surfaces. , 2006, , .		2
64	Movement-Flow-Based Visual Servoing and Force Control Fusion for Manipulation Tasks in Unstructured Environments. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2005, 35, 4-15.	3.3	27
65	Movement Flow-Based Visual Servoing for Tracking Trajectories with Occlusions. IEEE Latin America Transactions, 2004, 2, 142-148.	1.2	0
66	Virtual disassembly of products based on geometric models. Computers in Industry, 2004, 55, 1-14.	5.7	57
67	Automatic PC disassembly for component recovery. International Journal of Advanced Manufacturing Technology, 2004, 23, 39-46.	1.5	84
68	<title>Disassembly movements for geometrical objects through heuristic methods</title>. , 2002, 4569, 71.		6
69	Time Independent Tracking Using 2-D Movement Flow-Based Visual Servoing. , 0, , .		1
70	New Educational Challenges and Innovations: Students with Disability in Immersive Learning Environments. , 0, , .		0