Oscar Reinoso

List of Publications by Year
in descending order

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159	1,887	331538	315616
papers	citations	21	38
		h-index	g-index

167	167	167	1375
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Development and use of a convolutional neural network for hierarchical appearance-based localization. Artificial Intelligence Review, 2022, 55, 2847-2874.	9.7	5
2	Efficient probability-oriented feature matching using wide field-of-view imaging. Engineering Applications of Artificial Intelligence, 2022, 107, 104539.	4.3	3
3	A Localization Approach Based on Omnidirectional Vision and Deep Learning. Lecture Notes in Electrical Engineering, 2022, , 226-246.	0.3	1
4	Evaluating the Robustness of New Holistic Description Methods in Position Estimation of Mobile Robots. Lecture Notes in Electrical Engineering, 2022, , 207-225.	0.3	0
5	Design of a mobile binary parallel robot that exploits nonsingular transitions. Mechanism and Machine Theory, 2022, 171, 104733.	2.7	2
6	Training, Optimization and Validation of a CNN for Room Retrieval and Description of Omnidirectional Images. SN Computer Science, 2022, 3, 1.	2.3	3
7	Generation and Quality Evaluation of a 360-degree View from Dual Fisheye Images. , 2022, , .		0
8	A state-of-the-art review on mobile robotics tasks using artificial intelligence and visual data. Expert Systems With Applications, 2021, 167, 114195.	4.4	65
9	A Robust CNN Training Approach to Address Hierarchical Localization with Omnidirectional Images. , 2021, , .		1
10	The Role of Global Appearance of Omnidirectional Images in Relative Distance and Orientation Retrieval. Sensors, 2021, 21, 3327.	2.1	3
11	A CNN Regression Approach to Mobile Robot Localization Using Omnidirectional Images. Applied Sciences (Switzerland), 2021, 11, 7521.	1.3	8
12	Evaluating the Influence of Feature Matching on the Performance of Visual Localization with Fisheye Images. , 2021, , .		1
13	A Robust CNN Training Approach to Address Hierarchical Localization with Omnidirectional Images. , 2021, , .		1
14	Creating Incremental Models of Indoor Environments through Omnidirectional Imaging. Applied Sciences (Switzerland), 2020, 10, 6480.	1.3	5
15	Holistic Descriptors of Omnidirectional Color Images and Their Performance in Estimation of Position and Orientation. IEEE Access, 2020, 8, 81822-81848.	2.6	6
16	A Novel Method to Estimate the Position of a Mobile Robot in Underfloor Environments Using RGB-D Point Clouds. IEEE Access, 2020, 8, 9084-9101.	2.6	3
17	Special Issue on Mobile Robots Navigation. Applied Sciences (Switzerland), 2020, 10, 1317.	1.3	10
18	Special Issue on Visual Sensors. Sensors, 2020, 20, 910.	2.1	9

#	Article	IF	Citations
19	A Deep Learning Tool to Solve Localization in Mobile Autonomous Robotics. , 2020, , .		5
20	Environment Virtualization for Visual Localization and Mapping. Advances in Intelligent Systems and Computing, 2020, , 209-221.	0.5	1
21	Performance of New Global Appearance Description Methods in Localization ofÂMobile Robots. Advances in Intelligent Systems and Computing, 2020, , 351-363.	0.5	0
22	Solution of the Forward Kinematic Problem of 3UPS-PU Parallel Manipulators based on Constraint Curves. , 2020, , .		1
23	An Evaluation of New Global Appearance Descriptor Techniques for Visual Localization in Mobile Robots under Changing Lighting Conditions. , 2020, , .		1
24	Dynamic Catadioptric Sensory Data Fusion for Visual Localization in Mobile Robotics. Proceedings (mdpi), 2019, 15, .	0.2	1
25	Hierarchical Localization in Topological Models Under Varying Illumination Using Holistic Visual Descriptors. IEEE Access, 2019, 7, 49580-49595.	2.6	11
26	Simulation Tool for Analyzing the Kinetostatic Effects of Singularities in Parallel Robots. , 2019, , .		1
27	Trajectory Analysis for the MASAR: A New Modular and Single-Actuator Robot. Robotics, 2019, 8, 78.	2.1	4
28	Analysing Studentsâ€™ Achievement in the Learning of Electronics Supported by ICT Resources. Electronics (Switzerland), 2019, 8, 264.	1.8	7
29	Evaluation of Clustering Methods in Compression of Topological Models and Visual Place Recognition Using Global Appearance Descriptors. Applied Sciences (Switzerland), 2019, 9, 377.	1.3	14
30	Design of compact switchable magnetic grippers for the HyReCRo structure-climbing robot. Mechatronics, 2019, 59, 199-212.	2.0	35
31	Relative Altitude Estimation Using Omnidirectional Imaging and Holistic Descriptors. Remote Sensing, 2019, 11, 323.	1.8	10
32	Deployment of a Software to Simulate Control Systems in the State-Space. Electronics (Switzerland), 2019, 8, 1205.	1.8	5
33	An Evaluation between Global Appearance Descriptors based on Analytic Methods and Deep Learning Techniques for Localization in Autonomous Mobile Robots. , 2019, , .		2
34	Parallelisms Between Planar and Spatial Tricept-Like Parallel Robots. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2019, , 155-162.	0.3	2
35	Active Learning Program Supported by Online Simulation Applet in Engineering Education. , 2019, , .		5
36	Using Global Appearance Descriptors to Solve Topological Visual SLAM. Advances in Computer and Electrical Engineering Book Series, 2019, , 1127-1140.	0.2	0

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37	Mapping and localization module in a mobile robot for insulating building crawl spaces. Automation in Construction, 2018, 87, 248-262.	4.8	13
38	Trajectory estimation and optimization through loop closure detection, using omnidirectional imaging and global-appearance descriptors. Expert Systems With Applications, 2018, 102, 273-290.	4.4	9
39	A Simulation Tool for Visualizing the Assembly Modes and Singularity Locus of 3RPR Planar Parallel Robots. Advances in Intelligent Systems and Computing, 2018, , 516-528.	0.5	0
40	m-PaRoLa: a Mobile Virtual Laboratory for Studying the Kinematics of Five-bar and 3RRR Planar Parallel Robots âŽ âŽWork supported by the Spanish Ministries of Education (grant No. FPU13/00413) and Economy (project No. DPI 2016-78361-R).. IFAC-PapersOnLine, 2018, 51, 178-183.	0.5	4
41	Visual Information Fusion through Bayesian Inference for Adaptive Probability-Oriented Feature Matching. Sensors, 2018, 18, 2041.	2.1	24
42	Modeling Environments Hierarchically with Omnidirectional Imaging and Global-Appearance Descriptors. Remote Sensing, 2018, 10, 522.	1.8	14
43	A method based on the vanishing of self-motion manifolds to determine the collision-free workspace of redundant robots. Mechanism and Machine Theory, 2018, 128, 84-109.	2.7	10
44	Movement Direction Estimation Using Omnidirectional Images in a SLAM Algorithm. Advances in Intelligent Systems and Computing, 2018, , 640-651.	0.5	0
45	Fusing Omnidirectional Visual Data forÂProbability Matching Prediction. Lecture Notes in Computer Science, 2018, , 571-583.	1.0	0
46	Evaluating the Robustness of Global Appearance Descriptors in a Visual Localization Task, under Changing Lighting Conditions. , 2018, , .		2
47	Using Global Appearance Descriptors to Solve Topological Visual SLAM. , 2018, , 6894-6905.		1
48	A MULTI-PERSPECTIVE SIMULATOR FOR VISUALIZING AND ANALYZING THE KINEMATICS AND SINGULARITIES OF 2UPS/U PARALLEL MECHANISMS. INTED Proceedings, 2018, , .	0.0	0
49	DEVELOPMENT OF A PLATFORM TO SIMULATE VIRTUAL ENVIRONMENTS FOR ROBOT LOCALIZATION. , 2018, , .		3
50	On the Stability of the Quadruple Solutions of the Forward Kinematic Problem in Analytic Parallel Robots. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 86, 381-396.	2.0	1
51	An improved Monte Carlo method based on Gaussian growth to calculate the workspace of robots. Engineering Applications of Artificial Intelligence, 2017, 64, 197-207.	4.3	54
52	Compression of topological models and localization using the global appearance of visual information. , 2017, , .		2
53	Improved Omnidirectional Odometry for a View-Based Mapping Approach. Sensors, 2017, 17, 325.	2.1	20
54	Development of Height Indicators using Omnidirectional Images and Global Appearance Descriptors. Applied Sciences (Switzerland), 2017, 7, 482.	1.3	1

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55	Robust Visual Localization with Dynamic Uncertainty Management in Omnidirectional SLAM. Applied Sciences (Switzerland), 2017, 7, 1294.	1.3	22
56	A State-of-the-Art Review on Mapping and Localization of Mobile Robots Using Omnidirectional Vision Sensors. Journal of Sensors, 2017, 2017, 1-20.	0.6	31
57	Estimating the position and orientation of a mobile robot with respect to a trajectory using omnidirectional imaging and global appearance. PLoS ONE, 2017, 12, e0175938.	1.1	8
58	Second-order Taylor Stability Analysis of Isolated Kinematic Singularities of Closed-chain Mechanisms. , 2017, , .		1
59	SLAM Algorithm by using Global Appearance of Omnidirectional Images. , 2017, , .		0
60	A Study of Visual Descriptors for Outdoor Navigation Using Google Street View Images. Journal of Sensors, 2016, 2016, 1-12.	0.6	2
61	Using Omnidirectional Vision to Create a Model of the Environment: A Comparative Evaluation of Global-Appearance Descriptors. Journal of Sensors, 2016, 2016, 1-21.	0.6	21
62	A Simulation Tool to Study the Kinematics and Control of 2RPR-PR Parallel Robots. IFAC-PapersOnLine, 2016, 49, 268-273.	0.5	5
63	Development of a graphical interface to simulate control systems using modern control techniques. , 2016, , .		1
64	A Web-based Tool to Analyze the Kinematics and Singularities of Parallel Robots. Journal of Intelligent and Robotic Systems: Theory and Applications, 2016, 81, 145-163.	2.0	10
65	Monte-Carlo Workspace Calculation of a Serial-Parallel Biped Robot. Advances in Intelligent Systems and Computing, 2016, , 157-169.	0.5	5
66	A study of traffic accidents in Spanish intercity roads by means of feature vectors. International Journal of Design and Nature and Ecodynamics, 2016, 11, 317-327.	0.3	1
67	Nearest Position Estimation Using Omnidirectional Images and Global Appearance Descriptors. Advances in Intelligent Systems and Computing, 2016, , 517-529.	0.5	1
68	Calculation of the Boundaries and Barriers of the Workspace of a Redundant Serial-parallel Robot using the Inverse Kinematics. , 2016, , .		1
69	Generation of Data Sets Simulating Different Kinds of Cameras in Virtual Environments. , 2016, , .		0
70	Kinematics, Simulation, and Analysis of the Planar and Symmetric Postures of a Serial-Parallel Climbing Robot. Lecture Notes in Electrical Engineering, 2016, , 115-135.	0.3	0
71	Inverse Kinematic Analysis of a Redundant Hybrid Climbing Robot. International Journal of Advanced Robotic Systems, 2015, 12, 163.	1.3	7
72	MRXT: The Multi-Robot Exploration Tool. International Journal of Advanced Robotic Systems, 2015, 12, 29.	1.3	2

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73	Position Estimation and Local Mapping Using Omnidirectional Images and Global Appearance Descriptors. Sensors, 2015, 15, 26368-26395.	2.1	20
74	Performing Nonsingular Transitions Between Assembly Modes in Analytic Parallel Manipulators by Enclosing Quadruple Solutions. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, .	1.7	11
75	A Virtual Laboratory to Simulate the Control of Parallel Robots. IFAC-PapersOnLine, 2015, 48, 19-24.	0.5	9
76	Development and deployment of a new robotics toolbox for education. Computer Applications in Engineering Education, 2015, 23, 443-454.	2.2	35
77	Occupancy grid based graph-SLAM using the distance transform, SURF features and SGD. Engineering Applications of Artificial Intelligence, 2015, 40, 1-10.	4.3	11
78	Information-based view initialization in visual SLAM with a single omnidirectional camera. Robotics and Autonomous Systems, 2015, 72, 93-104.	3.0	10
79	Kinematic Analysis and Simulation of a Hybrid Biped Climbing Robot. , 2015, , .		1
80	Relative Height Estimation using Omnidirectional Images and a Global Appearance Approach. , 2015, , .		0
81	A Comparison of Appearance-Based Descriptors in a Visual SLAM Approach. , 2015, , 3187-3196.		0
82	Global Appearance Applied to Visual Map Building and Path Estimation Using Multiscale Analysis. Mathematical Problems in Engineering, 2014, 2014, 1-23.	0.6	1
83	Performance of Global-Appearance Descriptors in Map Building and Localization Using Omnidirectional Vision. Sensors, 2014, 14, 3033-3064.	2.1	32
84	Appearanceâ€based approach to hybrid metricâ€topological simultaneous localisation and mapping. IET Intelligent Transport Systems, 2014, 8, 688-699.	1.7	5
85	A comparison of EKF and SGD applied to a view-based SLAM approach with omnidirectional images. Robotics and Autonomous Systems, 2014, 62, 108-119.	3.0	21
86	Implementation and Assessment of a Virtual Laboratory of Parallel Robots Developed for Engineering Students. IEEE Transactions on Education, 2014, 57, 92-98.	2.0	13
87	A modified stochastic gradient descent algorithm for view-based SLAM using omnidirectional images. Information Sciences, 2014, 279, 326-337.	4.0	13
88	Visual Odometry using the Global-appearance of Omnidirectional Images. , 2014, , .		0
89	Visual Hybrid SLAM: An Appearance-Based Approach to Loop Closure. Advances in Intelligent Systems and Computing, 2014, , 693-701.	0.5	3
90	Modeling and Simulation of 5 and 11 DOF Ball Bearing System with Localized Defect. Journal of Testing and Evaluation, 2014, 42, 20120345.	0.4	6

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91	Topological Height Estimation Using Global Appearance of Images. Advances in Intelligent Systems and Computing, 2014, , 77-89.	0.5	0
92	An educational software to develop robot mapping and localization practices using visual information. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 174-179.	0.4	0
93	Low-cost platforms used in Control Education: An educational case study. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 256-261.	0.4	21
94	TEAM ASPAR Uses Binary Optimization to Obtain Optimal Gearbox Ratios in Motorcycle Racing. Interfaces, 2012, 42, 191-198.	1.6	2
95	A comparison of path planning strategies for autonomous exploration and mapping of unknown environments. Autonomous Robots, 2012, 33, 427-444.	3.2	167
96	Searching Dynamic Agents with a Team of Mobile Robots. Sensors, 2012, 12, 8815-8831.	2.1	3
97	Development of a Web-Based Educational Platform to Interact with Remote Mobile Robots. , 2011, , 46-65.		0
98	An educational tool for mobile robots remote interaction. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 42, 180-185.	0.4	4
99	A comparative evaluation of interest point detectors and local descriptors for visual SLAM. Machine Vision and Applications, 2010, 21, 905-920.	1.7	143
100	Disassembly planning strategies for automatic material removal. International Journal of Advanced Manufacturing Technology, 2010, 46, 339-350.	1.5	5
101	Multi-robot visual SLAM using a Rao-Blackwellized particle filter. Robotics and Autonomous Systems, 2010, 58, 68-80.	3.0	92
102	Remote control laboratory via Internet using Matlab and Simulink. Computer Applications in Engineering Education, 2010, 18, 694-702.	2.2	25
103	A hybrid solution to the multi-robot integrated exploration problem. Engineering Applications of Artificial Intelligence, 2010, 23, 473-486.	4.3	27
104	Map Building and Monte Carlo Localization Using Global Appearance of Omnidirectional Images. Sensors, 2010, 10, 11468-11497.	2.1	32
105	Estimation of Visual Maps with a Robot Network Equipped with Vision Sensors. Sensors, 2010, 10, 5209-5232.	2.1	22
106	Comparison of mapping techniques in appearance-based topological maps creation. , 2010, , .		0
107	Docencia en AutomÃ¡tica: AplicaciÃ³n de las TIC a la realizaciÃ³n de actividades prÃ¡cticas a travÃ©s de Internet a la realizaciÃ³n de actividades prÃ¡cticas a travÃ©s de Internet. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2010, 7, 35-45.	0.6	2
108	FusiÃ³n Borrosa de Estimadores para Aplicaciones de Control Basado en Imagen. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2010, 7, 81-90.	0.6	0

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109	Real-time collaboration of virtual laboratories through the Internet. Computers and Education, 2009, 52, 126-140.	5.1	96
110	Analysis of Map Alignment techniques in visual SLAM systems. , 2008, , .		5
111	Assessing the influence in the parameters of a Rao-Blackwellised particle filter to solve the SLAM problem. IEEE Latin America Transactions, 2008, 6, 18-27.	1.2	2
112	Mechanisms for collaborative teleoperation with a team of cooperative robots. Industrial Robot, 2008, 35, 27-36.	1.2	7
113	Improving Appearance-Based Following Routes with a Probabilistic Approach. , 2008, , .		0
114	Multi-robot Route Following Using Omnidirectional Vision and Appearance-Based Representation of the Environment. Lecture Notes in Computer Science, 2008, , 680-687.	1.0	2
115	Remote Control Laboratory Using Matlab and Simulink. , 2007, , .		13
116	Subspace Reduction for Appearance-Based Navigation of a Mobile Robot. , 2007, , .		0
117	User Voice Assistance Tool for Teleoperation. , 2007, , 107-120.		2
118	Object trajectory prediction application to visual servoing. , 2007, , .		2
119	Plataforma Distribuida para la RealizaciÃ³n de PrÃ¡cticas de RobÃ³tica MÃ³vil a travÃ©s de Internet. Informacion Tecnologica (discontinued), 2007, 18, .	0.1	3
120	Appearance-Based Multi-robot Following Routes Using Incremental PCA. Lecture Notes in Computer Science, 2007, , 1170-1178.	1.0	4
121	Interest Point Detectors for Visual SLAM. Lecture Notes in Computer Science, 2007, , 170-179.	1.0	23
122	Using Parallel Platforms as Climbing Robots. , 2006, , .		3
123	DISTRIBUTED PLATFORM FOR THE CONTROL OF THE WIFIBOT ROBOT THROUGH INTERNET. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 59-64.	0.4	3
124	Part grasping for automated disassembly. International Journal of Advanced Manufacturing Technology, 2006, 30, 540-553.	1.5	8
125	Detection of partial occlusions of assembled components to simplify the disassembly tasks. International Journal of Advanced Manufacturing Technology, 2006, 30, 530-539.	1.5	11
126	A climbing parallel robot: a robot to climb along tubular and metallic structures. IEEE Robotics and Automation Magazine, 2006, 13, 16-22.	2.2	66

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127	Improving Data Association in Vision-based SLAM. , 2006, , .		32
128	PERFORMANCE ANALYSIS OF A CONTINUOUS VISION-BASED CONTROL SYSTEM FOR THE NAVIGATION OF A MOBILE ROBOT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 7-12.	0.4	0
129	Dynamic virtual environment to test teleoperated systems with time delay communications. Journal of Field Robotics, 2005, 22, 167-181.	0.7	8
130	Climbing parallel robot: a computational and experimental study of its performance around structural nodes. , 2005, 21, 1056-1066.		29
131	Improving the Readability of Decision Trees Using Reduced Complexity Feature Extraction. Lecture Notes in Computer Science, 2005, , 442-444.	1.0	0
132	3D Object Recognition from Appearance: PCA Versus ICA Approaches. Lecture Notes in Computer Science, 2004, , 547-555.	1.0	2
133	Analysis of a Climbing Parallel Robot for Construction Applications. Computer-Aided Civil and Infrastructure Engineering, 2004, 19, 436-445.	6.3	2
134	Control of Teleoperators with Communication Time Delay through State Convergence. Journal of Field Robotics, 2004, 21, 167-182.	0.7	29
135	Generalized control method by state convergence for teleoperation systems with time delay. Automatica, 2004, 40, 1575-1582.	3.0	100
136	Parallel robots for autonomous climbing along tubular structures. Robotics and Autonomous Systems, 2003, 42, 125-134.	3.0	52
137	Motion planning of a climbing parallel robot. IEEE Transactions on Automation Science and Engineering, 2003, 19, 485-489.	2.4	73
138	<title>Recognition and location of real objects using eigenimages and a neural network classifier</title>. , 2003, 5150, 385.		1
139	VISUAL SERVO CONTROL OF INDUSTRIAL ROBOT MANIPULATOR. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 485-490.	0.4	1
140	Automatic Adaptation of a Natural Language Interface to a Robotic System. Lecture Notes in Computer Science, 2002, , 714-723.	1.0	0
141	<title>Vergence control system for stereo depth recovery</title>. , 1999, , .		1
142	Parallel Climbing Robots for Construction, Inspection and Maintenance. , 1999, , .		3
143	Automated real-time visual inspection system for high-resolution superimposed printings. Image and Vision Computing, 1998, 16, 947-958.	2.7	16
144	<title>Job-shop scheduling applied to computer vision</title>. , 1997, , .		2

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145	<title>Reconstruction of step edges with subpixel accuracy in gray-level images</title>. , 1997, , .		1
146	Parallel processing and scheduling techniques applied to the quality control of bill sheets. , 0, , .		1
147	Dynamic analysis for a teleoperation system with time delay. , 0, , .		17
148	Robot hand tracking using adaptive fuzzy control. , 0, , .		0
149	Recognizing objects in non-controlled backgrounds by an appearance two-step approach. , 0, , .		0
150	Kinematic Redundancy in Robot Grasp Synthesis. An Efficient Tree-based Representation. , 0, , .		0
151	Parameters Selection and Stability Analysis of Invariant Visual Servoing with Weighted Features. , 0, , .		2
152	Kinematic Redundancy in Robot Grasp Synthesis. An Efficient Tree-based Representation. , 0, , .		1
153	Climbing with Parallel Robots. , 0, , .		0
154	Building Visual Maps with a Team of Mobile Robots. , 0, , .		2
155	Probabilistic Map Building, Localization and Navigation of a Team of Mobile Robots. Application to Route Following. , 0, , .		1
156	Design and Postures of a Serial Robot Composed by Closed-Loop Kinematics Chains. , 0, , .		0
157	Uso de tÃ©cnicas de machine learning para realizar mapping en robÃ³tica mÃ³vil. , 0, , .		0
158	Algoritmo de SLAM utilizando apariencia global de imÃ¡genes omnidireccionales. , 0, , .		0
159	EvaluaciÃ³n de descriptores de apariencia global en tareas de localizaciÃ³n bajo cambios de iluminaciÃ³n. , 0, , .		0