

Oscar Reinoso

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2905465/publications.pdf>

Version: 2024-02-01

159
papers

1,887
citations

331538

21
h-index

315616

38
g-index

167
all docs

167
docs citations

167
times ranked

1375
citing authors

#	ARTICLE	IF	CITATIONS
1	A comparison of path planning strategies for autonomous exploration and mapping of unknown environments. <i>Autonomous Robots</i> , 2012, 33, 427-444.	3.2	167
2	A comparative evaluation of interest point detectors and local descriptors for visual SLAM. <i>Machine Vision and Applications</i> , 2010, 21, 905-920.	1.7	143
3	Generalized control method by state convergence for teleoperation systems with time delay. <i>Automatica</i> , 2004, 40, 1575-1582.	3.0	100
4	Real-time collaboration of virtual laboratories through the Internet. <i>Computers and Education</i> , 2009, 52, 126-140.	5.1	96
5	Multi-robot visual SLAM using a Rao-Blackwellized particle filter. <i>Robotics and Autonomous Systems</i> , 2010, 58, 68-80.	3.0	92
6	Motion planning of a climbing parallel robot. <i>IEEE Transactions on Automation Science and Engineering</i> , 2003, 19, 485-489.	2.4	73
7	A climbing parallel robot: a robot to climb along tubular and metallic structures. <i>IEEE Robotics and Automation Magazine</i> , 2006, 13, 16-22.	2.2	66
8	A state-of-the-art review on mobile robotics tasks using artificial intelligence and visual data. <i>Expert Systems With Applications</i> , 2021, 167, 114195.	4.4	65
9	An improved Monte Carlo method based on Gaussian growth to calculate the workspace of robots. <i>Engineering Applications of Artificial Intelligence</i> , 2017, 64, 197-207.	4.3	54
10	Parallel robots for autonomous climbing along tubular structures. <i>Robotics and Autonomous Systems</i> , 2003, 42, 125-134.	3.0	52
11	Development and deployment of a new robotics toolbox for education. <i>Computer Applications in Engineering Education</i> , 2015, 23, 443-454.	2.2	35
12	Design of compact switchable magnetic grippers for the HyReCRo structure-climbing robot. <i>Mechatronics</i> , 2019, 59, 199-212.	2.0	35
13	Improving Data Association in Vision-based SLAM. , 2006, , .		32
14	Map Building and Monte Carlo Localization Using Global Appearance of Omnidirectional Images. <i>Sensors</i> , 2010, 10, 11468-11497.	2.1	32
15	Performance of Global-Appearance Descriptors in Map Building and Localization Using Omnidirectional Vision. <i>Sensors</i> , 2014, 14, 3033-3064.	2.1	32
16	A State-of-the-Art Review on Mapping and Localization of Mobile Robots Using Omnidirectional Vision Sensors. <i>Journal of Sensors</i> , 2017, 2017, 1-20.	0.6	31
17	Control of Teleoperators with Communication Time Delay through State Convergence. <i>Journal of Field Robotics</i> , 2004, 21, 167-182.	0.7	29
18	Climbing parallel robot: a computational and experimental study of its performance around structural nodes. , 2005, 21, 1056-1066.		29

#	ARTICLE	IF	CITATIONS
19	A hybrid solution to the multi-robot integrated exploration problem. <i>Engineering Applications of Artificial Intelligence</i> , 2010, 23, 473-486.	4.3	27
20	Remote control laboratory via Internet using Matlab and Simulink. <i>Computer Applications in Engineering Education</i> , 2010, 18, 694-702.	2.2	25
21	Visual Information Fusion through Bayesian Inference for Adaptive Probability-Oriented Feature Matching. <i>Sensors</i> , 2018, 18, 2041.	2.1	24
22	Interest Point Detectors for Visual SLAM. <i>Lecture Notes in Computer Science</i> , 2007, , 170-179.	1.0	23
23	Estimation of Visual Maps with a Robot Network Equipped with Vision Sensors. <i>Sensors</i> , 2010, 10, 5209-5232.	2.1	22
24	Robust Visual Localization with Dynamic Uncertainty Management in Omnidirectional SLAM. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 1294.	1.3	22
25	Low-cost platforms used in Control Education: An educational case study. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 256-261.	0.4	21
26	A comparison of EKF and SGD applied to a view-based SLAM approach with omnidirectional images. <i>Robotics and Autonomous Systems</i> , 2014, 62, 108-119.	3.0	21
27	Using Omnidirectional Vision to Create a Model of the Environment: A Comparative Evaluation of Global-Appearance Descriptors. <i>Journal of Sensors</i> , 2016, 2016, 1-21.	0.6	21
28	Position Estimation and Local Mapping Using Omnidirectional Images and Global Appearance Descriptors. <i>Sensors</i> , 2015, 15, 26368-26395.	2.1	20
29	Improved Omnidirectional Odometry for a View-Based Mapping Approach. <i>Sensors</i> , 2017, 17, 325.	2.1	20
30	Dynamic analysis for a teleoperation system with time delay. , 0, , .		17
31	Automated real-time visual inspection system for high-resolution superimposed printings. <i>Image and Vision Computing</i> , 1998, 16, 947-958.	2.7	16
32	Modeling Environments Hierarchically with Omnidirectional Imaging and Global-Appearance Descriptors. <i>Remote Sensing</i> , 2018, 10, 522.	1.8	14
33	Evaluation of Clustering Methods in Compression of Topological Models and Visual Place Recognition Using Global Appearance Descriptors. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 377.	1.3	14
34	Remote Control Laboratory Using Matlab and Simulink. , 2007, , .		13
35	Implementation and Assessment of a Virtual Laboratory of Parallel Robots Developed for Engineering Students. <i>IEEE Transactions on Education</i> , 2014, 57, 92-98.	2.0	13
36	A modified stochastic gradient descent algorithm for view-based SLAM using omnidirectional images. <i>Information Sciences</i> , 2014, 279, 326-337.	4.0	13

#	ARTICLE	IF	CITATIONS
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	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
39	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
40	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
41	Hierarchical Localization in Topological Models Under Varying Illumination Using Holistic Visual Descriptors. IEEE Access, 2019, 7, 49580-49595.	2.6	11
42	Information-based view initialization in visual SLAM with a single omnidirectional camera. Robotics and Autonomous Systems, 2015, 72, 93-104.	3.0	10
43	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
44	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
45	Relative Altitude Estimation Using Omnidirectional Imaging and Holistic Descriptors. Remote Sensing, 2019, 11, 323.	1.8	10
46	Special Issue on Mobile Robots Navigation. Applied Sciences (Switzerland), 2020, 10, 1317.	1.3	10
47	A Virtual Laboratory to Simulate the Control of Parallel Robots. IFAC-PapersOnLine, 2015, 48, 19-24.	0.5	9
48	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
49	Special Issue on Visual Sensors. Sensors, 2020, 20, 910.	2.1	9
50	Dynamic virtual environment to test teleoperated systems with time delay communications. Journal of Field Robotics, 2005, 22, 167-181.	0.7	8
51	Part grasping for automated disassembly. International Journal of Advanced Manufacturing Technology, 2006, 30, 540-553.	1.5	8
52	A CNN Regression Approach to Mobile Robot Localization Using Omnidirectional Images. Applied Sciences (Switzerland), 2021, 11, 7521.	1.3	8
53	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
54	Mechanisms for collaborative teleoperation with a team of cooperative robots. Industrial Robot, 2008, 35, 27-36.	1.2	7

#	ARTICLE	IF	CITATIONS
55	Inverse Kinematic Analysis of a Redundant Hybrid Climbing Robot. International Journal of Advanced Robotic Systems, 2015, 12, 163.	1.3	7
56	Analysing Studentsâ€™ Achievement in the Learning of Electronics Supported by ICT Resources. Electronics (Switzerland), 2019, 8, 264.	1.8	7
57	Holistic Descriptors of Omnidirectional Color Images and Their Performance in Estimation of Position and Orientation. IEEE Access, 2020, 8, 81822-81848.	2.6	6
58	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
59	Analysis of Map Alignment techniques in visual SLAM systems. , 2008, , .		5
60	Disassembly planning strategies for automatic material removal. International Journal of Advanced Manufacturing Technology, 2010, 46, 339-350.	1.5	5
61	Appearanceâ€based approach to hybrid metricâ€topological simultaneous localisation and mapping. IET Intelligent Transport Systems, 2014, 8, 688-699.	1.7	5
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	Deployment of a Software to Simulate Control Systems in the State-Space. Electronics (Switzerland), 2019, 8, 1205.	1.8	5
64	Creating Incremental Models of Indoor Environments through Omnidirectional Imaging. Applied Sciences (Switzerland), 2020, 10, 6480.	1.3	5
65	Development and use of a convolutional neural network for hierarchical appearance-based localization. Artificial Intelligence Review, 2022, 55, 2847-2874.	9.7	5
66	Monte-Carlo Workspace Calculation of a Serial-Parallel Biped Robot. Advances in Intelligent Systems and Computing, 2016, , 157-169.	0.5	5
67	A Deep Learning Tool to Solve Localization in Mobile Autonomous Robotics. , 2020, , .		5
68	Active Learning Program Supported by Online Simulation Applet in Engineering Education. , 2019, , .		5
69	An educational tool for mobile robots remote interaction. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 42, 180-185.	0.4	4
70	m-PaRoLa: a Mobile Virtual Laboratory for Studying the Kinematics of Five-bar and 3RRR Planar Parallel Robots â€ Work 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
71	Trajectory Analysis for the MASAR: A New Modular and Single-Actuator Robot. Robotics, 2019, 8, 78.	2.1	4
72	Appearance-Based Multi-robot Following Routes Using Incremental PCA. Lecture Notes in Computer Science, 2007, , 1170-1178.	1.0	4

#	ARTICLE	IF	CITATIONS
73	Using Parallel Platforms as Climbing Robots. , 2006, , .		3
74	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
75	Plataforma Distribuida para la Realizaci3n de Pr3cticas de Rob3tica M3vil a trav3s de Internet. Informacion Tecnologica (discontinued), 2007, 18, .	0.1	3
76	Searching Dynamic Agents with a Team of Mobile Robots. Sensors, 2012, 12, 8815-8831.	2.1	3
77	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
78	The Role of Global Appearance of Omnidirectional Images in Relative Distance and Orientation Retrieval. Sensors, 2021, 21, 3327.	2.1	3
79	Visual Hybrid SLAM: An Appearance-Based Approach to Loop Closure. Advances in Intelligent Systems and Computing, 2014, , 693-701.	0.5	3
80	Parallel Climbing Robots for Construction, Inspection and Maintenance. , 1999, , .		3
81	DEVELOPMENT OF A PLATFORM TO SIMULATE VIRTUAL ENVIRONMENTS FOR ROBOT LOCALIZATION. , 2018, , .		3
82	Efficient probability-oriented feature matching using wide field-of-view imaging. Engineering Applications of Artificial Intelligence, 2022, 107, 104539.	4.3	3
83	Training, Optimization and Validation of a CNN for Room Retrieval and Description of Omnidirectional Images. SN Computer Science, 2022, 3, 1.	2.3	3
84	<title>Job-shop scheduling applied to computer vision</title>. , 1997, , .		2
85	3D Object Recognition from Appearance: PCA Versus ICA Approaches. Lecture Notes in Computer Science, 2004, , 547-555.	1.0	2
86	Analysis of a Climbing Parallel Robot for Construction Applications. Computer-Aided Civil and Infrastructure Engineering, 2004, 19, 436-445.	6.3	2
87	Parameters Selection and Stability Analysis of Invariant Visual Servoing with Weighted Features. , 0, , .		2
88	User Voice Assistance Tool for Teleoperation. , 2007, , 107-120.		2
89	Object trajectory prediction application to visual servoing. , 2007, , .		2
90	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

#	ARTICLE	IF	CITATIONS
91	TEAM ASPAR Uses Binary Optimization to Obtain Optimal Gearbox Ratios in Motorcycle Racing. Interfaces, 2012, 42, 191-198.	1.6	2
92	MRXT: The Multi-Robot Exploration Tool. International Journal of Advanced Robotic Systems, 2015, 12, 29.	1.3	2
93	A Study of Visual Descriptors for Outdoor Navigation Using Google Street View Images. Journal of Sensors, 2016, 2016, 1-12.	0.6	2
94	Compression of topological models and localization using the global appearance of visual information. , 2017, , .		2
95	An Evaluation between Global Appearance Descriptors based on Analytic Methods and Deep Learning Techniques for Localization in Autonomous Mobile Robots. , 2019, , .		2
96	Building Visual Maps with a Team of Mobile Robots. , 0, , .		2
97	Docencia en Automática: Aplicación de las TIC a la realización de actividades prácticas a través de Internet a la realización de actividades prácticas a través de Internet. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2010, 7, 35-45.	0.6	2
98	Evaluating the Robustness of Global Appearance Descriptors in a Visual Localization Task, under Changing Lighting Conditions. , 2018, , .		2
99	Parallelisms Between Planar and Spatial Tricept-Like Parallel Robots. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2019, , 155-162.	0.3	2
100	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
101	Design of a mobile binary parallel robot that exploits nonsingular transitions. Mechanism and Machine Theory, 2022, 171, 104733.	2.7	2
102	Parallel processing and scheduling techniques applied to the quality control of bill sheets. , 0, , .		1
103	<title>Reconstruction of step edges with subpixel accuracy in gray-level images</title>. , 1997, , .		1
104	<title>Vergence control system for stereo depth recovery</title>. , 1999, , .		1
105	VISUAL SERVO CONTROL OF INDUSTRIAL ROBOT MANIPULATOR. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 485-490.	0.4	1
106	<title>Recognition and location of real objects using eigenimages and a neural network classifier</title>. , 2003, 5150, 385.		1
107	Kinematic Redundancy in Robot Grasp Synthesis. An Efficient Tree-based Representation. , 0, , .		1
108	Global Appearance Applied to Visual Map Building and Path Estimation Using Multiscale Analysis. Mathematical Problems in Engineering, 2014, 2014, 1-23.	0.6	1

#	ARTICLE	IF	CITATIONS
109	Development of a graphical interface to simulate control systems using modern control techniques. , 2016, , .		1
110	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
111	Development of Height Indicators using Omnidirectional Images and Global Appearance Descriptors. Applied Sciences (Switzerland), 2017, 7, 482.	1.3	1
112	Dynamic Catadioptric Sensory Data Fusion for Visual Localization in Mobile Robotics. Proceedings (mdpi), 2019, 15, .	0.2	1
113	Simulation Tool for Analyzing the Kinetostatic Effects of Singularities in Parallel Robots. , 2019, , .		1
114	A Robust CNN Training Approach to Address Hierarchical Localization with Omnidirectional Images. , 2021, , .		1
115	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
116	Kinematic Analysis and Simulation of a Hybrid Biped Climbing Robot. , 2015, , .		1
117	Second-order Taylor Stability Analysis of Isolated Kinematic Singularities of Closed-chain Mechanisms. , 2017, , .		1
118	Probabilistic Map Building, Localization and Navigation of a Team of Mobile Robots. Application to Route Following. , 0, , .		1
119	Nearest Position Estimation Using Omnidirectional Images and Global Appearance Descriptors. Advances in Intelligent Systems and Computing, 2016, , 517-529.	0.5	1
120	Calculation of the Boundaries and Barriers of the Workspace of a Redundant Serial-parallel Robot using the Inverse Kinematics. , 2016, , .		1
121	Using Global Appearance Descriptors to Solve Topological Visual SLAM. , 2018, , 6894-6905.		1
122	Environment Virtualization for Visual Localization and Mapping. Advances in Intelligent Systems and Computing, 2020, , 209-221.	0.5	1
123	Solution of the Forward Kinematic Problem of 3UPS-PU Parallel Manipulators based on Constraint Curves. , 2020, , .		1
124	An Evaluation of New Global Appearance Descriptor Techniques for Visual Localization in Mobile Robots under Changing Lighting Conditions. , 2020, , .		1
125	Evaluating the Influence of Feature Matching on the Performance of Visual Localization with Fisheye Images. , 2021, , .		1
126	A Robust CNN Training Approach to Address Hierarchical Localization with Omnidirectional Images. , 2021, , .		1

#	ARTICLE	IF	CITATIONS
127	A Localization Approach Based on Omnidirectional Vision and Deep Learning. Lecture Notes in Electrical Engineering, 2022, , 226-246.	0.3	1
128	Robot hand tracking using adaptive fuzzy control. , 0, , .		0
129	Recognizing objects in non-controlled backgrounds by an appearance two-step approach. , 0, , .		0
130	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
131	Kinematic Redundancy in Robot Grasp Synthesis. An Efficient Tree-based Representation. , 0, , .		0
132	Subspace Reduction for Appearance-Based Navigation of a Mobile Robot. , 2007, , .		0
133	Climbing with Parallel Robots. , 0, , .		0
134	Improving Appearance-Based Following Routes with a Probabilistic Approach. , 2008, , .		0
135	Comparison of mapping techniques in appearance-based topological maps creation. , 2010, , .		0
136	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
137	Visual Odometry using the Global-appearance of Omnidirectional Images. , 2014, , .		0
138	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
139	Automatic Adaptation of a Natural Language Interface to a Robotic System. Lecture Notes in Computer Science, 2002, , 714-723.	1.0	0
140	Improving the Readability of Decision Trees Using Reduced Complexity Feature Extraction. Lecture Notes in Computer Science, 2005, , 442-444.	1.0	0
141	Fusión 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
142	Development of a Web-Based Educational Platform to Interact with Remote Mobile Robots. , 2011, , 46-65.		0
143	Design and Postures of a Serial Robot Composed by Closed-Loop Kinematics Chains. , 0, , .		0
144	Topological Height Estimation Using Global Appearance of Images. Advances in Intelligent Systems and Computing, 2014, , 77-89.	0.5	0

#	ARTICLE	IF	CITATIONS
145	Relative Height Estimation using Omnidirectional Images and a Global Appearance Approach. , 2015, , .		0
146	A Comparison of Appearance-Based Descriptors in a Visual SLAM Approach. , 2015, , 3187-3196.		0
147	Generation of Data Sets Simulating Different Kinds of Cameras in Virtual Environments. , 2016, , .		0
148	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
149	SLAM Algorithm by using Global Appearance of Omnidirectional Images. , 2017, , .		0
150	Movement Direction Estimation Using Omnidirectional Images in a SLAM Algorithm. Advances in Intelligent Systems and Computing, 2018, , 640-651.	0.5	0
151	Fusing Omnidirectional Visual Data for Probability Matching Prediction. Lecture Notes in Computer Science, 2018, , 571-583.	1.0	0
152	A MULTI-PERSPECTIVE SIMULATOR FOR VISUALIZING AND ANALYZING THE KINEMATICS AND SINGULARITIES OF 2UPS/U PARALLEL MECHANISMS. INTED Proceedings, 2018, , .	0.0	0
153	Using Global Appearance Descriptors to Solve Topological Visual SLAM. Advances in Computer and Electrical Engineering Book Series, 2019, , 1127-1140.	0.2	0
154	Performance of New Global Appearance Description Methods in Localization of Mobile Robots. Advances in Intelligent Systems and Computing, 2020, , 351-363.	0.5	0
155	Uso de técnicas de machine learning para realizar mapping en robótica móvil. , 0, , .		0
156	Algoritmo de SLAM utilizando apariencia global de imágenes omnidireccionales. , 0, , .		0
157	Evaluación de descriptores de apariencia global en tareas de localización bajo cambios de iluminación. , 0, , .		0
158	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
159	Generation and Quality Evaluation of a 360-degree View from Dual Fisheye Images. , 2022, , .		0