

# Jordi PalacÀ-n

## List of Publications by Year in descending order

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76  
papers

2,869  
citations

236925

25  
h-index

175258

52  
g-index

79  
all docs

79  
docs citations

79  
times ranked

2473  
citing authors

#	ARTICLE	IF	CITATIONS
1	Classification of Two Volatiles Using an eNose Composed by an Array of 16 Single-Type Miniature Micro-Machined Metal-Oxide Gas Sensors. <i>Sensors</i> , 2022, 22, 1120.	3.8	10
2	Systematic Odometry Error Evaluation and Correction in a Human-Sized Three-Wheeled Omnidirectional Mobile Robot Using Flower-Shaped Calibration Trajectories. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 2606.	2.5	16
3	Assessing over Time Performance of an eNose Composed of 16 Single-Type MOX Gas Sensors Applied to Classify Two Volatiles. <i>Chemosensors</i> , 2022, 10, 118.	3.6	8
4	Enhancing the Sense of Attention from an Assistance Mobile Robot by Improving Eye-Gaze Contact from Its Iconic Face Displayed on a Flat Screen. <i>Sensors</i> , 2022, 22, 4282.	3.8	9
5	Overview of the Trajectories of an Omnidirectional Mobile Robot based on a Single Motion Command. , 2022, , .		1
6	Classification of Three Volatiles Using a Single-Type eNose with Detailed Class-Map Visualization. <i>Sensors</i> , 2022, 22, 5262.	3.8	4
7	Suboptimal Omnidirectional Wheel Design and Implementation. <i>Sensors</i> , 2021, 21, 865.	3.8	16
8	Improving the Angular Velocity Measured with a Low-Cost Magnetic Rotary Encoder Attached to a Brushed DC Motor by Compensating Magnet and Hall-Effect Sensor Misalignments. <i>Sensors</i> , 2021, 21, 4763.	3.8	11
9	Evaluation of the Path-Tracking Accuracy of a Three-Wheeled Omnidirectional Mobile Robot Designed as a Personal Assistant. <i>Sensors</i> , 2021, 21, 7216.	3.8	22
10	Implementation of a Compact Wearable Temperature, Pressure, Humidity and Gas Sensing Device. <i>Advances in Intelligent Systems and Computing</i> , 2020, , 825-830.	0.6	0
11	Mobile Robot Self-Localization with 2D Push-Broom LIDAR in a 2D Map. <i>Sensors</i> , 2020, 20, 2500.	3.8	24
12	Design and FDM/FFF Implementation of a Compact Omnidirectional Wheel for a Mobile Robot and Assessment of ABS and PLA Printing Materials. <i>Robotics</i> , 2020, 9, 43.	3.5	15
13	Extending the Application of an Assistant Personal Robot as a Walk-Helper Tool. <i>Robotics</i> , 2019, 8, 27.	3.5	21
14	Application of an Array of Metal-Oxide Semiconductor Gas Sensors in an Assistant Personal Robot for Early Gas Leak Detection. <i>Sensors</i> , 2019, 19, 1957.	3.8	51
15	Optical Mouse Sensor for Eye Blink Detection and Pupil Tracking: Application in a Low-Cost Eye-Controlled Pointing Device. <i>Journal of Sensors</i> , 2019, 2019, 1-19.	1.1	10
16	Measurement of Vibrations in Two Tower-Typed Assistant Personal Robot Implementations with and without a Passive Suspension System. <i>Sensors</i> , 2017, 17, 1122.	3.8	13
17	Automatic Supervision of Temperature, Humidity, and Luminance with an Assistant Personal Robot. <i>Journal of Sensors</i> , 2017, 2017, 1-7.	1.1	8
18	Chemical Source Localization Fusing Concentration Information in the Presence of Chemical Background Noise. <i>Sensors</i> , 2017, 17, 904.	3.8	9

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19	Preliminary Application of an Assistant Personal Robot as an Ambient Monitoring Tool. <i>Advances in Intelligent Systems and Computing</i> , 2017, , 25-31.	0.6	0
20	Experimental Characterization of the Twin-Eye Laser Mouse Sensor. <i>Journal of Sensors</i> , 2016, 2016, 1-8.	1.1	1
21	Assistant Personal Robot (APR): Conception and Application of a Tele-Operated Assisted Living Robot. <i>Sensors</i> , 2016, 16, 610.	3.8	40
22	Design, Implementation and Validation of the Three-Wheel Holonomic Motion System of the Assistant Personal Robot (APR). <i>Sensors</i> , 2016, 16, 1658.	3.8	36
23	Measuring Gas Concentration and Wind Intensity in a Turbulent Wind Tunnel with a Mobile Robot. <i>Journal of Sensors</i> , 2016, 2016, 1-8.	1.1	409
24	A Proposal to Combine Depth Information from LIDAR and RGB-D Sensors in an Assistant Personal Robot. <i>Advances in Intelligent Systems and Computing</i> , 2016, , 359-361.	0.6	0
25	A Proposal of a Multi-agent System Implementation for the Control of an Assistant Personal Robot. <i>Advances in Intelligent Systems and Computing</i> , 2016, , 171-179.	0.6	1
26	Vineyard Yield Estimation Based on the Analysis of High Resolution Images Obtained with Artificial Illumination at Night. <i>Sensors</i> , 2015, 15, 8284-8301.	3.8	56
27	Collision Avoidance System with Deceleration Control Applied to an Assistant Personal Robot. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 227-228.	0.6	1
28	Development of a High Mobility Assistant Personal Robot for Home Operation. <i>Advances in Intelligent Systems and Computing</i> , 2015, , 65-73.	0.6	4
29	A Proposal for Automatic Fruit Harvesting by Combining a Low Cost Stereovision Camera and a Robotic Arm. <i>Sensors</i> , 2014, 14, 11557-11579.	3.8	84
30	Ambient Intelligence Application Based on Environmental Measurements Performed with an Assistant Mobile Robot. <i>Sensors</i> , 2014, 14, 6045-6055.	3.8	20
31	Counting red grapes in vineyards by detecting specular spherical reflection peaks in RGB images obtained at night with artificial illumination. <i>Computers and Electronics in Agriculture</i> , 2014, 108, 105-111.	7.7	45
32	An image processing method for in-line nectarine variety verification based on the comparison of skin feature histogram vectors. <i>Computers and Electronics in Agriculture</i> , 2014, 102, 112-119.	7.7	18
33	A Combined Approach to the Problem of Opening a Door with an Assistant Mobile Robot. <i>Lecture Notes in Computer Science</i> , 2014, , 9-12.	1.3	1
34	Optimization of the virtual mouse HeadMouse to foster its classroom use by children with physical disabilities. <i>Advances in Distributed Computing and Artificial Intelligence Journal</i> , 2014, 2, 01-08.	1.5	5
35	A Mobile Robot Agent for Gas Leak Source Detection. <i>Advances in Intelligent Systems and Computing</i> , 2014, , 19-25.	0.6	7
36	Corridor Gas-Leak Localization Using a Mobile Robot with a Photo Ionization Detector Sensor. <i>Sensor Letters</i> , 2014, 12, 974-977.	0.4	1

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37	Implementation of a robust absolute virtual head mouse combining face detection, template matching and optical flow algorithms. <i>Telecommunication Systems</i> , 2013, 52, 1479-1489.	2.5	15
38	Leaf area index estimation in vineyards using a ground-based LiDAR scanner. <i>Precision Agriculture</i> , 2013, 14, 290-306.	6.0	103
39	Project-Based Learning Example: Controlling an Educational Robotic Arm With Computer Vision. <i>Revista Iberoamericana De Tecnologias Del Aprendizaje</i> , 2013, 8, 135-142.	0.9	25
40	Evaluation of the Color-Based Image Segmentation Capabilities of a Compact Mobile Robot Agent Based on Google Android Smartphone. <i>Advances in Intelligent Systems and Computing</i> , 2013, , 25-32.	0.6	1
41	Measuring Yarn Diameter Using Fast and Inexpensive Optical Sensors. <i>International Journal of Sensors, Wireless Communications and Control</i> , 2013, 2, 157-167.	0.7	0
42	An Embedded Real-Time Red Peach Detection System Based on an OV7670 Camera, ARM Cortex-M4 Processor and 3D Look-Up Tables. <i>Sensors</i> , 2012, 12, 14129-14143.	3.8	10
43	Definition of Linear Color Models in the RGB Vector Color Space to Detect Red Peaches in Orchard Images Taken under Natural Illumination. <i>Sensors</i> , 2012, 12, 7701-7718.	3.8	39
44	Two-Dimensional Radial Laser Scanning for Circular Marker Detection and External Mobile Robot Tracking. <i>Sensors</i> , 2012, 12, 16482-16497.	3.8	22
45	Design and Implementation of a Biomimetic Turtle Hydrofoil for an Autonomous Underwater Vehicle. <i>Sensors</i> , 2011, 11, 11168-11187.	3.8	17
46	Innovative LIDAR 3D Dynamic Measurement System to Estimate Fruit-Tree Leaf Area. <i>Sensors</i> , 2011, 11, 5769-5791.	3.8	86
47	Characterization of a Low-Cost Optical Flow Sensor When Using an External Laser as a Direct Illumination Source. <i>Sensors</i> , 2011, 11, 11856-11870.	3.8	11
48	Characterisation of the LMS200 Laser Beam under the Influence of Blockage Surfaces. Influence on 3D Scanning of Tree Orchards. <i>Sensors</i> , 2011, 11, 2751-2772.	3.8	44
49	Measuring Oscillating Walking Paths with a LIDAR. <i>Sensors</i> , 2011, 11, 5071-5086.	3.8	15
50	Development of a Virtual Humanoid Model Using the Denavit-Hartenberg Parameters as a Base for Visual Feedback Applications. <i>Lecture Notes in Electrical Engineering</i> , 2011, , 639-646.	0.4	0
51	Measuring yarn diameter using inexpensive optical sensors. <i>Procedia Engineering</i> , 2010, 5, 236-239.	1.2	14
52	Using the image acquisition capabilities of the optical mouse sensor to build an absolute rotary encoder. <i>Sensors and Actuators A: Physical</i> , 2010, 157, 161-167.	4.1	51
53	Modeling floor-cleaning coverage performances of some domestic mobile robots in a reduced scenario. <i>Robotics and Autonomous Systems</i> , 2010, 58, 37-45.	5.1	34
54	Bioinspired Electronic White Cane Implementation Based on a LIDAR, a Tri-Axial Accelerometer and a Tactile Belt. <i>Sensors</i> , 2010, 10, 11322-11339.	3.8	34

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55	Sensitivity of tree volume measurement to trajectory errors from a terrestrial LIDAR scanner. <i>Agricultural and Forest Meteorology</i> , 2010, 150, 1420-1427.	4.8	57
56	Using the Optical Mouse Sensor as a Two-Euro Counterfeit Coin Detector. <i>Sensors</i> , 2009, 9, 7083-7096.	3.8	28
57	Measuring Gait Using a Ground Laser Range Sensor. <i>Sensors</i> , 2009, 9, 9133-9146.	3.8	57
58	The optical mouse sensor as an incremental rotary encoder. <i>Sensors and Actuators A: Physical</i> , 2009, 155, 73-81.	4.1	36
59	A tractor-mounted scanning LIDAR for the non-destructive measurement of vegetative volume and surface area of tree-row plantations: A comparison with conventional destructive measurements. <i>Biosystems Engineering</i> , 2009, 102, 128-134.	4.3	158
60	Obtaining the three-dimensional structure of tree orchards from remote 2D terrestrial LIDAR scanning. <i>Agricultural and Forest Meteorology</i> , 2009, 149, 1505-1515.	4.8	222
61	Simple and Robust Implementation of a Relative Virtual Mouse Controlled by Head Movements. , 2008, , .		7
62	Difficulties on Tree Volume Measurement from a Ground Laser Scanner. , 2008, , .		4
63	Real-Time Tree-Foliage Surface Estimation Using a Ground Laser Scanner. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2007, 56, 1377-1383.	4.7	61
64	The optical mouse for indoor mobile robot odometry measurement. <i>Sensors and Actuators A: Physical</i> , 2006, 126, 141-147.	4.1	98
65	Center-pivot automatization for agrochemical use. <i>Computers and Electronics in Agriculture</i> , 2005, 49, 419-430.	7.7	4
66	A methodology to extract dynamic compact thermal models under time-varying boundary conditions: application to a thermopile based IR sensor. <i>Microsystem Technologies</i> , 2005, 12, 21-29.	2.0	6
67	Dynamic compact thermal models with multiple power sources: application to an ultrathin chip stacking technology. <i>IEEE Transactions on Advanced Packaging</i> , 2005, 28, 694-703.	1.6	14
68	Evolutionary algorithms for compact thermal modelling of microsystems: application to a micro-pyrotechnic actuator. <i>Journal of Micromechanics and Microengineering</i> , 2004, 14, 1074-1082.	2.6	16
69	Building a Mobile Robot for a Floor-Cleaning Operation in Domestic Environments. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2004, 53, 1418-1424.	4.7	73
70	Extraction of a Dynamic Multiport Compact Thermal Model for a Silicon Microthruster. <i>Journal of Microelectronics and Electronic Packaging</i> , 2004, 1, 30-38.	0.7	0
71	A 128Å–128 CMOS image sensor with analog memory for synchronous image capture. <i>IEEE Sensors Journal</i> , 2002, 2, 120-127.	4.7	16
72	Suboptimal filtering and nonlinear time scale transformation for the analysis of multiexponential decays. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2001, 50, 135-140.	4.7	5

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73	Improved multiexponential transient spectroscopy by iterative deconvolution. IEEE Transactions on Instrumentation and Measurement, 2001, 50, 774-780.	4.7	13
74	A time-domain method for the analysis of thermal impedance response preserving the convolution form. IEEE Transactions on Components and Packaging Technologies, 1999, 22, 238-244.	1.3	31
75	Successive elimination algorithm for motion estimation. IEEE Transactions on Image Processing, 1995, 4, 105-107.	9.8	437
76	Measuring Coverage Performances of a Floor Cleaning Mobile Robot Using a Vision System. , 0, , .		24