Ramiro VelÃ¡zquez

List of Publications by Year
in descending order

125 papers	1,368 citations	430442 18 h-index	454577 30 g-index
130 all docs	130 docs citations	130 times ranked	1206 citing authors

#	Article	IF	Citations
1	Wearable Assistive Devices for the Blind. Lecture Notes in Electrical Engineering, 2010, , 331-349.	0.3	142
2	An Outdoor Navigation System for Blind Pedestrians Using GPS and Tactile-Foot Feedback. Applied Sciences (Switzerland), 2018, 8, 578.	1.3	68
3	Tactile Rendering With Shape-Memory-Alloy Pin-Matrix. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 1051-1057.	2.4	52
4	Development of Sensors-Based Agri-Food Traceability System Remotely Managed by a Software Platform for Optimized Farm Management. Sensors, 2020, 20, 3632.	2.1	50
5	Geometry-Based Statistical Modeling of Non-WSSUS Mobile-to-Mobile Rayleigh Fading Channels. IEEE Transactions on Vehicular Technology, 2018, 67, 362-377.	3.9	46
6	Energy-Efficient Clustering Routing Protocol for Wireless Sensor Networks Based on Yellow Saddle Goatfish Algorithm. Mathematics, 2020, 8, 1515.	1.1	40
7	Wireless Sensor Network Energy Model and Its Use in the Optimization of Routing Protocols. Energies, 2020, 13, 728.	1.6	38
8	DC/AC conversion efficiency of grid-connected photovoltaic inverters in central Mexico. Solar Energy, 2016, 139, 650-665.	2.9	36
9	A low-cost highly-portable tactile display based on shape memory alloy micro-actuators. , 0, , .		35
10	A shoe-integrated tactile display for directional navigation. , 2009, , .		34
11	Towards a Cognitive Model of Human Mobility: An Investigation of Tactile Perception for use in Mobility Devices. Journal of Navigation, 2017, 70, 1-17.	1.0	33
12	An Overview of Wearable Piezoresistive and Inertial Sensors for Respiration Rate Monitoring. Electronics (Switzerland), 2021, 10, 2178.	1.8	33
13	A Multisensor Data Fusion Approach for Predicting Consumer Acceptance of Food Products. Foods, 2020, 9, 774.	1.9	32
14	A New Framework for Cognitive Mobility of Visually Impaired Users in Using Tactile Device. IEEE Transactions on Human-Machine Systems, 2017, 47, 1040-1051.	2.5	30
15	Smart Campus: An Experimental Performance Comparison of Collaborative and Cooperative Schemes for Wireless Sensor Network. Energies, 2019, 12, 3135.	1.6	28
16	A compact tactile display for the blind with shape memory alloys. , 0, , .		26
17	Development of a Self-Powered Piezo-Resistive Smart Insole Equipped with Low-Power BLE Connectivity for Remote Gait Monitoring. Sensors, 2021, 21, 4539.	2.1	26
18	Analysis of electrical mismatches in high-concentrator photovoltaic power plants with distributed inverter configurations. Energy, 2016, 107, 374-387.	4.5	24

#	Article	IF	Citations
19	Characterization of a Piezoelectric Ultrasonic Linear Motor for Braille Displays. , 2009, , .		23
20	A Portable Piezoelectric Tactile Terminal for Braille Readers. Applied Bionics and Biomechanics, 2012, 9, 45-60.	0.5	23
21	Solar-Powered Deep Learning-Based Recognition System of Daily Used Objects and Human Faces for Assistance of the Visually Impaired. Energies, 2020, 13, 6104.	1.6	22
22	Coding the Environment in Tactile Maps for Real-Time Guidance of the Visually Impaired. , 2006, , .		21
23	Miniature Shape Memory Alloy Actuator for Tactile Binary Information Display. , 0, , .		20
24	Insights into the Capabilities of Tactile-Foot Perception. International Journal of Advanced Robotic Systems, 2012, 9, 179.	1.3	18
25	Tactile-Foot Stimulation Can Assist the Navigation of People with Visual Impairment. Applied Bionics and Biomechanics, 2015, 2015, 1-9.	0.5	18
26	Making eBooks accessible to blind Braille readers. , 2008, , .		17
27	A portable eBook reader for the blind. , 2010, 2010, 2107-10.		17
28	Active and Passive Haptic Perception of Shape: Passive Haptics Can Support Navigation. Electronics (Switzerland), 2019, 8, 355.	1.8	17
29	Wearable devices and IoT applications for symptom detection, infection tracking, and diffusion containment of the COVID-19 pandemic: a survey. Frontiers of Information Technology and Electronic Engineering, 2021, 22, 1413-1442.	1.5	15
30	An Energy Model Using Sleeping Algorithms for Wireless Sensor Networks under Proactive and Reactive Protocols: A Performance Evaluation. Energies, 2020, 13, 3024.	1.6	14
31	Haptic Rendering of Virtual Shapes with the Novint Falcon. Procedia Technology, 2012, 3, 132-138.	1.1	13
32	Preliminary evaluation of podotactile feedback in sighted and blind users. , 2010, 2010, 2103-6.		12
33	A methodology for the electrical characterization of shaded high concentrator photovoltaic modules. Energy, 2015, 89, 768-777.	4.5	12
34	Passive vibration control in a civil structure: Experimental results. Measurement and Control, 2019, 52, 938-946.	0.9	12
35	A four-fingered robot hand with shape memory alloys. , 2009, , .		11
36	A low-cost electric power wheelchair with manual and vision-based control systems. , 2009, , .		11

#	Article	IF	Citations
37	A review of models and structures for wheeled mobile robots: Four case studies. , 2011, , .		11
38	Image-Based Automated Width Measurement of Surface Cracking. Sensors, 2021, 21, 7534.	2.1	11
39	On-shoe tactile display. , 2008, , .		10
40	A Method for Facial Emotion Recognition Based on Interest Points. , 2018, , .		10
41	Facial Emotion Recognition: A Comparison of Different Landmark-Based Classifiers. , 2018, , .		10
42	Vibrating insoles for tactile communication with the feet. , 2011, , .		9
43	A Differential-Drive Mobile Robot Driven by an Ethology Inspired Behaviour Architecture. Procedia Technology, 2012, 3, 157-166.	1.1	9
44	Gradient Descent-Based Optimization Method of a Four-Bar Mechanism Using Fully Cartesian Coordinates. Applied Sciences (Switzerland), 2019, 9, 4115.	1.3	9
45	Wearable Urban Mobility Assistive Device for Visually Impaired Pedestrians Using a Smartphone and a Tactile-Foot Interface. Sensors, 2021, 21, 5274.	2.1	9
46	A Combined Wiimote-Camera Tracking System for Small Aerial Vehicles. , 2009, , .		8
47	Optimum Balancing of the Four-Bar Linkage Using Fully Cartesian Coordinates. IEEE Latin America Transactions, 2019, 17, 983-990.	1.2	8
48	Available Technologies and Commercial Devices to Harvest Energy by Human Trampling in Smart Flooring Systems: A Review. Energies, 2022, 15, 432.	1.6	8
49	Comparative performance analysis of two channel estimation techniques for DSRC systems based on the IEEE 802.11p standard. , 2014, , .		7
50	On Spatial Cognition and Mobility Strategies. , 2018, , 137-166.		7
51	10 Clock-Periods Pipelined Implementation of AES-128 Encryption-Decryption Algorithm up to 28 Gbit/s Real Throughput by Xilinx Zynq UltraScale+ MPSoC ZCU102 Platform. Electronics (Switzerland), 2020, 9, 1665.	1.8	7
52	A Non-WSSUS Channel Simulator for V2X Communication Systems. Electronics (Switzerland), 2020, 9, 1190.	1.8	7
53	Modeling and control techniques for electric powered wheelchairs: An overview. , 2014, , .		6
54	Visual Impairment Simulator Based on the Hadamard Product. Electronic Notes in Theoretical Computer Science, 2016, 329, 169-179.	0.9	6

#	Article	IF	Citations
55	An Alternative Method for Shaking Force Balancing of the 3RRR PPM through Acceleration Control of the Center of Mass. Applied Sciences (Switzerland), 2020, 10, 1351.	1.3	6
56	On Image Matching and Feature Tracking for Embedded Systems: A State-of-the-Art. , 2013, , 357-380.		6
57	Predicting PV module characteristics with outdoor measurements: Modeling improvements. , 2011, , .		5
58	Usability evaluation of foot-based interfaces for blind travelers. IEEE Instrumentation and Measurement Magazine, 2020, 23, 4-13.	1.2	5
59	Design and Optimization of Crossbar Architectures for Shape Memory Alloy Actuator Arrays. , 2006, , .		4
60	IMAGE MATCHING OPTIMIZATION VIA VISION AND INERTIAL DATA FUSION: APPLICATION TO NAVIGATION OF THE VISUALLY IMPAIRED. International Journal of Image and Graphics, 2010, 10, 545-558.	1.2	4
61	Training a Single-Layer Perceptron for an Approximate Edge Detection on a Digital Image. , 2011, , .		4
62	Design and Evaluation of an Eye Disease Simulator. IEEE Latin America Transactions, 2015, 13, 2734-2741.	1.2	4
63	Robust multiband image segmentation method based on user clues. , 2017, , .		4
64	A method for the outdoor thermal characterisation of high-concentrator photovoltaic modules alternative to the IEC 62670-3 standard. Energy, 2018, 148, 159-168.	4.5	4
65	Intelligent Glasses: A Multimodal Interface for Data Communication to the Visually Impaired. Lecture Notes in Electrical Engineering, 2009, , 349-357.	0.3	4
66	An optimal adaptive filtering approach for stress-tests motion artifacts removal: application on an ECG for telediagnosis. , 0, , .		3
67	MPISTE: A Mobile, Personalised, Interactive Story Telling Environment. , 2010, , .		3
68	Computer-Based System for Simulating Visual Impairments. IETE Journal of Research, 2016, 62, 833-841.	1.8	3
69	Leak Detection in Waterworks: Comparison Between STFT and FFT with an Overcoming of Limitations. Metrology and Measurement Systems, 2017, 24, 631-644.	1.4	3
70	Analysis of wind missing data for wind farms in Isthmus of Tehuantepec. , 2018, , .		3
71	Monitoring Improvement on Reactive, Proactive and Hybrid Protocols of Wireless Sensor Networks. , 2019, , .		3
72	Performance Evaluation of Active and Passive Haptic Feedback in Shape Perception. , 2019, , .		3

#	Article	IF	Citations
73	Automatic Stomatal Segmentation Based on Delaunay-Rayleigh Frequency Distance. Plants, 2020, 9, 1613.	1.6	3
74	Design and Characterization of a Miniature Bio-Inspired Mobile Robot. , 2021, , .		3
75	Sensors-based mobile robot for harsh environments: functionalities, energy consumption analysis and characterization. Acta IMEKO (2012), 2021, 10, 209.	0.4	3
76	Generation of Gait Events with a FSR Based Cane Handle. Sensors, 2021, 21, 5632.	2.1	3
77	MODELING AND DESIGNING A FULL BEAMFORMER FOR ACOUSTIC SENSING AND MEASUREMENT. International Journal on Smart Sensing and Intelligent Systems, 2017, 10, 718-734.	0.4	3
78	Energy-efficiency Model for a Smart Building: A Real Application. , 2020, , .		3
79	Modeling and Prototype Implementation of an Automated Guided Vehicle for Smart Factories. , 2021, , .		3
80	The Early Stages of Quantum Dot Self-Assembly: A Kinetic Monte Carlo Simulation. Journal of Computational and Theoretical Nanoscience, 2006, 3, 696-701.	0.4	2
81	A comparison of controllers for improving the time response of NiTi wires. , 2009, , .		2
82	Constraints on human stereo vision for tele-operation. , 2011, , .		2
83	On human performance in tactile language learning and tactile memory. , 2014, , .		2
84	An analytical and experimental study of ultrasonic linear motors. Tehnicki Vjesnik, 2015, 22, 1057-1063.	0.3	2
85	An Innovative Tool for Detection of Small Notches Using a Nanocomposite Optical Sensor. IEEE Sensors Journal, 2016, 16, 5029-5036.	2.4	2
86	Kinematic analysis and workspace simulation of humanoid robot KUBO. , 2017, , .		2
87	Inline Force Sensor Development for Electrical Motors for Mining Operations in Chile: A New Inspection Protocol. IEEE Latin America Transactions, 2018, 16, 66-74.	1.2	2
88	A Monte Carlo Simulator of non-WSSUS Rayleigh Fading Channels for Vehicular Communications. , 2018, , .		2
89	Using Fully Cartesian Coordinates to Calculate the Support Reactions of Multi-Scale Mechanisms. , 2018, , .		2
90	Brush-Holder Integrated Load Sensor Prototype for SAG Grinding Mill Motor. Electronics (Switzerland), 2019, 8, 1227.	1.8	2

#	Article	IF	Citations
91	Detection of river flow slow-down through sensing system and quasi-real time imaging. Flow Measurement and Instrumentation, 2021, 81, 102042.	1.0	2
92	Efficient Balancing Optimization of a Simplified Slider-Crank Mechanism. , 2020, , .		2
93	Design and characterization of a shape memory alloy based micro-actuator for tactile stimulation. , 2004, , .		1
94	Lateral motion pin device for tactile communication: an approach with DC mini-motors. , 2006, , .		1
95	New Test Structure for Tactile Display using Laterally Driven Tactors. , 2008, , .		1
96	Design and development of humanoid robot ZERO. , 2011, , .		1
97	Modeling review of structures and locomotion systems for mobile robots: Four case studies. , 2011, , .		1
98	Simulation of vision impairment with virtual imaging. , 2013, , .		1
99	Foot-based interfaces for navigational assistance of the visually impaired. , 2013, , .		1
100	Design of Baseband Digital Delta-Sigma Modulators in 180nm CMOS. IEEE Latin America Transactions, 2015, 13, 1272-1278.	1.2	1
101	Assessment indicators for expressing accuracy in sensing infrastructure health: Case study of leakage in water pipelines. , 2017, , .		1
102	Use of automated blinds in smart buildings for energy savings: A mexican case. , 2017, , .		1
103	Design and Construction of a New Door Driving Mechanism for Mexico's City Metro. , 2018, , .		1
104	Consumer Acceptances Through Facial Expressions of Encapsulated Flavors Based on a Nanotechnology Approach. , 2018, , .		1
105	Shaking Moment Balancing of a Four-Bar Mechanism Using Actuation Redundancy. Mechanisms and Machine Science, 2019, , 3319-3327.	0.3	1
106	Comparison Between Reactive and Proactive Protocols of Wireless Sensor Networks: Railway Application. Promet - Traffic - Traffico, 2019, 31, 311-319.	0.3	1
107	Development of an Electronic Nose Device for Security Applications. , 2019, , .		1
108	An Efficient Point-Matching Method Based on Multiple Geometrical Hypotheses. Electronics (Switzerland), 2021, 10, 246.	1.8	1

#	Article	IF	Citations
109	A Novel Electronic Nose Instrument for the Detection of Volatile Hazardous Compounds: Preliminary Results. , 2021, , .		1
110	Intelligent PI Controller for Microalgae Growth in a Closed Photobioreactor. , 2020, , .		1
111	Sensors Allocation and Observer Design for Discrete Bilateral Teleoperation Systems with Multi-Rate Sampling. Sensors, 2022, 22, 2673.	2.1	1
112	Touch stimulation through an SMA-actuated micro-mechanism. , 2005, , .		0
113	Global space integration from tactile representations: an experimental evaluation. , 2007, , .		0
114	Dynamic Characteristics of Tiny Ultrasonic Linear Actuators. International Journal on Measurement Technologies and Instrumentation Engineering, 2011, 1, 12-23.	0.3	0
115	A Wearable Dichoptic Display System. , 2011, , .		0
116	A portable tactile display based on pin lateral traction. , 2017, , .		0
117	Performance of MRC Detection in OFDM System with Virtual Carriers over V2V Channels. , 2019, , .		0
118	Linear and Nonlinear Control Approaches for the Cart Inverted Pendulum Problem. , 2021, , .		0
119	Shaking Force Balancing of the 2RRR PPM Specifying Toolâ€™s Motion. Mechanisms and Machine Science, 2022, , 181-190.	0.3	0
120	On Cognitive Dynamic Map and Its Use for Navigation in Space. Lecture Notes in Computer Science, 2005, , 187-194.	1.0	0
121	Dynamic Characteristics of Tiny Ultrasonic Linear Actuators. , 2013, , 12-23.		0
122	Gauest editorial: Explosion of sensor-based instrumentation and measurement for human care. IEEE Instrumentation and Measurement Magazine, 2020, 23, 3-3.	1.2	0
123	Contactless Environment Map Construction with Ultrasonic Sensors. , 2020, , .		0
124	A remote-controlled global navigation satellite system based rover for accurate video-assisted cadastral surveys. International Journal of Electrical and Computer Engineering, 2022, 12, 3551.	0.5	0
125	Complete Balancing of the Six-Bar Mechanism Using Fully Cartesian Coordinates and Multiobjective Differential Evolution Optimization. Mathematics, 2022, 10, 1830.	1.1	0