Higinio GonzÃ¡lez Jorge

List of Publications by Year
in descending order

114 papers	2,655 citations	236925 25 h-index	214800 47 g-index
114 all docs	114 docs citations	114 times ranked	2507 citing authors

#	Article	IF	Citations
1	Review of mobile mapping and surveying technologies. Measurement: Journal of the International Measurement Confederation, 2013, 46, 2127-2145.	5.0	308
2	Assessment of cracks on concrete bridges using image processing supported by laser scanning survey. Construction and Building Materials, 2017, 146, 668-678.	7.2	131
3	Metrological evaluation of Microsoft Kinect and Asus Xtion sensors. Measurement: Journal of the International Measurement Confederation, 2013, 46, 1800-1806.	5.0	130
4	Unmanned Aerial Systems for Civil Applications: A Review. Drones, 2017, 1, 2.	4.9	130
5	Quantifying the influence of rain in LiDAR performance. Measurement: Journal of the International Measurement Confederation, 2017, 95, 143-148.	5.0	110
6	Approach to identify cracking in asphalt pavement using GPR and infrared thermographic methods: Preliminary findings. NDT and E International, 2014, 62, 55-65.	3.7	102
7	Metrological comparison between Kinect I and Kinect II sensors. Measurement: Journal of the International Measurement Confederation, 2015, 70, 21-26.	5.0	97
8	4-Plane congruent sets for automatic registration of as-is 3D point clouds with 3D BIM models. Automation in Construction, 2018, 89, 120-134.	9.8	79
9	Validation of terrestrial laser scanning and photogrammetry techniques for the measurement of vertical underclearance and beam geometry in structural inspection of bridges. Measurement: Journal of the International Measurement Confederation, 2013, 46, 784-794.	5.0	76
10	Automatic detection of zebra crossings from mobile LiDAR data. Optics and Laser Technology, 2015, 70, 63-70.	4.6	69
11	Calibration and verification of thermographic cameras for geometric measurements. Infrared Physics and Technology, 2011, 54, 92-99.	2.9	67
12	Accuracy verification of the Lynx Mobile Mapper system. Optics and Laser Technology, 2013, 45, 578-586.	4.6	65
13	Automatic Morphologic Analysis of Quasiâ€Periodic Masonry Walls from LiDAR. Computer-Aided Civil and Infrastructure Engineering, 2016, 31, 305-319.	9.8	52
14	Monitoring biological crusts in civil engineering structures using intensity data from terrestrial laser scanners. Construction and Building Materials, 2012, 31, 119-128.	7.2	51
15	Automatic classification of urban ground elements from mobile laser scanning data. Automation in Construction, 2018, 86, 226-239.	9.8	47
16	A semi-automated method for extracting vertical clearance and cross sections in tunnels using mobile LiDAR data. Tunnelling and Underground Space Technology, 2016, 59, 48-54.	6.2	46
17	Automatic point cloud coarse registration using geometric keypoint descriptors for indoor scenes. Automation in Construction, 2017, 81, 134-148.	9.8	45
18	Standard artifact for the geometric verification of terrestrial laser scanning systems. Optics and Laser Technology, 2011, 43, 1249-1256.	4.6	44

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19	Automatic detection of road tunnel luminaires using a mobile LiDAR system. Measurement: Journal of the International Measurement Confederation, 2014, 47, 569-575.	5.0	42
20	Automatic classification of urban pavements using mobile LiDAR data and roughness descriptors. Construction and Building Materials, 2016, 102, 208-215.	7.2	41
21	High performance grid for the metric calibration of thermographic cameras. Measurement Science and Technology, 2012, 23, 015402.	2.6	40
22	Photogrammetry and laser scanner technology applied to length measurements in car testing laboratories. Measurement: Journal of the International Measurement Confederation, 2012, 45, 354-363.	5.0	40
23	Mapping Forest Riskâ€"A Case Study in Galicia (Spain). Remote Sensing, 2020, 12, 3705.	4.0	38
24	Automatic segmentation of road overpasses and detection of mortar efflorescence using mobile LiDAR data. Optics and Laser Technology, 2013, 54, 353-361.	4.6	33
25	NDT Documentation and Evaluation of the Roman Bridge of Lugo Using GPR and Mobile and Static LiDAR. Journal of Performance of Constructed Facilities, 2015, 29, .	2.0	31
26	Determining the limits of unmanned aerial photogrammetry for the evaluation of road runoff. Measurement: Journal of the International Measurement Confederation, 2016, 85, 132-141.	5.0	29
27	UAV payload with collision mitigation for contact inspection. Automation in Construction, 2020, 115, 103200.	9.8	29
28	Validation of mobile LiDAR surveying for measuring pavement layer thicknesses and volumes. NDT and E International, 2013, 60, 70-76.	3.7	28
29	Uncertainty evaluation of the 1GHz GPR antenna for the estimation of concrete asphalt thickness. Measurement: Journal of the International Measurement Confederation, 2013, 46, 3032-3040.	5.0	25
30	Integration of UAV Photogrammetry and SPH Modelling of Fluids to Study Runoff on Real Terrains. PLoS ONE, 2014, 9, e111031.	2.5	24
31	An Automatic Image-Based Modelling Method Applied to Forensic Infography. PLoS ONE, 2015, 10, e0118719.	2.5	22
32	A genetic algorithm approach for feature selection in potatoes classification by computer vision. , 2009, , .		20
33	Novel image analysis approach to the terrestrial LiDAR monitoring of damage in rubble mound breakwaters. Ocean Engineering, 2014, 91, 273-280.	4.3	20
34	Single image rectification of thermal images for geometric studies in faÃ§ade inspections. Infrared Physics and Technology, 2012, 55, 421-426.	2.9	19
35	Metrological evaluation of KinectFusion and its comparison with Microsoft Kinect sensor. Measurement: Journal of the International Measurement Confederation, 2015, 73, 137-145.	5.0	19
36	Verification artifact for photogrammetric measurement systems. Optical Engineering, 2011, 50, 073603.	1.0	17

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37	Performance testing of LiDAR exploitation software. Computers and Geosciences, 2013, 54, 122-129.	4.2	17
38	Automatic filtering of vehicles from mobile LiDAR datasets. Measurement: Journal of the International Measurement Confederation, 2014, 53, 215-223.	5.0	17
39	UAV Photogrammetry Application to the Monitoring of Rubble Mound Breakwaters. Journal of Performance of Constructed Facilities, 2016, 30, .	2.0	17
40	Application of non-destructive geomatic techniques and FDTD modeling to metrical analysis of stone blocks in a masonry wall. Construction and Building Materials, 2012, 36, 14-19.	7.2	16
41	Automatic Estimation of Excavation Volume from Laser Mobile Mapping Data for Mountain Road Widening. Remote Sensing, 2013, 5, 4629-4651.	4.0	16
42	Accuracy assessment of airborne laser scanner dataset by means of parametric and non‐parametric statistical methods. IET Science, Measurement and Technology, 2015, 9, 505-513.	1.6	16
43	Evaluation of point cloud registration using Monte Carlo method. Measurement: Journal of the International Measurement Confederation, 2016, 92, 264-270.	5.0	16
44	Operational Study of Drone Spraying Application for the Disinfection of Surfaces against the COVID-19 Pandemic. Drones, 2021, 5, 18.	4.9	15
45	UAV Obstacle Avoidance Algorithm to Navigate in Dynamic Building Environments. Drones, 2022, 6, 16.	4.9	15
46	Procedure to induce a persistent current in superconducting cylinders or rings. Applied Physics Letters, 2002, 81, 4207-4208.	3.3	14
47	Payload for Contact Inspection Tasks with UAV Systems. Sensors, 2019, 19, 3752.	3.8	14
48	Automatic LiDAR-based lighting inventory in buildings. Measurement: Journal of the International Measurement Confederation, 2015, 73, 544-550.	5.0	13
49	Indoor Path-Planning Algorithm for UAV-Based Contact Inspection. Sensors, 2021, 21, 642.	3.8	13
50	Ability of a contactless inductive device for the characterization of the critical current versus temperature in superconducting rings at temperatures close to TC. Cryogenics, 2004, 44, 115-119.	1.7	12
51	A machine vision system for the calibration of digital thermometers. Measurement Science and Technology, 2009, 20, 065106.	2.6	12
52	Procedure to evaluate the accuracy of laser-scanning systems using a linear precision electro-mechanical actuator. IET Science, Measurement and Technology, 2012, 6, 6.	1.6	12
53	Application of Kinect Gaming Sensor in Forensic Science. Journal of Forensic Sciences, 2015, 60, 206-211.	1.6	12
54	Laser Scanning Technology: Fundamentals, Principles and Applications in Infrastructure. Structures and Infrastructures Series, 2016, , 7-33.	0.2	12

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55	Machining high quality superconducting rings from top seeded melt grown samples. Advances in Applied Ceramics, 2004, 103, 145-146.	0.4	11
56	Automatic Registration of Mobile LiDAR Data Using High-Reflectivity Traffic Signs. Journal of Construction Engineering and Management - ASCE, 2016, 142, .	3.8	11
57	Comparison between laser scanning, single-image rectification and ground-penetrating radar technologies in forensic science. Measurement: Journal of the International Measurement Confederation, 2012, 45, 836-843.	5.0	10
58	Interurban visibility diagnosis from point clouds. European Journal of Remote Sensing, 2016, 49, 673-690.	3.5	9
59	Autonomous Point Cloud Acquisition of Unknown Indoor Scenes. ISPRS International Journal of Geo-Information, 2018, 7, 250.	2.9	9
60	Terrestrial laser scanning for geometry extraction and change monitoring of rubble mound breakwaters. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, II-5, 289-295.	0.0	9
61	Testing phase-shifting algorithms for uncertainty evaluation in interferometric gauge block calibration. Metrologia, 2009, 46, 637-645.	1.2	8
62	Canopy detection over roads using mobile lidar data. International Journal of Remote Sensing, 2020, 41, 1927-1942.	2.9	8
63	Evidence of current stabilization after long-time decay in high-TC superconductors. Cryogenics, 2005, 45, 135-140.	1.7	7
64	In Situ Roughness Measurements for the Solar Cell Industry Using an Atomic Force Microscope. Sensors, 2010, 10, 4002-4009.	3.8	7
65	Metrological comparison of terrestrial laser scanning systems Riegl LMS Z390i and Trimble GX. Optical Engineering, 2011, 50, 116201.	1.0	7
66	Ground-Penetrating Radar for Inspection of In-Road Structures and Data Interpretation by Numerical Modeling. Journal of Construction Engineering and Management - ASCE, 2013, 139, 749-753.	3.8	7
67	Geometric road runoff estimation from laser mobile mapping data. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, II-5, 385-391.	0.0	7
68	Inducting technique and trapped field in ring-shaped superconductors. Physica C: Superconductivity and Its Applications, 2005, 433, 132-138.	1.2	6
69	Error propagation in differential phase evaluation. Optics Express, 2010, 18, 3199.	3.4	6
70	Low-Cost Reflectance-Based Method for the Radiometric Calibration of Kinect 2. IEEE Sensors Journal, 2016, 16, 1975-1985.	4.7	6
71	Quantitative Evaluation of CHT and GHT for Column Detection under Different Conditions of Data Quality. Journal of Computing in Civil Engineering, 2017, 31, .	4.7	6
72	Active UAV payload based on horizontal propellers for contact inspections tasks. Measurement: Journal of the International Measurement Confederation, 2020, 165, 108106.	5.0	6

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73	EVALUATION OF DRIVER VISIBILITY FROM MOBILE LIDAR DATA AND WEATHER CONDITIONS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLI-B1, 577-582.	0.2	6
74	EVALUATION OF DRIVER VISIBILITY FROM MOBILE LIDAR DATA AND WEATHER CONDITIONS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLI-B1, 577-582.	0.2	6
75	Uncertainty contribution of tip-sample angle to AFM lateral measurements. Precision Engineering, 2011, 35, 164-172.	3.4	5
76	Metrological intercomparison of six terrestrial laser scanning systems. IET Science, Measurement and Technology, 2018, 12, 218-222.	1.6	5
77	DETECTION OF GEOMETRIC KEYPOINTS AND ITS APPLICATION TO POINT CLOUD COARSE REGISTRATION. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLI-B3, 187-194.	0.2	5
78	Superconducting cylinders aid in an understanding of current induction. Physics Education, 2004, 39, 234-235.	0.5	4
79	Measurement of critical current in superconducting rings. Measurement: Journal of the International Measurement Confederation, 2007, 40, 378-382.	5.0	4
80	Verification of image orthorectification techniques for low-cost geometric inspection of masonry arch bridges. Optical Engineering, 2012, 51, 073606.	1.0	4
81	Infrastructuresâ€"An Open Access Journal. Infrastructures, 2016, 1, 1-7.	2.8	4
82	Automatic Processing of Aerial LiDAR Data to Detect Vegetation Continuity in the Surroundings of Roads. Remote Sensing, 2020, 12, 1677.	4.0	4
83	Procedure for the calibration of surface temperature sensors used in dimensional metrology. Metrologia, 2007, 44, 217-221.	1.2	3
84	Automatic reading of digital instrumentation. , 2008, , .		3
85	Singleâ€‐mage Rectification Technique in Forensic Science. Journal of Forensic Sciences, 2013, 58, 459-464.	1.6	3
86	New discretization method applied to NBV problem: Semioctree. PLoS ONE, 2018, 13, e0206259.	2.5	3
87	Working with non-cryogenic Hall sensors at 77K. Cryogenics, 2006, 46, 736-739.	1.7	2
88	Induction technique for superconducting rings between field cooling and zero field cooling. Physica C: Superconductivity and Its Applications, 2007, 459, 24-26.	1.2	2
89	Magnetic field cancellation on the surface of superconducting rings: Influence on the flux creep. Cryogenics, 2008, 48, 2-5.	1.7	2
90	Metrological evaluation of vessel-based mobile lidar for survey of coastal structures. International Journal of Remote Sensing, 2015, 36, 2622-2633.	2.9	2

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91	Wave Run-Up Monitoring on Rubble-Mound Breakwaters Using a Photogrammetric Methodology. Journal of Performance of Constructed Facilities, 2016, 30, 04015075.	2.0	2
92	Automatic Measurement of Water Height in the As Conchas (Spain) Reservoir Using Sentinel 2 and Aerial LiDAR Data. Remote Sensing, 2018, 10, 902.	4.0	2
93	FIRST APPROACH TO UAV-BASED CONTACT INSPECTION: A SMART PAYLOAD FOR NAVIGATION IN THE NEIGHBOURHOOD OF STRUCTURES. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W13, 323-328.	0.2	2
94	PATH PLANNING FOR INDOOR CONTACT INSPECTION TASKS WITH UAVS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLIII-B4-2020, 345-351.	0.2	2
95	A CityGML extension for traffic-sign objects that guides the automatic processing of data collected using Mobile Mapping technology. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-1, 415-420.	0.2	2
96	AUTOMATIC MODELLING OF RUBBLE MOUND BREAKWATERS FROM LIDAR DATA. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-3/W3, 9-13.	0.2	2
97	A Computer Vision System for Visual Grape Grading in Wine Cellars. Lecture Notes in Computer Science, 2009, , 335-344.	1.3	2
98	LOW-ALTITUDE LONG-ENDURANCE SOLAR UNMANNED PLANE FOR FOREST FIRE PREVENTION: APPLICATION TO THE NATURAL PARK OF SERRA DO XURES (SPAIN). International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W6, 135-139.	0.2	2
99	Current Inducting Techniques for Superconducting Rings. Journal of Superconductivity and Novel Magnetism, 2005, 18, 541-544.	0.5	1
100	Critical current measurement in superconducting rings using an automatic inductive technique. Physica C: Superconductivity and Its Applications, 2007, 451, 8-12.	1.2	1
101	A technique for separating the trapped vortex and current in superconducting rings. Journal of Physics: Conference Series, 2008, 97, 012181.	0.4	1
102	Digital Instrumentation Calibration Using Computer Vision. Lecture Notes in Computer Science, 2010, , 335-344.	1.3	1
103	Influence of mobile light detecting and ranging data quality in road runoff evaluation. Journal of Applied Remote Sensing, 2016, 10, 044001.	1.3	1
104	INFLUENCE OF THE PRECISION OF LIDAR DATA IN SURFACE WATER RUNOFF ESTIMATION FOR ROAD MAINTENANCE. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-3/W3, 3-8.	0.2	1
105	METROLOGICAL EVALUATION OF HELMHOLTZ FACILITY SETUP FOR TESTING OF MAGNETIC ATTITUDE DETERMINATION AND CONTROL SYSTEMS (ADCS) OF SMALL SATELLITES. Dyna (Spain), 2022, 97, 267-273.	0.2	1
106	Critical Current Measurements in the Ring-Shaped Configuration Magnetâ€"Superconductor. Journal of Superconductivity and Novel Magnetism, 2006, 19, 125-128.	1.8	0
107	Inverse Flux Creep in Ring-Shaped Superconductors. Journal of Superconductivity and Novel Magnetism, 2007, 20, 305-308.	1.8	0
108	Monte-Carlo method in AFM calibration. , 2009, , .		0

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109	Evidence for the movement of macro-vortices on high critical temperature superconductors. EPJ Applied Physics, 2016, 76, 10601.	0.7	0
110	Estudio de la evolución y técnica de regulación de la corriente persistente en anillos superconductores de YBCO. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2008, 47, 105-109.	1.9	0
111	Road Management Using Mobile LiDAR Data. Software Testing. Structures and Infrastructures Series, 2016, , 293-301.	0.2	0
112	Current inducting techniques for superconducting rings. Journal of Superconductivity and Novel Magnetism, 2005, 18, 541-544.	0.5	0
113	OPERATIONAL STUDY OF DRONE SPRAYING APPLICATION OF PHYTOSANITARY PRODUCTS IN VINEYARDS. Dyna (Spain), 2022, 97, 23-26.	0.2	0
114	Metrological Validation of Pixhawk Autopilot Magnetometers in Helmholtz Cage. World Electric Vehicle Journal, 2022, 13, 85.	3.0	0