Julio Molleda

List of Publications by Year
in descending order

64 papers	**1,446** citations	471061 **17** h-index	329751 **37** g-index
64 all docs	**64** docs citations	**64** times ranked	**1445** citing authors

#	Article	IF	Citations
1	Infrared Thermography for Temperature Measurement and Non-Destructive Testing. Sensors, 2014, 14, 12305-12348.	2.1	662
2	Fast and robust laser stripe extraction for 3D reconstruction in industrial environments. Machine Vision and Applications, 2012, 23, 179-196.	1.7	112
3	Temperature Measurement of Molten Pig Iron With Slag Characterization and Detection Using Infrared Computer Vision. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1149-1159.	2.4	58
4	Real-time flatness inspection of rolled products based on optical laser triangulation and three-dimensional surface reconstruction. Journal of Electronic Imaging, 2010, 19, 031206.	0.5	40
5	An efficient method for defect detection during the manufacturing of web materials. Journal of Intelligent Manufacturing, 2016, 27, 431-445.	4.4	40
6	An improved 3D imaging system for dimensional quality inspection of rolled products in the metal industry. Computers in Industry, 2013, 64, 1186-1200.	5.7	39
7	A Profile Measurement System for Rail Quality Assessment During Manufacturing. IEEE Transactions on Industry Applications, 2016, 52, 2684-2692.	3.3	36
8	On-Line Flatness Measurement in the Steelmaking Industry. Sensors, 2013, 13, 10245-10272.	2.1	34
9	Shape Measurement of Steel Strips Using a Laser-Based Three-Dimensional Reconstruction Technique. IEEE Transactions on Industry Applications, 2011, 47, 1536-1544.	3.3	32
10	Monitoring Sintering Burn-Through Point Using Infrared Thermography. Sensors, 2013, 13, 10287-10305.	2.1	29
11	Removing vibrations in 3D reconstruction using multiple laser stripes. Optics and Lasers in Engineering, 2014, 53, 51-59.	2.0	24
12	Monitoring and control of energy consumption in buildings using WoT: A novel approach for smart retrofit. Sustainable Cities and Society, 2021, 65, 102637.	5.1	24
13	Temperature Measurement Using the Wedge Method: Comparison and Application to Emissivity Estimation and Compensation. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 1768-1778.	2.4	23
14	Structured-Light Sensor Using Two Laser Stripes for 3D Reconstruction without Vibrations. Sensors, 2014, 14, 20041-20063.	2.1	23
15	Vision-Based Sensor for Early Detection of Periodical Defects in Web Materials. Sensors, 2012, 12, 10788-10809.	2.1	19
16	Flatness Measurement Using Two Laser Stripes to Remove the Effects of Vibrations. IEEE Transactions on Industry Applications, 2015, 51, 4297-4304.	3.3	19
17	A Non-Invasive Technique for Online Defect Detection on Steel Strip Surfaces. Journal of Nondestructive Evaluation, 2016, 35, 1.	1.1	19
18	Uncertainty Propagation Analysis in 3-D Shape Measurement Using Laser Range Finding. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1160-1172.	2.4	17

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19	Vibrations in Steel Strips: Effects on Flatness Measurement and Filtering. IEEE Transactions on Industry Applications, 2014, 50, 3103-3112.	3.3	16
20	A fast and robust decision support system for in-line quality assessment of resistance seam welds in the steelmaking industry. Computers in Industry, 2012, 63, 222-230.	5.7	12
21	Efficient registration of 2D points to CAD models for real-time applications. Journal of Real-Time Image Processing, 2018, 15, 329-347.	2.2	11
22	Machine Vision System for Flatness Control Feedback. , 2009, , .		10
23	Vanishing point detection for visual surveillance systems in railway platform environments. Computers in Industry, 2018, 98, 153-164.	5.7	10
24	Real-time line scan extraction from infrared images using the wedge method in industrial environments. Journal of Electronic Imaging, 2010, 19, 043017.	0.5	9
25	Temperature Tracking System for Sinter Material in a Rotatory Cooler Based on Infrared Thermography. IEEE Transactions on Industry Applications, 2014, 50, 3095-3102.	3.3	9
26	A Parallel Genetic Algorithm for Configuring Defect Detection Methods. IEEE Latin America Transactions, 2015, 13, 1462-1468.	1.2	9
27	Real-time adaptive method for noise filtering of a stream of thermographic line scans based on spatial overlapping and edge detection. Journal of Electronic Imaging, 2008, 17, 033012.	0.5	8
28	Real-Time Assessment of the Reliability of Welds in Steel Strips. IEEE Transactions on Industry Applications, 2010, 46, 81-88.	3.3	8
29	A Parallel Genetic Algorithm for Optimizing an Industrial Inspection System. IEEE Latin America Transactions, 2013, 11, 1338-1343.	1.2	8
30	Uncertainty Analysis in Spatial Thermal Measurements Using Infrared Line Scanners. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 2074-2082.	2.4	7
31	Compensation for Uneven Temperature in Flatness Control Systems for Steel Strips. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	6
32	Real-time recovery of moving 3D faces for emerging applications. Computers in Industry, 2013, 64, 1390-1398.	5.7	6
33	Jam Detector for Steel Pickling Lines Using Machine Vision. IEEE Transactions on Industry Applications, 2013, 49, 1954-1961.	3.3	6
34	A profile measurement system for rail manufacturing using multiple laser range finders. , 2015, , .		5
35	Objective comparison of edge detection assessment methods based on genetic optimization. Journal of Electronic Imaging, 2009, 18, 023013.	0.5	4
36	Temperature measurement of streams of molten pig iron during pouring using infrared computer vision. , 2011, , .		4

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37	Towards autonomic computing in machine vision applications: techniques and strategies for in-line 3D reconstruction in harsh industrial environments. , 2011, , .		4
38	Temperature tracking system for sinter material in a rotatory cooler based on infrared thermography. , 2013, , .		4
39	Indoor Air Quality Monitoring Sensor for the Web of Things. Proceedings (mdpi), 2018, 2, 1466.	0.2	4
40	Shape Measurement of Steel Strips Using a Laser-Based Three-Dimensional Reconstruction Technique. , 2010, , .		3
41	Detection of periodical patterns in the defects identified by computer vision systems. , 2011, , .		3
42	Uncertainty analysis in 3D shape measurement of steel strips using laser range finding. , 2011, , .		3
43	Calibrating a profile measurement system for dimensional inspection in rail rolling mills. Machine Vision and Applications, 2021, 32, 1.	1.7	3
44	Fuzzy-based approach to real-time detection of steel strips defective welds. , 0, , .		2
45	Real-time line scan extraction from infrared images using the wedge method in industrial environments. Proceedings of SPIE, 2008, , .	0.8	2
46	Automatic tuning for the segmentation of infrared images considering uncertain ground truth. Journal of Electronic Imaging, 2009, 18, 013001.	0.5	2
47	Vision-based technique for periodical defect detection in hot steel strips. , 2011, , .		2
48	A flexible software architecture for scalable real-time image and video processing applications. , 2012, , .		2
49	Vibrations in steel strips: Effects on flatness measurement and filtering. , 2013, , .		2
50	Resilient overlay network for real-time interactive multimedia sessions in corporate networks. Multimedia Systems, 2016, 22, 543-557.	3.0	2
51	Profile Measurement of Rails in Rolling Mills: Integrating Autonomic Computing Capabilities. , 2018, , .		2
52	Profile Measurement of Rails in a Rolling Mill: Implementing and Evaluating Autonomic Computing Capabilities. IEEE Transactions on Industry Applications, 2019, 55, 5466-5475.	3.3	2
53	AN IOT PLATFORM FOR INDOOR AIR QUALITY MONITORING USING THE WEB OF THINGS. WIT Transactions on Ecology and the Environment, 2019, , .	0.0	2
54	Spatial Calibration Procedure for Infrared Line Scanners. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	1

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55	Comparing temperature measurement using infrared line scanners and the wedge method. , 2010, , .		1
56	Periodic defects in steel strips: Detection through a vision-based technique. IEEE Industry Applications Magazine, 2013, 19, 39-46.	0.3	1
57	An Expert System for Building Energy Management Through the Web of Things. Lecture Notes in Computer Science, 2020, , 477-485.	1.0	1
58	Pattern recognition for infrared profiles of steel strips based on fuzzy knowledge. , 2006, , .		0
59	Real-Time Assessment of the Reliability of Welds in Steel Strips. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	0
60	Parallel training and testing methods for complex image processing algorithms on distributed, heterogeneous, unreliable, and non-dedicated resources. Proceedings of SPIE, 2011, , .	0.8	0
61	A quality inspection system for resistance seam welds in endless production of steel coils using anomaly detection techniques. , 2012, , .		0
62	Jam detector for steel pickling lines using machine vision. , 2012, , .		0
63	Flatness measurement using two laser stripes to remove the effects of vibrations. , 2014, , .		0
64	Spatial Calibration Procedure for Infrared Line Scanners. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	0