

# Fernando Torres

## List of Publications by Year in descending order

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127  
papers

1,937  
citations

331259

21  
h-index

315357

38  
g-index

129  
all docs

129  
docs citations

129  
times ranked

1717  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hands-on experiences of undergraduate students in Automatics and Robotics using a virtual and remote laboratory. Computers and Education, 2011, 57, 2451-2461.	5.1	161
2	Real-time collaboration of virtual laboratories through the Internet. Computers and Education, 2009, 52, 126-140.	5.1	96
3	A Network of Automatic Control Web-Based Laboratories. IEEE Transactions on Learning Technologies, 2011, 4, 197-208.	2.2	90
4	Automatic PC disassembly for component recovery. International Journal of Advanced Manufacturing Technology, 2004, 23, 39-46.	1.5	84
5	Hybrid tracking of human operators using IMU/UWB data fusion by a Kalman filter. , 2008, , .		82
6	Providing collaborative support to virtual and remote laboratories. IEEE Transactions on Learning Technologies, 2013, 6, 312-323.	2.2	71
7	A Survey on FPGA-Based Sensor Systems: Towards Intelligent and Reconfigurable Low-Power Sensors for Computer Vision, Control and Signal Processing. Sensors, 2014, 14, 6247-6278.	2.1	71
8	Safe human-robot interaction based on dynamic sphere-swept line bounding volumes. Robotics and Computer-Integrated Manufacturing, 2011, 27, 177-185.	6.1	64
9	Flexible multi-sensorial system for automatic disassembly using cooperative robots. International Journal of Computer Integrated Manufacturing, 2007, 20, 757-772.	2.9	58
10	Virtual disassembly of products based on geometric models. Computers in Industry, 2004, 55, 1-14.	5.7	57
11	Learning Spatio Temporal Tactile Features with a ConvLSTM for the Direction Of Slip Detection. Sensors, 2019, 19, 523.	2.1	53
12	Experiences on using Arduino for laboratory experiments of Automatic Control and Robotics. IFAC-PapersOnLine, 2015, 48, 105-110.	0.5	52
13	Disassembly Planning Based on Precedence Relations among Assemblies. International Journal of Advanced Manufacturing Technology, 2003, 21, 317-327.	1.5	46
14	Automatic cooperative disassembly robotic system: Task planner to distribute tasks among robots. Control Engineering Practice, 2009, 17, 112-121.	3.2	45
15	Control Framework for Dexterous Manipulation Using Dynamic Visual Servoing and Tactile Sensors <sup>™</sup> Feedback. Sensors, 2014, 14, 1787-1804.	2.1	45
16	Synchronous collaboration of virtual and remote laboratories. Computer Applications in Engineering Education, 2012, 20, 124-136.	2.2	39
17	Cooperative Tasks between Humans and Robots in Industrial Environments. International Journal of Advanced Robotic Systems, 2012, 9, 94.	1.3	31
18	Fast geometry-based computation of grasping points on three-dimensional point clouds. International Journal of Advanced Robotic Systems, 2019, 16, 172988141983184.	1.3	30

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19	Vectorial morphological reconstruction for brightness elimination in colour images. Real Time Imaging, 2004, 10, 379-387.	1.6	28
20	Colour Mathematical Morphology For Neural Image Analysis. Real Time Imaging, 2002, 8, 455-465.	1.6	27
21	Movement-Flow-Based Visual Servoing and Force Control Fusion for Manipulation Tasks in Unstructured Environments. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2005, 35, 4-15.	3.3	27
22	EJS+EjsRL: An interactive tool for industrial robots simulation, Computer Vision and remote operation. Robotics and Autonomous Systems, 2011, 59, 389-401.	3.0	23
23	In-hand recognition and manipulation of elastic objects using a servo-tactile control strategy. Robotics and Computer-Integrated Manufacturing, 2017, 48, 102-112.	6.1	21
24	<title>Comparative study of vectorial morphological operations in different color spaces</title> , 2001, , .		20
25	Virtual and remote laboratory for robotics e-learning. Computer Aided Chemical Engineering, 2008, 25, 1193-1198.	0.3	20
26	Java software platform for the development of advanced robotic virtual laboratories. Computer Applications in Engineering Education, 2013, 21, E14.	2.2	19
27	FPGA-based architecture for direct visual control robotic systems. Mechatronics, 2016, 39, 204-216.	2.0	19
28	Tactile control based on Gaussian images and its application in bi-manual manipulation of deformable objects. Robotics and Autonomous Systems, 2017, 94, 148-161.	3.0	19
29	Targetless Camera-LiDAR Calibration in Unstructured Environments. IEEE Access, 2020, 8, 143692-143705.	2.6	19
30	Survey of Visual and Force/Tactile Control of Robots for Physical Interaction in Spain. Sensors, 2009, 9, 9689-9733.	2.1	18
31	Sensor data integration for indoor human tracking. Robotics and Autonomous Systems, 2010, 58, 931-939.	3.0	17
32	Visual perception for the 3D recognition of geometric pieces in robotic manipulation. International Journal of Advanced Manufacturing Technology, 2016, 83, 1999-2013.	1.5	17
33	Automated real-time visual inspection system for high-resolution superimposed printings. Image and Vision Computing, 1998, 16, 947-958.	2.7	16
34	Automatic detection and elimination of specular reflectance in color images by means of MS diagram and vector connected filters. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2006, 36, 681-687.	3.3	15
35	Automatic robotic tasks in unstructured environments using an image path tracker. Control Engineering Practice, 2009, 17, 597-608.	3.2	15
36	Dynamic Visual Servoing With Chaos Control for Redundant Robots. IEEE/ASME Transactions on Mechatronics, 2014, 19, 423-431.	3.7	15

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37	Adaptive Visual Servoing by Simultaneous Camera Calibration. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	14
38	A Robust Approach to Control Robot Manipulators by Fusing Visual and Force Information. Journal of Intelligent and Robotic Systems: Theory and Applications, 2007, 48, 437-456.	2.0	14
39	Automatic Detection of Specular Reflectance in Colour Images Using the MS Diagram. Lecture Notes in Computer Science, 2003, , 132-139.	1.0	13
40	Framework for Fast Experimental Testing of Autonomous Navigation Algorithms. Applied Sciences (Switzerland), 2019, 9, 1997.	1.3	13
41	FPGA-based visual control system using dynamic perceptibility. Robotics and Computer-Integrated Manufacturing, 2016, 41, 13-22.	6.1	12
42	e-Health: Biomedical instrumentation with Arduino. IFAC-PapersOnLine, 2017, 50, 9156-9161.	0.5	12
43	Tactile-Driven Grasp Stability and Slip Prediction. Robotics, 2019, 8, 85.	2.1	12
44	Flexible system for simulating and tele-operating robots through the internet. Journal of Field Robotics, 2005, 22, 157-166.	0.7	11
45	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
46	Adaptive tactile control for in-hand manipulation tasks of deformable objects. International Journal of Advanced Manufacturing Technology, 2017, 91, 4127-4140.	1.5	11
47	Generation of Tactile Data From 3D Vision and Target Robotic Grasps. IEEE Transactions on Haptics, 2021, 14, 57-67.	1.8	11
48	Intelligent disassembly in the demanufacturing process. International Journal of Advanced Manufacturing Technology, 2006, 30, 479-480.	1.5	9
49	Modelling and simulation of a multi-fingered robotic hand for grasping tasks. , 2010, , .		9
50	A Multi-Sensorial Hybrid Control for Robotic Manipulation in Human-Robot Workspaces. Sensors, 2011, 11, 9839-9862.	2.1	9
51	3D Visual Data-Driven Spatiotemporal Deformations for Non-Rigid Object Grasping Using Robot Hands. Sensors, 2016, 16, 640.	2.1	9
52	Deeper in BLUE. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 98, 207-225.	2.0	9
53	Automatic inspection for phase-shift reflection defects in aluminum web production. Journal of Intelligent Manufacturing, 2002, 13, 151-156.	4.4	8
54	Visual Control of Robots Using Range Images. Sensors, 2010, 10, 7303-7322.	2.1	8

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55	Analysis and Adaptation of Integration Time in PMD Camera for Visual Servoing. , 2010, , .		8
56	Finger Readjustment Algorithm for Object Manipulation Based on Tactile Information. International Journal of Advanced Robotic Systems, 2013, 10, 9.	1.3	8
57	Control and Guidance of Low-Cost Robots via Gesture Perception for Monitoring Activities in the Home. Sensors, 2015, 15, 31268-31292.	2.1	8
58	Electromechanical delay in the tibialis anterior muscle during time-varying ankle dorsiflexion. , 2017, 2017, 68-71.		8
59	<title>Product disassembly scheduling using graph models</title>. , 2002, , .		7
60	Gaussian noise elimination in colour images by vector-connected filters. , 2004, , .		7
61	Direct Visual Servoing to Track Trajectories in Human-Robot Cooperation. International Journal of Advanced Robotic Systems, 2011, 8, 44.	1.3	7
62	3D Visual Sensing of the Human Hand for the Remote Operation of a Robotic Hand. International Journal of Advanced Robotic Systems, 2014, 11, 26.	1.3	7
63	Direct visual servoing framework based on optimal control for redundant joint structures. International Journal of Precision Engineering and Manufacturing, 2015, 16, 267-274.	1.1	7
64	A Vision-Driven Collaborative Robotic Grasping System Tele-Operated by Surface Electromyography. Sensors, 2018, 18, 2366.	2.1	7
65	Towards footwear manufacturing 4.0: shoe sole robotic grasping in assembling operations. International Journal of Advanced Manufacturing Technology, 2021, 114, 811-827.	1.5	7
66	Remote robot execution through WWW simulation. , 0, , .		6
67	<title>Disassembly movements for geometrical objects through heuristic methods</title>. , 2002, 4569, 71.		6
68	Improving detection of surface discontinuities in visualâ€“force control systems. Image and Vision Computing, 2008, 26, 1435-1447.	2.7	6
69	A cooperative robotic system based on multiple sensors to construct metallic structures. International Journal of Advanced Manufacturing Technology, 2009, 45, 616-630.	1.5	6
70	Dynamic visual servo control of a 4-axis joint tool to track image trajectories during machining complex shapes. Robotics and Computer-Integrated Manufacturing, 2013, 29, 261-270.	6.1	6
71	A Performance Evaluation of Surface Normals-based Descriptors for Recognition of Objects Using CAD-Models. , 2014, , .		6
72	Study of dexterous robotic grasping for deformable objects manipulation. , 2015, , .		6

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73	A New Inpainting Method for Highlights Elimination by Colour Morphology. Lecture Notes in Computer Science, 2005, , 368-376.	1.0	6
74	Disassembly planning strategies for automatic material removal. International Journal of Advanced Manufacturing Technology, 2010, 46, 339-350.	1.5	5
75	Optimal control for robot-hand manipulation of an object using dynamic visual servoing. , 2014, , .		5
76	Assistance Robotics and Biosensors. Sensors, 2018, 18, 3502.	2.1	5
77	Clasificaci3n de objetos usando percepci3n bimodal de palpaci3n 3nica en acciones de agarre rob3tico. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2020, 17, 44.	0.6	5
78	A new time-independent image path tracker to guide robots using visual servoing. , 2007, , .		4
79	Visual servoing path tracking for safe human-robot interaction. , 2009, , .		4
80	Direct visual servo control of a robot to track trajectories in supervision tasks. , 2010, , .		4
81	Simulation and Scheduling of Real-Time Computer Vision Algorithms. Lecture Notes in Computer Science, 1999, , 98-114.	1.0	4
82	A Comparative Study of Highlights Detection and Elimination by Color Morphology and Polar Color Models. Lecture Notes in Computer Science, 2005, , 295-302.	1.0	3
83	Practical experiences using RobUJALab.ejs: a virtual and remote laboratory for Robotics e-learning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 42, 1-6.	0.4	3
84	Synchronous collaboration between auto-generated WebGL applications and 3D virtual laboratories created with Easy Java Simulations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 160-165.	0.4	3
85	Robotic workcell for sole grasping in footwear manufacturing. , 2020, , .		3
86	Guidance of Robot Arms using Depth Data from RGB-D Camera. , 2013, , .		3
87	<title>Web teleoperation of robots with simulation feedback</title>. , 2002, , .		2
88	Visual - Force Control and Structured Light Fusion to Improve Recognition of Discontinuities in Surfaces. , 2006, , .		2
89	A new 3D visualization Java framework based on physics principles. Computer Physics Communications, 2012, 183, 231-244.	3.0	2
90	Presenting BLUE: A robot for localization in unstructured environments. , 2018, , .		2

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91	Mathematical Morphology and Binary Geodesy for Robot Navigation Planning. Lecture Notes in Computer Science, 2005, , 118-126.	1.0	2
92	Parallel processing and scheduling techniques applied to the quality control of bill sheets. , 0, , .		1
93	<title>Vergence control system for stereo depth recovery</title>. , 1999, , .		1
94	Time Independent Tracking Using 2-D Movement Flow-Based Visual Servoing. , 0, , .		1
95	Multi-Sensorial System for the Generation of Disassembly Trajectories. , 2006, , .		1
96	New features of Easy Java Simulations for 3D Modeling. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 42, 250-255.	0.4	1
97	Visual control of a multi-robot coupled system: Application to collision avoidance in human-robot interaction. , 2011, , .		1
98	An improvement of a SLAM RGB-D method with movement prediction derived from a study of visual features. Advanced Robotics, 2014, 28, 1231-1242.	1.1	1
99	FPGA-based framework for dynamic visual servoing of robot manipulators. , 2015, , .		1
100	Computation of Curvature Skeleton to Measure Deformations in Surfaces. Lecture Notes in Electrical Engineering, 2016, , 197-207.	0.3	1
101	Competition benchmarking to design and program mobile robots. , 2016, , .		1
102	Control of Robot Fingers with Adaptable Tactile Servoing to Manipulate Deformable Objects. Advances in Intelligent Systems and Computing, 2016, , 81-92.	0.5	1
103	Virtualization of Robotic Hands Using Mobile Devices â€. Robotics, 2019, 8, 81.	2.1	1
104	Assistance Robotics and Biosensors 2019. Sensors, 2020, 20, 1335.	2.1	1
105	Speed Estimation for Control of an Unmanned Ground Vehicle using Extremely Low Resolution Sensors. , 2018, , .		1
106	SASEPA: Simultaneous Allocation and Scheduling with Exclusion and Precedence Relations Algorithm. Lecture Notes in Computer Science, 2002, , 65-70.	1.0	1
107	A DETECTION METHOD OF INTERSECTIONS FOR DETERMINING OVERLAPPING USING ACTIVE VISION. , 2006, , .		1
108	ESTIMATION OF CAMERA 3D-POSITION TO MINIMIZE OCCLUSIONS. , 2007, , .		1

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109	An advanced interactive interface for robotics elearning. International Journal of Online Engineering, 2008, 4, .	0.5	1
110	Event-based Visual Servoing. , 2013, , .		1
111	DM-UAV: Dexterous Manipulation Unmanned Aerial Vehicle. , 2017, , .		1
112	Graph models applied to specification, simulation, allocation, and scheduling of real-time computer vision applications. International Journal of Imaging Systems and Technology, 2000, 11, 287-291.	2.7	0
113	Direct visual servoing of a redundant robot with chaos compensation. , 2013, , .		0
114	Practical experiences on a real pumping system emulated by a hardware model and used as a remote laboratory. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 339-344.	0.4	0
115	FPGA-based visual control of robot manipulators using dynamic perceptibility. , 2015, , .		0
116	Static Scheduling with Interruption Costs for Computer Vision Applications. Lecture Notes in Computer Science, 2003, , 509-522.	1.0	0
117	IMPROVING TRACKING TRAJECTORIES WITH MOTION ESTIMATION. , 2006, , .		0
118	CALCULATION OF OPTIMAL TRAJECTORY IN 3-D STRUCTURED ENVIRONMENT BY USING GEODESY AND MATHEMATICAL MORPHOLOGY. , 2006, , .		0
119	TASK PLANNER FOR HUMAN-ROBOT INTERACTION INSIDE A COOPERATIVE DISASSEMBLY ROBOTIC SYSTEM. , 2007, , .		0
120	EJS+EJSRL: A FREE JAVA TOOL FOR ADVANCED ROBOTICS SIMULATION AND COMPUTER VISION PROCESSING. , 2010, , .		0
121	VISUAL SERVOING OF A MULTI-ROBOTIC SYSTEM FOR MANIPULATION TASKS. , 2011, , .		0
122	REAL TIME UNILATERAL TELEOPERATION SYSTEM FOR ARM MOVEMENT PERFORMANCE. , 2011, , .		0
123	Disassembly Planning using Visual Servoing. , 2012, , .		0
124	Autonomous Surface Vessel based on a Low Cost Catamaran Design. , 2016, , .		0
125	Oil Spill Detection using Segmentation based Approaches. , 2017, , .		0
126	Speed Estimation for Control of an Unmanned Ground Vehicle using Extremely Low Resolution Sensors. , 2018, , .		0



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127	An Uncalibrated Approach to Track Trajectories using Visualâ€“Force Control. , 2007, , 103-108.		0