Rui Cortesao

List of Publications by Year
in descending order

48 papers	530 citations	1163117 8 h-index	940533 16 g-index
48 all docs	48 docs citations	48 times ranked	469 citing authors

#	Article	IF	Citations
1	Physical feasibility of robot base inertial parameter identification: A linear matrix inequality approach. International Journal of Robotics Research, 2014, 33, 931-944.	8.5	91
2	On Kalman Active Observers. Journal of Intelligent and Robotic Systems: Theory and Applications, 2007, 48, 131-155.	3.4	51
3	Inertia Tensor Properties in Robot Dynamics Identification: A Linear Matrix Inequality Approach. IEEE/ASME Transactions on Mechatronics, 2019, 24, 406-411.	5.8	35
4	Computed-Torque Control for Robotic-Assisted Tele-Echography Based on Perceived Stiffness Estimation. IEEE Transactions on Automation Science and Engineering, 2018, 15, 1337-1354.	5.2	30
5	Impedance Control Architecture for Robotic-Assisted Mold Polishing Based on Human Demonstration. IEEE Transactions on Industrial Electronics, 2022, 69, 3822-3830.	7.9	30
6	Robust Control for Steer-by-Wire Vehicles. Autonomous Robots, 2005, 19, 193-214.	4.8	25
7	Harvested Power Wireless Sensor Network Solution for Disaggregated Current Estimation in Large Buildings. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 1847-1857.	4.7	22
8	Robot Force Control on a Beating Heart. IEEE/ASME Transactions on Mechatronics, 2017, 22, 1736-1743.	5.8	18
9	Haptic Control Design for Robotic-Assisted Minimally Invasive Surgery. , 2006, , .		15
10	Low cost wireless sensor network for in-field operation monitoring of induction motors. , 2010, , .		14
11	Stability and transparency analysis of a haptic feedback controller for medical applications. , 2007, , .		12
12	Motion compensation for robotic-assisted surgery with force feedback. , 2009, , .		12
13	Towards teleoperated needle insertion with haptic feedback controller. , 2007, , .		11
14	Compensation for 3D physiological motion in robotic-assisted surgery using a predictive force controller. Experimental results. , 2009, , .		11
15	Heart motion compensation for robotic-assisted surgery predictive approach vs. active observer. , 2011, , .		10
16	Model predictive control architectures with force feedback for robotic-assisted beating heart surgery. , 2014, , .		10
17	Energy harvesting for Zigbee compliant Wireless Sensor Network nodes. , 2012, , .		9
18	SageRobotics. , 2012, , .		7

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19	Admittance control for robotic-assisted tele-echography. , 2013, , .		7
20	A dynamically consistent hierarchical control architecture for robotic-assisted tele-echography with motion and contact dynamics driven by a 3D time-of-flight camera and a force sensor. , 2015, , .		7
21	Environment stiffness estimation with multiple observers. , 2009, , .		6
22	Active impedance control design for human-robot comanipulation. , 2010, , .		6
23	System stiffness estimation with the candidate observers algorithm. , 2010, , .		6
24	Comparison of position and force-based techniques for environment stiffness estimation in robotic tasks. , 2012, , .		6
25	Joint space torque control with task space posture reference for robotic-assisted tele-echography. , 2012, , .		6
26	Powering Wireless Sensor Networks Nodes for Complex Protocols on Harvested Energy. Procedia Technology, 2012, 5, 518-526.	1.1	6
27	Cascade force control for autonomous beating heart motion compensation. Control Engineering Practice, 2015, 37, 80-88.	5.5	6
28	Computed torque posture control for robotic-assisted tele-echography. , 2010, , .		5
29	Haptic tele-manipulation for robotic-assisted Minimally Invasive Surgery with explicit posture control. , 2010, , .		5
30	Adaptive stiffness estimation for compliant robotic manipulation using stochastic disturbance models. International Journal of Systems Science, 2011, 42, 1241-1252.	5.5	5
31	IROS 2012 Competitions [Competitions]. IEEE Robotics and Automation Magazine, 2013, 20, 10-12.	2.0	5
32	Sensor fusion for human-robot skill transfer systems. Advanced Robotics, 2000, 14, 537-549.	1.8	4
33	In-field operation monitoring of induction motors using wireless modules running on harvested power. , 2011, , .		4
34	Physically feasible dynamic parameter identification of the 7-DOF WAM robot. , 2013, , .		4
35	Device and operation mechanism for non-beacon IEEE802.15.4/Zigbee nodes running on harvested energy. Ad Hoc Networks, 2015, 26, 50-68.	5.5	4
36	Force-based stiffness estimation for robotic tasks. , 2012, , .		3

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37	Cascade robot force control architecture for autonomous beating heart motion compensation with model predictive control and active observer. , 2014, , .		3
38	Perceived Stiffness Estimation for Robot Force Control. , 2018, , .		3
39	Control Architecture for Robotic-Assisted Polishing Tasks Based on Human Skills. , 2019, , .		3
40	Twin Kinematics Approach for Robotic-Assisted Tele-Echography. , 2019, , .		3
41	An Energy Study of a LoRaWan Based Electrical Impedance Spectroscopy Module for Tree Health Monitoring. , 2019, , .		3
42	Impedance control architecture for robotic-assisted micro-drilling tasks. Journal of Manufacturing Processes, 2021, 67, 356-363.	5.9	3
43	A dynamically consistent hierarchical control architecture for robotic-assisted tele-echography. , 2014, , .		2
44	A neural-based approach for stiffness estimation in robotic tasks. , 2013, , .		1
45	Noise Effects on Quaternion and Axis-Angle Representations in Robotics. IEEE Robotics and Automation Letters, 2021, 6, 64-71.	5.1	1
46	Compliant comanipulation control for medical robotics. , 2009, , .		0
47	Correction to "Robot Force Control on a Beating Heart". IEEE/ASME Transactions on Mechatronics, 2017, 22, 2802-2802.	5.8	0
48	Semi-Automatic Tool for Dynamic Contour Tracking in Image-Guided Ultrasound Procedures. , 2020, , .		0