Gianni Borghesan

List of Publications by Year
in descending order

39 papers	526 citations	933447 10 h-index	794594 19 g-index
40 all docs	40 docs citations	40 times ranked	454 citing authors

#	Article	IF	Citations
1	Modeling, Identification, and Control of Tendon-Based Actuation Systems. IEEE Transactions on Robotics, 2012, 28, 277-290.	10.3	135
2	Tendon-based transmission systems for robotic devices: Models and control algorithms. , 2009, , .		31
3	Robust Catheter Tracking by Fusing Electromagnetic Tracking, Fiber Bragg Grating and Sparse Fluoroscopic Images. IEEE Sensors Journal, 2021, 21, 23422-23434.	4.7	23
4	Bilateral energy transfer in delayed teleoperation on the time domain. , 2008, , .		22
5	Design of tendon-driven robotic fingers: Modeling and control issues. , 2010, , .		22
6	Combined OCT distance and FBG force sensing cannulation needle for retinal vein cannulation: in vivo animal validation. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 301-309.	2.8	22
7	Integrated Mechatronic Design for a New Generation of Robotic Hands. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 8-13.	0.4	21
8	Force from Shapeâ€"Estimating the Location and Magnitude of the External Force on Flexible Instruments. IEEE Transactions on Robotics, 2021, 37, 1826-1833.	10.3	21
9	Evaluation of Haptic Feedback on Bimanually Teleoperated Laparoscopy for Endometriosis Surgery. IEEE Transactions on Biomedical Engineering, 2019, 66, 1207-1221.	4.2	20
10	Robotic Endoscope Control Via Autonomous Instrument Tracking. Frontiers in Robotics and AI, 2022, 9, 832208.	3.2	17
11	Development and Experimental Validation of a Combined FBG Force and OCT Distance Sensing Needle for Robot-Assisted Retinal Vein Cannulation. , 2018, , .		15
12	Deep-Learning-Based Compliant Motion Control of a Pneumatically-Driven Robotic Catheter. IEEE Robotics and Automation Letters, 2022, 7, 8853-8860.	5.1	15
13	Friction compensation and virtual force sensing for robotic hands. , 2011, , .		13
14	Estimating and Localizing External Forces Applied on Flexible Instruments by Shape Sensing. , 2019, , .		13
15	Constraint-Based Interaction Control of Robots Featuring Large Compliance and Deformation. IEEE Transactions on Robotics, 2015, 31, 1252-1260.	10.3	12
16	Constraint-based specification of hybrid position-impedance-force tasks. , 2014, , .		11
17	Friction and visco-elasticity effects in tendon-based transmission systems. , 2010, , .		10
18	Introducing Geometric Constraint Expressions Into Robot Constrained Motion Specification and Control. IEEE Robotics and Automation Letters, 2016, 1, 1140-1147.	5.1	10

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19	Contact Localization of Continuum and Flexible Robot Using Data-Driven Approach. IEEE Robotics and Automation Letters, 2022, 7, 6910-6917.	5.1	10
20	A constraint-based programming approach to physical human-robot interaction. , 2012, , .		8
21	Interconnection and Simulation Issues in Haptics. IEEE Transactions on Haptics, 2010, 3, 266-279.	2.7	7
22	Control of a hybrid robotic system for computer-assisted interventions in dynamic environments. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 1371-1383.	2.8	7
23	Single Scan OCT-Based Retina Detection for Robot-Assisted Retinal Vein Cannulation. Journal of Medical Robotics Research, 2018, 03, 1840005.	1.2	7
24	Model and Modeless Friction Compensation: Application to a Defective Haptic Interface. Lecture Notes in Computer Science, 2008, , 94-103.	1.3	6
25	Bilateral Energy Transfer for high fidelity haptic telemanipulation. , 2009, , .		5
26	Bridging the gap between discrete symbolic planning and optimization-based robot control. , 2015, , .		5
27	Incorporating Artificial Skin Signals in the Constraint-based Reactive Control of Human-Robot Collaborative Manipulation Tasks. , 2018, , .		5
28	Towards Palpation in Virtual Reality by an Encountered-Type Haptic Screen. Lecture Notes in Computer Science, 2014, , 257-265.	1.3	5
29	Electrical Bio-Impedance Proximity Sensing for Vitreo-Retinal Micro-Surgery. IEEE Robotics and Automation Letters, 2019, 4, 4086-4093.	5.1	4
30	A Hybrid Active/Passive Wrist Approach for Increasing Virtual Fixture Stiffness in Comanipulated Robotic Minimally Invasive Surgery. IEEE Robotics and Automation Letters, 2019, 4, 3029-3036.	5.1	4
31	Simulation Issues in Haptics. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	3
32	Innovative Bio-Impedance Sensor Towards Puncture Detection in Eye Surgery for Retinal Vein Occlusion Treatment. , 2018, , .		3
33	Incorporating artificial skin signals in the constraint-based reactive control of human–robot collaborative manipulation tasks. Industrial Robot, 2019, 46, 360-368.	2.1	3
34	IVUS-Based Local Vessel Estimation for Robotic Intravascular Navigation. IEEE Robotics and Automation Letters, 2021, 6, 8102-8109.	5.1	3
35	A framework for formal specification of robotic constraint-based tasks and their concurrent execution with online qos monitoring. , 2014, , .		2
36	Constraint- and synergy-based specification of manipulation tasks. , 2014, , .		2

#	Article	IF	Citations
37	Towards Real-time Estimation of a Spherical Eye Model based on a Single Fiber OCT. , 2019, , .		2
38	Teleoperation in Presence of Uncertainties: a Constraint-Based Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 385-392.	0.4	1
39	A Computational Model for Frictional Effects Applied To Dexterous Hands with Soft Padsâ‹†. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1072-1077.	0.4	0