

# Luigi Biagiotti

## List of Publications by Year in descending order

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42  
papers

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citations

1039880

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940416

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42  
docs citations

42  
times ranked

470  
citing authors

#	ARTICLE	IF	CITATIONS
1	Combining Unsupervised Muscle Co-Contraction Estimation With Bio-Feedback Allows Augmented Kinesthetic Teaching. IEEE Robotics and Automation Letters, 2021, 6, 6180-6187.	3.3	7
2	Optimization of Generalized S-Curve Trajectories for Residual Vibration Suppression and Compliance With Kinematic Bounds. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2724-2734.	3.7	12
3	Damped Harmonic Smoother for Trajectory Planning and Vibration Suppression. IEEE Transactions on Control Systems Technology, 2020, 28, 626-634.	3.2	5
4	Improving the Accuracy of Industrial Robots via Iterative Reference Trajectory Modification. IEEE Transactions on Control Systems Technology, 2020, 28, 831-843.	3.2	13
5	Repetitive Control Meets Continuous Zero Phase Error Tracking Controller for Precise Tracking of B-Spline Trajectories. IEEE Transactions on Industrial Electronics, 2020, 67, 7808-7818.	5.2	11
6	Grasp-Oriented Myoelectric Interfaces for Robotic Hands: A Minimal-Training Synergy-Based Framework for Intent Detection, Control and Perception. Springer Proceedings in Advanced Robotics, 2020, , 110-124.	0.9	2
7	A Control Architecture for Grasp Strength Regulation in Myocontrolled Robotic Hands Using Vibrotactile Feedback: Preliminary Results. , 2019, 2019, 1272-1277.		3
8	Zero-phase velocity tracking of vibratory systems with actuation constraints. Control Engineering Practice, 2019, 87, 1-16.	3.2	2
9	Trajectory generation via FIR filters: A procedure for time-optimization under kinematic and frequency constraints. Control Engineering Practice, 2019, 87, 43-58.	3.2	15
10	A Plug-In Feed-Forward Control for Sloshing Suppression in Robotic Teleoperation Tasks. , 2018, , .		10
11	Physical-consistent behavior embodied in B-spline curves for robot path planning. IFAC-PapersOnLine, 2018, 51, 306-311.	0.5	5
12	Toward the Next Generation of Robotic Waiters. , 2018, , .		0
13	Manipulating liquids with robots: A sloshing-free solution. Control Engineering Practice, 2018, 78, 129-141.	3.2	19
14	Control of liquid handling robotic systems: A feed-forward approach to suppress sloshing. , 2017, , .		11
15	Feedforward control of Variable Stiffness Joints robots for vibrations suppression. , 2017, , .		0
16	Multidimensional Trajectories Generation with Vibration Suppression Capabilities: the Role of Exponential B-splines * *This activity has been supported by the University of Modena and Reggio Emilia with the "FAR 2015" project.. IFAC-PapersOnLine, 2017, 50, 6054-6059.	0.5	4
17	Repetitive control of non-minimum phase systems along B-spline trajectories. , 2016, , .		4
18	Optimal Trajectories for Vibration Reduction Based on Exponential Filters. IEEE Transactions on Control Systems Technology, 2015, , 1-1.	3.2	22

#	ARTICLE	IF	CITATIONS
19	A repetitive control scheme for industrial robots based on b-spline trajectories. , 2015, , .		8
20	A Repetitive Control Scheme Based on B-Spline Trajectories Modification**This activity has been supported by the University of Bologna, with the "FARB Linea 2" funding action.. IFAC-PapersOnLine, 2015, 48, 262-267.	0.5	1
21	Qualitative graphical representation of Nyquist plots. Systems and Control Letters, 2015, 83, 53-60.	1.3	7
22	An innovative stand-alone bioreactor for the highly reproducible transfer of cyclic mechanical stretch to stem cells cultured in a 3D scaffold. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 787-793.	1.3	20
23	Online trajectory planning and filtering for robotic applications via B-spline smoothing filters. , 2013, , .		18
24	Integration of robotic systems in a packaging machine: A tool for design and simulation of efficient motion trajectories. , 2013, , .		1
25	FIR filters for online trajectory planning with time- and frequency-domain specifications. Control Engineering Practice, 2012, 20, 1385-1399.	3.2	81
26	Online Planning of Multi-Segment Trajectories with Trigonometric blends. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10343-10348.	0.4	1
27	Efficient simulation of Static and Dynamic friction for Automotive Applications. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 2132-2137.	0.4	0
28	Input shaping via B-spline filters for 3-D trajectory planning. , 2011, , .		0
29	Time-optimal regulation of a chain of integrators with saturated input and internal variables: an application to trajectory planning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 1278-1283.	0.4	10
30	Online trajectory planner with constraints on velocity, acceleration and torque. , 2010, , .		7
31	B-spline based filters for multi-point trajectories planning. , 2010, , .		24
32	Environment Estimation in Teleoperation Systems. , 2007, , 211-231.		3
33	A bioreactor for electromechanical stress of cells to address towards cardiac phenotype. Journal of Molecular and Cellular Cardiology, 2007, 42, S89.	0.9	0
34	ROBOTICAD: A MATLAB® TOOLBOX FOR ROBOT MANIPULATORS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 431-436.	0.4	4
35	SMOOTH TRAJECTORIES FOR HIGH-PERFORMANCE MULTI-AXES AUTOMATIC MACHINES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 175-180.	0.4	1
36	Nonlinear Modeling and Experimental Identification of Hemispherical Soft Pads for Robotic Manipulators. , 2005, , 363.		1

#	ARTICLE	IF	CITATIONS
37	Modelling and identification of soft pads for robotic hands. , 2005, , .		16
38	UBH 3: an anthropomorphic hand with simplified endo-skeletal structure and soft continuous fingerpads. , 2004, , .		42
39	A dexterous robotic gripper for autonomous grasping. Industrial Robot, 2003, 30, 449-458.	1.2	3
40	An integrated approach to the design of complex robotic end-effectors. , 0, , .		4
41	Robotic Interaction Through Compliant Interfaces: Modelling and Identification. , 0, , .		0
42	Development of UB Hand 3: Early Results. , 0, , .		132