

Raffaella Carloni

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

1,338
citations

759233

12
h-index

752698

20
g-index

50
all docs

50
docs citations

50
times ranked

1200
citing authors

#	ARTICLE	IF	CITATIONS
1	The effect of morphology on poly(vinylidene Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 747 Td (fluoride-trifluoroethylene-chlorotrifluoroethylene)-based aligned nanofiber mats. Sensors and Actuators A: Physical, 2022, 333, 113255.	4.1	5
2	Structural FEA-Based Design and Functionality Verification Methodology of Energy-Storing-and-Releasing Prosthetic Feet. Applied Sciences (Switzerland), 2022, 12, 97.	2.5	2
3	An Adaptive Hybrid Control Architecture for an Active Transfemoral Prosthesis. IEEE Access, 2022, 10, 52008-52019.	4.2	2
4	The Functionality Verification through Pilot Human Subject Testing of MyFlex-Î: An ESR Foot Prosthesis with Spherical Ankle Joint. Applied Sciences (Switzerland), 2022, 12, 4575.	2.5	0
5	IMU-Based Deep Neural Networks: Prediction of Locomotor and Transition Intentions of an Osseointegrated Transfemoral Amputee. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1079-1088.	4.9	20
6	Deep Reinforcement Learning for Physics-Based Musculoskeletal Simulations of Healthy Subjects and Transfemoral Prosthesesâ€™ Users During Normal Walking. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 607-618.	4.9	16
7	A Polyurethane-based Electrospun Nanofiber Bundle Soft Actuator: Fabrication, Modeling, and Control. , 2021, , .		0
8	A Comparative Study of Predictive Models for Nafion-117 IPMC Soft Actuators. , 2021, , .		3
9	Towards Poly(vinylidene fluoride-trifluoroethylene-chlorotrifluoroethylene)-Based Soft Actuators: Films and Electrospun Aligned Nanofiber Mats. Nanomaterials, 2021, 11, 172.	4.1	7
10	Musculoskeletal Model of an Osseointegrated Transfemoral Amputee in OpenSim. , 2020, , .		8
11	Hierarchical fibrous structures for muscleâ€™inspired softâ€™actuators: A review. Applied Materials Today, 2020, 20, 100772.	4.3	30
12	IMU-based Deep Neural Networks for Locomotor Intention Prediction. , 2020, , .		5
13	A Variable Stiffness Joint With Electrospun P(VDF-TrFE-CTFE) Variable Stiffness Springs. IEEE Robotics and Automation Letters, 2018, 3, 973-978.	5.1	11
14	Conceptual Design of a Fully Passive Transfemoral Prosthesis to Facilitate Energy-Efficient Gait. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 2360-2366.	4.9	3
15	Autonomous Battery Exchange of UAVs with a Mobile Ground Base. , 2018, , .		18
16	Modeling Robotic Manipulators Powered by Variable Stiffness Actuators: A Graph-Theoretic and Port-Hamiltonian Formalism. IEEE Transactions on Robotics, 2017, 33, 807-818.	10.3	11
17	A 2-DOF Joint With Coupled Variable Output Stiffness. IEEE Robotics and Automation Letters, 2017, 2, 366-372.	5.1	3
18	Control of a variable stiffness joint for catching a moving object. , 2017, , .		2

#	ARTICLE	IF	CITATIONS
19	Mechatronic design of a variable stiffness robotic arm. , 2017, , .		5
20	Optimal event handling by multiple unmanned aerial vehicles. , 2016, , .		1
21	Elastic energy storage in leaf springs for a lever-arm based Variable Stiffness Actuator. , 2016, , .		13
22	Robust control of UAVs using the parameter space approach. , 2016, , .		13
23	The SHERPA gripper: Grasping of small-scale UAVs. , 2016, , .		4
24	Variable Stiffness Actuators: Review on Design and Components. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2418-2430.	5.8	293
25	Bilateral human-robot control for semi-autonomous UAV navigation. , 2015, , .		2
26	Switching proportional EMG control of a 3D endpoint arm support for people with duchenne muscular dystrophy. , 2015, , .		4
27	Variable impedance control for aerial interaction. , 2014, , .		19
28	On Bilateral Teleoperation of Aerial Robots. IEEE Transactions on Robotics, 2014, 30, 258-274.	10.3	32
29	Exploiting the dynamics of a robotic manipulator for control of UAVs. , 2014, , .		17
30	Bipedal walking gait with variable stiffness knees. , 2014, , .		3
31	Variable bipedal walking gait with variable leg stiffness. , 2014, , .		4
32	Developing an Aerial Manipulator Prototype: Physical Interaction with the Environment. IEEE Robotics and Automation Magazine, 2014, 21, 41-50.	2.0	129
33	The Variable Stiffness Actuator vsaUT-II: Mechanical Design, Modeling, and Identification. IEEE/ASME Transactions on Mechatronics, 2014, 19, 589-597.	5.8	120
34	Robot Vision: Obstacle-Avoidance Techniques for Unmanned Aerial Vehicles. IEEE Robotics and Automation Magazine, 2013, 20, 22-31.	2.0	34
35	Lending a helping hand: toward novel assistive robotic arms. IEEE Robotics and Automation Magazine, 2013, 20, 20-29.	2.0	33
36	Interaction control of an UAV endowed with a manipulator. , 2013, , .		67

#	ARTICLE	IF	CITATIONS
37	A modified impedance control for physical interaction of UAVs. , 2013, , .		15
38	A contribution to haptic teleoperation of aerial vehicles. , 2012, , .		4
39	Limit cycles and stiffness control with variable stiffness actuators. , 2012, , .		2
40	Kinetic scrolling-based position mapping for haptic teleoperation of unmanned aerial vehicles. , 2012, , .		16
41	Bilateral teleoperation of underactuated unmanned aerial vehicles: The virtual slave concept. , 2012, , .		18
42	Variable Stiffness Actuators: A Port-Based Power-Flow Analysis. IEEE Transactions on Robotics, 2012, 28, 1-11.	10.3	52
43	Switching-based mapping and control for haptic teleoperation of aerial robots. , 2012, , .		9
44	The mVSA-UT: A miniaturized differential mechanism for a continuous rotational variable stiffness actuator. , 2012, , .		30
45	An energy efficient knee locking mechanism for a dynamically walking robot. , 2011, , .		19
46	Energy-Efficient Variable Stiffness Actuators. IEEE Transactions on Robotics, 2011, 27, 865-875.	10.3	200
47	Mechatronic design of the Twente humanoid head. Intelligent Service Robotics, 2011, 4, 107-118.	2.6	16
48	Port-based modeling and control of underactuated aerial vehicles. , 2011, , .		16
49	Compliance analysis of an under-actuated robotic finger. , 2010, , .		2
50	Digital elevation map reconstruction for port-based dynamic simulation of contacts on irregular surfaces. , 2009, , .		0