Cecilia Laschi

List of Publications by Year in Descending Order

319 papers	8,853 citations	42 h-index	87 g-index
361 ext. papers	11,274 ext. citations	4 avg, IF	6.7 L-index

#	Paper	IF	Citations
319	Closed-loop Dynamic Control of a Soft Manipulator using Deep Reinforcement Learning. *IEEE Robotics and Automation Letters*, **2022**, 1-1	4.2	1
318	Modeling Vestibular Afferents for Neuromorphic Sensing and Eye Movement Control. *Lecture Notes in Networks and Systems*, **2022**, 142-153	0.5	
317	Controlling Soft Robotic Arms Using Continual Learning. *IEEE Robotics and Automation Letters*, **2022**, 7, 5469-5476	4.2	1
316	Soft Robotics. *Intelligent Systems, Control and Automation: Science and Engineering*, **2022**, 115-136	0.6	
315	Experiments on Oscillation Control of a Continuum Soft Robotic Manipulator. *Lecture Notes in Mechanical Engineering*, **2021**, 557-571	0.4	
314	Bioinspired materials and approaches for soft robotics. *MRS Bulletin*, **2021**, 46, 345-349	3.2	0
313	Learning to stop: a unifying principle for legged locomotion in varying environments. *Royal Society Open Science*, **2021**, 8, 210223	3.3	0
312	Actuation Technologies for Soft Robot Grippers and Manipulators: A Review. *Current Robotics Reports*, **2021**, 2, 355-369	3.5	15
311	Conductive Silicone Vocal Folds Reproducing Electroglottographic Signal in Pathophysiological Conditions. *IEEE Transactions on Medical Robotics and Bionics*, **2021**, 3, 337-348	3.1	1
310	Morphologically induced stability on an underwater legged robot with a deformable body. *International Journal of Robotics Research*, **2021**, 40, 435-448	5.7	9
309	Recurrence quantification analysis of EEG signals for tactile roughness discrimination. *International Journal of Machine Learning and Cybernetics*, **2021**, 12, 1115-1136	3.8	2
308	Making an Opportunity Out of a Crisis: The Inclusive Approach of the Italian Robotics Community. *IEEE Robotics and Automation Magazine*, **2021**, 2-14	3.4	1
307	Robotics Responds to the COVID-19 Outbreak [From the Guest Editors]. *IEEE Robotics and Automation Magazine*, **2021**, 28, 16-17	3.4	1
306	The Italy–Japan Workshop: A History of Bilateral Cooperation, Pushing the Boundaries of Robotics. *IEEE Robotics and Automation Magazine*, **2021**, 28, 150-162	3.4	
305	Sharpness recognition based on synergy between bio-inspired nociceptors and tactile mechanoreceptors. *Scientific Reports*, **2021**, 11, 2109	4.9	3
304	Bioinspired underwater legged robot for seabed exploration with low environmental disturbance. *Science Robotics*, **2020**, 5,	18.6	31
303	Locomotory behaviour of the intertidal marble crab (Pachygrapsus marmoratus) supports the underwater spring-loaded inverted pendulum as a fundamental model for punting in animals. *Bioinspiration and Biomimetics*, **2020**, 15, 055004	2.6	4

302	A vision for future bioinspired and biohybrid robots. *Science Robotics*, **2020**, 5,	18.6	23
301	I-Support: A robotic platform of an assistive bathing robot for the elderly population. *Robotics and Autonomous Systems*, **2020**, 126, 103451	3.5	15
300	Cerebellar adaptive mechanisms explain the optimal control of saccadic eye movements. *Bioinspiration and Biomimetics*, **2020**, 16, 016004	2.6	1
299	A Cerebellum-Inspired Learning Approach for Adaptive and Anticipatory Control. *International Journal of Neural Systems*, **2020**, 30, 1950028	6.2	7
298	Evaluation of the Electroglottographic Signal Variability in Organic and Functional Dysphonia. *Journal of Voice*, **2020**,	1.9	1
297	Experimental and Computational Study on Motor Control and Recovery After Stroke: Toward a Constructive Loop Between Experimental and Virtual Embodied Neuroscience. *Frontiers in Systems Neuroscience*, **2020**, 14, 31	3.5	6
296	A bistable soft gripper with mechanically embedded sensing and actuation for fast grasping **2020**,		4
295	. *IEEE Robotics and Automation Magazine*, **2020**, 27, 12-26	3.4	11
294	The Challenge of Studying Interaction in Children with Autism Spectrum Disorder during Play Activity with a Robotic Platform. *Journal of Developmental and Physical Disabilities*, **2020**, 32, 113-129	1.5	2
293	Quantitative Measurements of Octopus vulgaris Arms for Bioinspired Soft Robotics. *Cognitive Systems Monographs*, **2020**, 3-14	0.2	2
292	Spike train analysis in a digital neuromorphic system of cutaneous mechanoreceptor. *Neurocomputing*, **2020**, 379, 343-355	5.4	0
291	Structured motor exploration for adaptive learning-based tracking in soft robotic manipulators **2019**,		1
290	Combining Evolutionary and Adaptive Control Strategies for Quadruped Robotic Locomotion. *Frontiers in Neurorobotics*, **2019**, 13, 71	3.4	4
289	Soft robot perception using embedded soft sensors and recurrent neural networks. *Science Robotics*, **2019**, 4,	18.6	189
288	Early Intervention to Improve Sucking in Preterm Newborns: A Systematic Review of Quantitative Studies. *Advances in Neonatal Care*, **2019**, 19, 97-109	2	7
287	Emergence of behavior through morphology: a case study on an octopus inspired manipulator. *Bioinspiration and Biomimetics*, **2019**, 14, 034001	2.6	4
286	The Use of Smart Tools for Combined Training of People with MCI: A Case Report. *Lecture Notes in Electrical Engineering*, **2019**, 121-134	0.2	
285	Cerebellum-inspired approach for adaptive kinematic control of soft robots **2019**,		4

284	Foot Inertial Sensing for Combined Cognitive-Motor Exercise of the Sustained Attention Domain. *IEEE Transactions on Biomedical Engineering*, **2019**, 66, 2413-2420	5	5
283	Emotion as an emergent phenomenon of the neurocomputational energy regulation mechanism of a cognitive agent in a decision-making task. *Adaptive Behavior*, **2019**, 105971231988064	1.1	2
282	Comparison of electroglottographic variability index in euphonic and pathological voice. *Acta Otorhinolaryngologica Italica*, **2019**, 39, 381-388	2.8	3
281	A Digital Hardware System for Spiking Network of Tactile Afferents. *Frontiers in Neuroscience*, **2019**, 13, 1330	5.1	2
280	Surveying and cleaning plastic pollution in the sediment: SILVER+ approach **2019**,		5
279	Can physical and cognitive training based on episodic memory be combined in a new protocol for daily training?. *Aging Clinical and Experimental Research*, **2019**, 31, 1615-1623	4.8	4
278	Model-Based Reinforcement Learning for Closed-Loop Dynamic Control of Soft Robotic Manipulators. *IEEE Transactions on Robotics*, **2019**, 35, 124-134	6.5	93
277	. *IEEE/ASME Transactions on Mechatronics*, **2019**, 24, 109-119	5.5	11
276	Stable Open Loop Control of Soft Robotic Manipulators. *IEEE Robotics and Automation Letters*, **2018**, 3, 1292-1298	4.2	37
275	Control Strategies for Soft Robotic Manipulators: A Survey. *Soft Robotics*, **2018**, 5, 149-163	9.2	220
274	A Multi-soft-body Dynamic Model for Underwater Soft Robots. *Springer Proceedings in Advanced Robotics*, **2018**, 143-160	0.6	4
273	A Digital Hardware Realization for Spiking Model of Cutaneous Mechanoreceptor. *Frontiers in Neuroscience*, **2018**, 12, 322	5.1	16
272	Effect of base rotation on the controllability of a redundant soft robotic arm **2018**,		1
271	Evolving Soft Locomotion in Aquatic and Terrestrial Environments: Effects of Material Properties and Environmental Transitions. *Soft Robotics*, **2018**, 5, 475-495	9.2	27
270	A unified multi-soft-body dynamic model for underwater soft robots. *International Journal of Robotics Research*, **2018**, 37, 648-666	5.7	23
269	. *IEEE Sensors Journal*, **2018**, 18, 6327-6336	4	11
268	Modeling the Encoding of Saccade Kinematic Metrics in the Purkinje Cell Layer of the Cerebellar Vermis. *Frontiers in Computational Neuroscience*, **2018**, 12, 108	3.5	2
267	Multiobjective Optimization for Stiffness and Position Control in a Soft Robot Arm Module. *IEEE Robotics and Automation Letters*, **2018**, 3, 108-115	4.2	46

266	Model-based open loop control of a multigait legged underwater robot. *Mechatronics*, **2018**, 55, 162-170	3	17
265	Induced Vibrations of Soft Robotic Manipulators for Controller Design and Stiffness Estimation **2018**,		3
264	Biomedical applications of soft robotics. *Nature Reviews Materials*, **2018**, 3, 143-153	73.3	437
263	Head stabilization in a humanoid robot: models and implementations. *Autonomous Robots*, **2017**, 41, 349-365	3	12
262	Evaluation of the Electroglottographic signal variability by amplitude-speed combined analysis. *Biomedical Signal Processing and Control*, **2017**, 37, 61-68	4.9	7
261	Educational Robotics intervention on Executive Functions in preschool children: A pilot study. *Computers in Human Behavior*, **2017**, 71, 16-23	7.7	79
260	Octobot - A robot octopus points the way to soft robotics. *IEEE Spectrum*, **2017**, 54, 38-43	1.7	8
259	Hybrid parameter identification of a multi-modal underwater soft robot. *Bioinspiration and Biomimetics*, **2017**, 12, 025007	2.6	28
258	Electrohydrodynamic Conduction Pump with Asymmetrical Electrode Structures in the Microchannels. *Chemistry Letters*, **2017**, 46, 950-952	1.7	12
257	Towards the development of a soft manipulator as an assistive robot for personal care of elderly people. *International Journal of Advanced Robotic Systems*, **2017**, 14, 172988141668713	1.4	49
256	Fundamentals of soft robot locomotion. *Journal of the Royal Society Interface*, **2017**, 14,	4.1	115
255	Conduction Electrohydrodynamics with Mobile Electrodes: A Novel Actuation System for Untethered Robots. *Advanced Science*, **2017**, 4, 1600495	13.6	16
254	Helping robots blend into the background. *Science*, **2017**, 358, 169	33.3	5
253	Morphological and control criteria for self-stable underwater hopping. *Bioinspiration and Biomimetics*, **2017**, 13, 016001	2.6	8
252	Development and characterization of a multilayer matrix textile sensor for interface pressure measurements. *Smart Materials and Structures*, **2017**, 26, 104011	3.4	17
251	Learning dynamic models for open loop predictive control of soft robotic manipulators. *Bioinspiration and Biomimetics*, **2017**, 12, 066003	2.6	50
250	A comprehensive gaze stabilization controller based on cerebellar internal models. *Bioinspiration and Biomimetics*, **2017**, 12, 065001	2.6	10
249	A rotating polarizing filter approach for image enhancement **2017**,		3

248	Active-Braid, a Bioinspired Continuum Manipulator. *IEEE Robotics and Automation Letters*, **2017**, 2, 2104-2110	4.2	8
247	An active simulator for neonatal intubation: Design, development and assessment. *Medical Engineering and Physics*, **2017**, 39, 57-65	2.4	3
246	A Framework for Coupled Simulations of Robots and Spiking Neuronal Networks. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2017**, 85, 71-91	2.9	11
245	Warp-Knitted Textile as a Strain Sensor: Characterization Procedure and Application in a Comfortable Wearable Goniometer. *IEEE Sensors Journal*, **2017**, 17, 5927-5936	4	16
244	Feasibility study on the assessment of auditory sustained attention through walking motor parameters in mild cognitive impairments and healthy subjects. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 897-900	0.9	6
243	Development and testing of a new cognitive technological tool for episodic memory: A feasibility study. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 893-896	0.9	3
242	Sense of movement: Simplifying principles for humanoid robots. *Science Robotics*, **2017**, 2,	18.6	1
241	Swinging paper actuator driven by conduction electrohydrodynamics **2017**,		2
240	Active suction cup actuated by ElectroHydroDynamics phenomenon **2017**,		9
239	A pressure-sensitive palatograph for speech analysis. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 4431-4434	0.9	1
238	Evolutionary Developmental Soft Robotics As a Framework to Study Intelligence and Adaptive Behavior in Animals and Plants. *Frontiers in Robotics and AI*, **2017**, 4,	2.8	9
237	Connecting Artificial Brains to Robots in a Comprehensive Simulation Framework: The Neurorobotics Platform. *Frontiers in Neurorobotics*, **2017**, 11, 2	3.4	48
236	Proprioceptive Feedback through a Neuromorphic Muscle Spindle Model. *Frontiers in Neuroscience*, **2017**, 11, 341	5.1	2
235	Learning Closed Loop Kinematic Controllers for Continuum Manipulators in Unstructured Environments. *Soft Robotics*, **2017**, 4, 285-296	9.2	48
234	Exploiting Morphology of a Soft Manipulator for Assistive Tasks. *Lecture Notes in Computer Science*, **2017**, 291-301	0.9	6
233	A Closed Loop Shape Control for Bio-inspired Soft Arms. *Lecture Notes in Computer Science*, **2017**, 567-573	0.9	1
232	. *IEEE Robotics and Automation Magazine*, **2016**, 23, 107-114	3.4	37
231	Eye-Head Stabilization Mechanism for a Humanoid Robot Tested on Human Inertial Data. *Lecture Notes in Computer Science*, **2016**, 341-352	0.9	3

230	Large deformation of self-oscillating polymer gel. *Physical Review E*, **2016**, 93, 010501	2.4	9
229	Modelling the nonlinear response of fibre-reinforced bending fluidic actuators. *Smart Materials and Structures*, **2016**, 25, 105020	3.4	24
228	A Multiagent Reinforcement Learning approach for inverse kinematics of high dimensional manipulators with precision positioning **2016**,		17
227	Soft assistive robot for personal care of elderly people **2016**,		36
226	Pleasant to the Touch: By Emulating Nature, Scientists Hope to Find Innovative New Uses for Soft Robotics in Health-Care Technology. *IEEE Pulse*, **2016**, 7, 34-7	0.7	7
225	Pressure mapping with textile sensors for compression therapy monitoring. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2016**, 230, 795-808	1.7	13
224	Soft Robotics: from scientific challenges to technological applications **2016**,		1
223	An improved tracking algorithm for underwater vessels using the passive sonar **2016**,		2
222	Hopping on Uneven Terrains With an Underwater One-Legged Robot. *IEEE Robotics and Automation Letters*, **2016**, 1, 461-468	4.2	22
221	CareToy: An Intelligent Baby Gym: Home-Based Intervention for Infants at Risk for Neurodevelopmental Disorders. *IEEE Robotics and Automation Magazine*, **2016**, 23, 63-72	3.4	9
220	Underwater soft-bodied pulsed-jet thrusters: Actuator modeling and performance profiling. *International Journal of Robotics Research*, **2016**, 35, 1308-1329	5.7	39
219	Correcting for changes: expected perception-based control for reaching a moving target. *IEEE Robotics and Automation Magazine*, **2016**, 23, 63-70	3.4	2
218	Learning Global Inverse Statics Solution for a Redundant Soft Robot **2016**,		18
217	Visual Target Sequence Prediction via Hierarchical Temporal Memory Implemented on the iCub Robot. *Lecture Notes in Computer Science*, **2016**, 119-130	0.9	1
216	Retina Color-Opponency Based Pursuit Implemented Through Spiking Neural Networks in the Neurorobotics Platform. *Lecture Notes in Computer Science*, **2016**, 16-27	0.9	4
215	Adaptive gaze stabilization through cerebellar internal models in a humanoid robot **2016**,		7
214	Contest-Driven Soft-Robotics Boost: The RoboSoft Grand Challenge. *Frontiers in Robotics and AI*, **2016**, 3,	2.8	9
213	Learning Global Inverse Kinematics Solutions for a Continuum Robot. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2016**, 47-54	0.6	20

212	An Autonomous Water Monitoring and Sampling System for Small-Sized ASVs. *IEEE Journal of Oceanic Engineering*, **2016**, 1-8	3.3	5
211	Point-to-point motion controller for soft robotic manipulators **2016**,		4
210	Sequential decision making based on emergent emotion for a humanoid robot **2016**,		1
209	Soft Robotics and Morphological Computation [From the Guest Editors]. *IEEE Robotics and Automation Magazine*, **2016**, 23, 28-29	3.4	3
208	Soft robotics: Technologies and systems pushing the boundaries of robot abilities. *Science Robotics*, **2016**, 1,	18.6	605
207	Sensorized pacifier to evaluate non-nutritive sucking in newborns. *Medical Engineering and Physics*, **2016**, 38, 398-402	2.4	7
206	The Soft Robotics Week: A New Yearly Event for the Community of Soft Robotics. *Soft Robotics*, **2015**, 2, 88-90	9.2	1
205	Novelty-Based Evolutionary Design of Morphing Underwater Robots **2015**,		18
204	An Under-Actuated and Adaptable Soft Robotic Gripper. *Lecture Notes in Computer Science*, **2015**, 64-74	0.9	12
203	Locomotion and elastodynamics model of an underwater shell-like soft robot **2015**,		10
202	Soft Robotics Research, Challenges, and Innovation Potential, Through Showcases **2015**, 255-264		9
201	Comparative performances analysis of neonatal ventilators. *Italian Journal of Pediatrics*, **2015**, 41, 9	3.2	3
200	Dynamic Walking with a Soft Limb Robot. *Lecture Notes in Computer Science*, **2015**, 13-25	0.9	2
199	A Bioinspired Soft Robotic Gripper for Adaptable and Effective Grasping. *Soft Robotics*, **2015**, 2, 107-116	9.2	195
198	Neural dynamics and sliding mode integration for the guidance of unmanned surface vehicles **2015**,		1
197	. *IEEE Transactions on Robotics*, **2015**, 31, 823-834	6.5	105
196	Learning the inverse kinetics of an octopus-like manipulator in three-dimensional space. *Bioinspiration and Biomimetics*, **2015**, 10, 035006	2.6	32
195	Evolutionary discovery of self-stabilized dynamic gaits for a soft underwater legged robot **2015**,		11

194	Design and development of a soft robotic gripper for manipulation in minimally invasive surgery: a proof of concept. *Meccanica*, **2015**, 50, 2855-2863	2.1	44
193	Sensorized graspable devices for the study of motor imitation in infants. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 7394-7	0.9	0
192	Thrust depletion at high pulsation frequencies in underactuated, soft-bodied, pulsed-jet vehicles **2015**,		11
191	Structural Dynamics of a Pulsed-Jet Propulsion System for Underwater Soft Robots. *International Journal of Advanced Robotic Systems*, **2015**, 12, 68	1.4	13
190	Underwater running on uneven terrain **2015**,		7
189	Early Stage Economic Evaluation of Caretoy System for Early Intervention In Preterm Infants At Risk of Neurodevelopmental Disorders. *Value in Health*, **2015**, 18, A358	3.3	4
188	A new system for quantitative evaluation of infant gaze capabilities in a wide visual field. *BioMedical Engineering OnLine*, **2015**, 14, 83	4.1	5
187	Octopus-inspired robotics. Preface. *Bioinspiration and Biomimetics*, **2015**, 10, 030301	2.6	1
186	Modelling cephalopod-inspired pulsed-jet locomotion for underwater soft robots. *Bioinspiration and Biomimetics*, **2015**, 10, 055005	2.6	27
185	Cryo-scanning electron microscopy investigation of the Octopus Vulgaris arm structures for the design of an octopus-like arm artefact. *Microscopy Research and Technique*, **2015**, 78, 1133-45	2.8	2
184	Bioinspired locomotion and grasping in water: the soft eight-arm OCTOPUS robot. *Bioinspiration and Biomimetics*, **2015**, 10, 035003	2.6	142
183	A multi-depth sensorised micro sampling system **2015**,		1
182	A novel simulator for mechanical ventilation in newborns: MEchatronic REspiratory System SImulator for Neonatal Applications. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2015**, 229, 581-91	1.7	7
181	Design and development of a bio-inspired, under-actuated soft gripper. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 3619-22	0.9	19
180	Sensorized pacifier to quantify the rhythmicity of non-nutritive sucking: A preliminary study on newborns. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 7398-401	0.9	1
179	A ROV for supporting the planned maintenance in underwater archaeological sites **2015**,		6
178	A biorobotic model of the human larynx. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 3623-6	0.9	3
177	A visual tracking model implemented on the iCub robot as a use case for a novel neurorobotic toolkit integrating brain and physics simulation **2015**,		5

176	Sensorized toys for measuring manipulation capabilities of infants at home. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 7390-3	0.9	7
175	Dynamics of underwater legged locomotion: modeling and experiments on an octopus-inspired robot. *Bioinspiration and Biomimetics*, **2015**, 10, 046012	2.6	44
174	An in-situ, real-time Device for Hg Monitoring in Deep Waters **2015**,		1
173	The HydroNet ASV, a Small-Sized Autonomous Catamaran for Real-Time Monitoring of Water Quality: From Design to Missions at Sea. *IEEE Journal of Oceanic Engineering*, **2015**, 40, 710-726	3.3	27
172	Integrating Feedback and Predictive Control in a Bio-Inspired Model of Visual Pursuit Implemented on a Humanoid Robot. *Lecture Notes in Computer Science*, **2015**, 256-267	0.9	13
171	An active one-lobe pulmonary simulator with compliance control for medical training in neonatal mechanical ventilation. *Journal of Clinical Monitoring and Computing*, **2014**, 28, 251-60	2	3
170	Soft Robotics on the Move: Scientific Networks, Activities, and Future Challenges. *Soft Robotics*, **2014**, 1, 154-158	9.2	24
169	Dynamic Model of a Multibending Soft Robot Arm Driven by Cables. *IEEE Transactions on Robotics*, **2014**, 30, 1109-1122	6.5	212
168	Evolving Optimal Swimming in Different Fluids: A Study Inspired by batoid Fishes. *Lecture Notes in Computer Science*, **2014**, 23-34	0.9	5
167	Bioinspired Soft Actuation System Using Shape Memory Alloys. *Actuators*, **2014**, 3, 226-244	2.4	52
166	Adaptive visual pursuit involving eye-head coordination and prediction of the target motion **2014**,		12
165	**2014**,		1
164	Towards a neuromorphic vestibular system. *IEEE Transactions on Biomedical Circuits and Systems*, **2014**, 8, 669-80	5.1	9
163	Soft Robotics: New Perspectives for Robot Bodyware and Control. *Frontiers in Bioengineering and Biotechnology*, **2014**, 2, 3	5.8	208
162	Development and validation of a sensorized neonatal intubation skill trainer for simulation based education enhancement. *International Journal of Medical Research and Health Sciences*, **2014**, 3, 833		4
161	Dynamic Model of a Jet-Propelled Soft Robot Inspired by the Octopus Mantle. *Lecture Notes in Computer Science*, **2014**, 261-272	0.9	3
160	Bipedal Walking of an Octopus-Inspired Robot. *Lecture Notes in Computer Science*, **2014**, 35-46	0.9	12
159	Soft robotics: a bioinspired evolution in robotics. *Trends in Biotechnology*, **2013**, 31, 287-94	15.1	1140

158	Soft Robotics [TC Spotlight]. *IEEE Robotics and Automation Magazine*, **2013**, 20, 24-95	3.4	12
157	Design and development of a sensorized wireless toy for measuring infants' manual actions. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2013**, 21, 444-53	4.8	8
156	Measurements of octopus arm elongation: Evidence of differences by body size and gender. *Journal of Experimental Marine Biology and Ecology*, **2013**, 447, 160-164	2.1	14
155	Biomimetic Vortex Propulsion: Toward the New Paradigm of Soft Unmanned Underwater Vehicles. *IEEE/ASME Transactions on Mechatronics*, **2013**, 18, 484-493	5.5	43
154	A systematic method for dynamic modeling and identification of a small-sized autonomous surface vehicle using simulated annealing techniques **2013**,		2
153	A Feed Forward Neural Network for Solving the Inverse Kinetics of Non-Constant Curvature Soft Manipulators Driven by Cables **2013**,		3
152	Analysis of a dielectric EAP as smart component for a neonatal respiratory simulator. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2013**, 2013, 457-60	0.9	1
151	STIFF-FLOP surgical manipulator: Mechanical design and experimental characterization of the single module **2013**,		140
150	An elastic pulsed-jet thruster for Soft Unmanned Underwater Vehicles **2013**,		8
149	A feed-forward neural network learning the inverse kinetics of a soft cable-driven manipulator moving in three-dimensional space **2013**,		53
148	MEchatronic REspiratory System SImulator for Neonatal Applications (MERESSINA) project: a novel bioengineering goal. *Medical Devices: Evidence and Research*, **2013**, 6, 115-21	1.5	3
147	Forward speed control of a pulsed-jet soft-bodied underwater vehicle **2013**,		4
146	Neural Networks Learning the Inverse Kinetics of an Octopus-Inspired Manipulator in Three-Dimensional Space. *Lecture Notes in Computer Science*, **2013**, 378-380	0.9	2
145	Longitudinal study of unimanual actions and grasping forces during infancy. *Research in Social and Administrative Pharmacy*, **2012**, 35, 205-14	2.9	22
144	Head stabilization based on a feedback error learning in a humanoid robot **2012**,		7
143	Soft Robot Arm Inspired by the Octopus. *Advanced Robotics*, **2012**, 26, 709-727	1.7	565
142	An autonomous water monitoring and sampling system for small-sized ASV operations **2012**,		9
141	Realization of biped walking on soft ground with stabilization control based on gait analysis **2012**,		17

140	Soft robotic arm inspired by the octopus: I. From biological functions to artificial requirements. *Bioinspiration and Biomimetics*, **2012**, 7, 025004	2.6	72
139	Sensorization of continuum soft robots for reconstructing their spatial configuration **2012**,		22
138	Design and development of a soft robot with crawling and grasping capabilities **2012**,		36
137	A general method for the design and fabrication of shape memory alloy active spring actuators. *Smart Materials and Structures*, **2012**, 21, 115029	3.4	47
136	A general mechanical model for tendon-driven continuum manipulators **2012**,		23
135	A two dimensional inverse kinetics model of a cable driven manipulator inspired by the octopus arm **2012**,		37
134	Design and development of a soft robotic octopus arm exploiting embodied intelligence **2012**,		30
133	Fast estimation of Gaussian mixture models for image segmentation. *Machine Vision and Applications*, **2012**, 23, 773-789	2.8	25
132	Inverse and Direct Model of a Continuum Manipulator Inspired by the Octopus Arm. *Lecture Notes in Computer Science*, **2012**, 347-348	0.9	1
131	A Biomimetic, Swimming Soft Robot Inspired by the Octopus Vulgaris. *Lecture Notes in Computer Science*, **2012**, 349-351	0.9	3
130	Behavior switching using reservoir computing for a soft robotic arm **2012**,		12
129	Soft-robotic arm inspired by the octopus: II. From artificial requirements to innovative technological solutions. *Bioinspiration and Biomimetics*, **2012**, 7, 025005	2.6	160
128	Development of the functional unit of a completely soft octopus-like robotic arm **2012**,		12
127	Biped walking stabilization on soft ground based on gait analysis **2012**,		9
126	A 3D steady-state model of a tendon-driven continuum soft manipulator inspired by the octopus arm. *Bioinspiration and Biomimetics*, **2012**, 7, 025006	2.6	127
125	A comparison of human trajectory planning models for implementation on humanoid robot **2012**,		2
124	Implementation of a human model for head stabilization on a humanoid platform **2012**,		6
123	A robotic implementation of a bio-inspired head motion stabilization model on a humanoid platform **2012**,		4

122	Octopus-inspired sensorimotor control of a multi-arm soft robot **2012**,		17
121	A Locomotion Strategy for an Octopus-Bioinspired Robot. *Lecture Notes in Computer Science*, **2012**, 337-338	0.9	7
120	Bio-inspired Design of an Artificial Muscular-Hydrostat Unit for Soft Robotic Systems. *Lecture Notes in Computer Science*, **2012**, 375-376	0.9	
119	Changes on EMG activation in healthy subjects and incomplete SCI patients following a robot-assisted locomotor training. *IEEE International Conference on Rehabilitation Robotics*, **2011**, 2011, 5975467	1.3	12
118	Non-invasive study of Octopus vulgaris arm morphology using ultrasound. *Journal of Experimental Biology*, **2011**, 214, 3727-31	3	29
117	Adhesion Mechanisms Inspired by Octopus Suckers. *Procedia Computer Science*, **2011**, 7, 192-193	1.6	10
116	Soft Robotics: Challenges and Perspectives. *Procedia Computer Science*, **2011**, 7, 99-102	1.6	122
115	The Robot DustCart. *IEEE Robotics and Automation Magazine*, **2011**, 18, 59-67	3.4	5
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