

# Panagiotis Polygerinos

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3342223/publications.pdf>

Version: 2024-02-01

60  
papers

6,297  
citations

361413

20  
h-index

501196

28  
g-index

62  
all docs

62  
docs citations

62  
times ranked

4602  
citing authors

#	ARTICLE	IF	CITATIONS
1	Soft robotic glove for combined assistance and at-home rehabilitation. <i>Robotics and Autonomous Systems</i> , 2015, 73, 135-143.	5.1	1,168
2	Pneumatic Networks for Soft Robotics that Actuate Rapidly. <i>Advanced Functional Materials</i> , 2014, 24, 2163-2170.	14.9	1,125
3	Soft Robotics: Review of Fluid-Driven Intrinsically Soft Devices; Manufacturing, Sensing, Control, and Applications in Human-Robot Interaction. <i>Advanced Engineering Materials</i> , 2017, 19, 1700016.	3.5	707
4	Modeling of Soft Fiber-Reinforced Bending Actuators. <i>IEEE Transactions on Robotics</i> , 2015, 31, 778-789.	10.3	688
5	Mechanical Programming of Soft Actuators by Varying Fiber Angle. <i>Soft Robotics</i> , 2015, 2, 26-32.	8.0	382
6	Towards a soft pneumatic glove for hand rehabilitation. , 2013, , .		336
7	Mechanically programmable bend radius for fiber-reinforced soft actuators. , 2013, , .		183
8	Soft robotic glove for hand rehabilitation and task specific training. , 2015, , .		161
9	Interaction Forces of Soft Fiber Reinforced Bending Actuators. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017, 22, 717-727.	5.8	130
10	MRI-Compatible Fiber-Optic Force Sensors for Catheterization Procedures. <i>IEEE Sensors Journal</i> , 2010, 10, 1598-1608.	4.7	115
11	EMG controlled soft robotic glove for assistance during activities of daily living. , 2015, , .		111
12	The Soft Robotics Toolkit: Shared Resources for Research and Design. <i>Soft Robotics</i> , 2014, 1, 224-230.	8.0	109
13	Triaxial Catheter-Tip Force Sensor for MRI-Guided Cardiac Procedures. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013, 18, 386-396.	5.8	95
14	Biologically Inspired Soft Robot for Thumb Rehabilitation1. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2014, 8, .	0.7	75
15	MRI-Compatible Intensity-Modulated Force Sensor for Cardiac Catheterization Procedures. <i>IEEE Transactions on Biomedical Engineering</i> , 2011, 58, 721-726.	4.2	73
16	Soft Poly-Limbs: Toward a New Paradigm of Mobile Manipulation for Daily Living Tasks. <i>Soft Robotics</i> , 2019, 6, 38-53.	8.0	59
17	A Soft-Inflatable Exosuit for Knee Rehabilitation: Assisting Swing Phase During Walking. <i>Frontiers in Robotics and AI</i> , 2018, 5, 44.	3.2	58
18	Novel miniature MRI-compatible fiber-optic force sensor for cardiac catheterization procedures. , 2010, , .		56

#	ARTICLE	IF	CITATIONS
19	A Novel Soft Elbow Exosuit to Supplement Bicep Lifting Capacity. , 2018, , .		56
20	Modeling of Light Intensity-Modulated Fiber-Optic Displacement Sensors. IEEE Transactions on Instrumentation and Measurement, 2011, 60, 1408-1415.	4.7	46
21	Development of a soft-inflatable exosuit for knee rehabilitation. , 2017, , .		43
22	Mechanical and electrical numerical analysis of soft liquid-embedded deformation sensors analysis. Extreme Mechanics Letters, 2014, 1, 42-46.	4.1	38
23	Shape Deposition Manufacturing of a Soft, Atraumatic, and Deployable Surgical Grasper. Journal of Mechanisms and Robotics, 2015, 7, .	2.2	37
24	A light-reflecting balloon catheter for atraumatic tissue defect repair. Science Translational Medicine, 2015, 7, 306ra149.	12.4	34
25	Shape Deposition Manufacturing of a Soft, Atraumatic, Deployable Surgical Grasper1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.7	31
26	Fabric Soft Poly-Limbs for Physical Assistance of Daily Living Tasks. , 2019, , .		30
27	Design of a Soft Ankle-Foot Orthosis Exosuit for Foot Drop Assistance. , 2019, , .		27
28	Design and control of a 3-chambered fiber reinforced soft actuator with off-the-shelf stretch sensors. International Journal of Intelligent Robotics and Applications, 2017, 1, 342-351.	2.8	24
29	A fibre-optic catheter-tip force sensor with MRI compatibility: A feasibility study. , 2009, 2009, 1501-054.		22
30	Evaluating Immediate Benefits of Assisting Knee Extension With a Soft Inflatable Exosuit. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 216-225.	3.2	21
31	Water pipe robot utilizing soft inflatable actuators. , 2018, , .		17
32	Towards Untethered Soft Pneumatic Exosuits Using Low-Volume Inflatable Actuator Composites and a Portable Pneumatic Source. IEEE Robotics and Automation Letters, 2020, 5, 4062-4069.	5.1	17
33	Smart and Connected Actuated Mobile and Sensing Suit to Encourage Motion in Developmentally Delayed Infants1. Journal of Medical Devices, Transactions of the ASME, 2015, 9, .	0.7	16
34	Soft Robotic Haptic Interface with Variable Stiffness for Rehabilitation of Neurologically Impaired Hand Function. Frontiers in Robotics and AI, 2017, 4, .	3.2	16
35	Design and Control of a Hexacopter With Soft Grasper for Autonomous Object Detection and Grasping. , 2018, , .		15
36	Measuring tip and side forces of a novel catheter prototype: A feasibility study. , 2009, , .		12

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37	A novel MRI compatible air-cushion tactile sensor for Minimally Invasive Surgery. , 2009, , .		11
38	Tactile sensor array using prismatic-tip optical fibers for dexterous robotic hands. , 2010, , .		10
39	Carpal Tunnel Syndrome Soft Relief Device for Typing Applications. , 2017, , .		10
40	Design and Development of a Soft Robotic Back Orthosis. , 2018, , .		10
41	Distributed Planning of Multi-Segment Soft Robotic Arms. , 2018, , .		10
42	Design, Characterization, and Mechanical Programming of Fabric-Reinforced Textile Actuators for a Soft Robotic Hand. , 2019, , .		10
43	Dynamic Modeling and Motion Control of a Soft Robotic Arm Segment. , 2019, , .		10
44	Hysteresis Compensation for Ground Contact Force Measurement With Shoe-Embedded Air Pressure Sensors. , 2016, , .		9
45	Fabric-Based Soft Grippers Capable of Selective Distributed Bending for Assistance of Daily Living Tasks. , 2019, , .		8
46	An Intraventricular Soft Robotic Pulsatile Assist Device for Right Ventricular Heart Failure1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.7	8
47	An Underwater Glider with Muscle-Actuated Buoyancy Control and Caudal Fin Turning. Machines, 2022, 10, 381.	2.2	3
48	Cervical Spine Immobilization Device for Emergency Response1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.7	2
49	Towards a Soft Robotic 3rd Arm for Activities of Daily Living. , 2017, , .		2
50	Soft Robotic Shoulder Assist Device: Towards Prevention of Shoulder Overuse Syndrome in Wheelchair Users. , 2018, , .		2
51	Design, Development, and Control of a Fabric-Based Soft Ankle Module to Mimic Human Ankle Stiffness. , 2019, 2019, 886-891.		2
52	An intraventricular soft robotic pulsatile assist device for right ventricular heart failure. , 2014, , .		1
53	Towards the design of a soft robotic third arm for assisted living tasks. , 2017, , .		1
54	SOFT ROBOTIC GLOVE FOR COMBINED ASSISTANCE AND REHABILITATION DURING ACTIVITIES OF DAILY LIVING. , 2018, , 135-157.		1

#	ARTICLE	IF	CITATIONS
55	Soft Wearable Deltoid Assistive Device. , 2019, , .		1
56	Design of a Soft Ankle Joint Device for Correction of Inversion/Eversion Angle During Aquatic Therapy. , 2019, , .		1
57	Soft-inflatable exosuit for knee rehabilitation. , 2017, , .		0
58	Development of a Dynamically Adjusting Soft Wheelchair Insert for Reduction of Single-Point Pressure. , 2017, , .		0
59	Weight Distribution Monitoring System for Patients With Parkinsonâ€™s Disease. , 2018, , .		0
60	Haptic Neurofeedback Device for Parkinsonâ€™s Patients. , 2019, , .		0