

Panagiotis Polygerinos

List of Publications by Year in descending order

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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 | An Underwater Glider with Muscles-Actuated Buoyancy Control and Caudal Fin Turning. <i>Machines</i> , 2022, 10, 381. | 2.2 | 3 |
| 2 | Towards Untethered Soft Pneumatic Exosuits Using Low-Volume Inflatable Actuator Composites and a Portable Pneumatic Source. <i>IEEE Robotics and Automation Letters</i> , 2020, 5, 4062-4069. | 5.1 | 17 |
| 3 | Evaluating Immediate Benefits of Assisting Knee Extension With a Soft Inflatable Exosuit. <i>IEEE Transactions on Medical Robotics and Bionics</i> , 2020, 2, 216-225. | 3.2 | 21 |
| 4 | Design of a Soft Ankle-Foot Orthosis Exosuit for Foot Drop Assistance. , 2019, , . | | 27 |
| 5 | Design, Development, and Control of a Fabric-Based Soft Ankle Module to Mimic Human Ankle Stiffness. , 2019, 2019, 886-891. | | 2 |
| 6 | Fabric Soft Poly-Limbs for Physical Assistance of Daily Living Tasks. , 2019, , . | | 30 |
| 7 | Fabric-Based Soft Grippers Capable of Selective Distributed Bending for Assistance of Daily Living Tasks. , 2019, , . | | 8 |
| 8 | Design, Characterization, and Mechanical Programming of Fabric-Reinforced Textile Actuators for a Soft Robotic Hand. , 2019, , . | | 10 |
| 9 | Dynamic Modeling and Motion Control of a Soft Robotic Arm Segment. , 2019, , . | | 10 |
| 10 | 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 |
| 11 | Soft Wearable Deltoid Assistive Device. , 2019, , . | | 1 |
| 12 | Design of a Soft Ankle Joint Device for Correction of Inversion/Eversion Angle During Aquatic Therapy. , 2019, , . | | 1 |
| 13 | Haptic Neurofeedback Device for Parkinson's Patients. , 2019, , . | | 0 |
| 14 | Design and Control of a Hexacopter With Soft Grasper for Autonomous Object Detection and Grasping. , 2018, , . | | 15 |
| 15 | Weight Distribution Monitoring System for Patients With Parkinson's Disease. , 2018, , . | | 0 |
| 16 | A Novel Soft Elbow Exosuit to Supplement Bicep Lifting Capacity. , 2018, , . | | 56 |
| 17 | Soft Robotic Shoulder Assist Device: Towards Prevention of Shoulder Overuse Syndrome in Wheelchair Users. , 2018, , . | | 2 |
| 18 | Design and Development of a Soft Robotic Back Orthosis. , 2018, , . | | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | 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 |
| 20 | Water pipe robot utilizing soft inflatable actuators. , 2018, , . | | 17 |
| 21 | Distributed Planning of Multi-Segment Soft Robotic Arms. , 2018, , . | | 10 |
| 22 | SOFT ROBOTIC GLOVE FOR COMBINED ASSISTANCE AND REHABILITATION DURING ACTIVITIES OF DAILY LIVING. , 2018, , 135-157. | | 1 |
| 23 | Design and control of a 3-chambered fiber reinforced soft actuator with off-the-shelf stretch sensors. <i>International Journal of Intelligent Robotics and Applications</i> , 2017, 1, 342-351. | 2.8 | 24 |
| 24 | 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 |
| 25 | Interaction Forces of Soft Fiber Reinforced Bending Actuators. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017, 22, 717-727. | 5.8 | 130 |
| 26 | Carpal Tunnel Syndrome Soft Relief Device for Typing Applications. , 2017, , . | | 10 |
| 27 | Towards a Soft Robotic 3rd Arm for Activities of Daily Living. , 2017, , . | | 2 |
| 28 | Development of a soft-inflatable exosuit for knee rehabilitation. , 2017, , . | | 43 |
| 29 | Soft Robotic Haptic Interface with Variable Stiffness for Rehabilitation of Neurologically Impaired Hand Function. <i>Frontiers in Robotics and AI</i> , 2017, 4, . | 3.2 | 16 |
| 30 | Towards the design of a soft robotic third arm for assisted living tasks. , 2017, , . | | 1 |
| 31 | Soft-inflatable exosuit for knee rehabilitation. , 2017, , . | | 0 |
| 32 | Development of a Dynamically Adjusting Soft Wheelchair Insert for Reduction of Single-Point Pressure. , 2017, , . | | 0 |
| 33 | Hysteresis Compensation for Ground Contact Force Measurement With Shoe-Embedded Air Pressure Sensors. , 2016, , . | | 9 |
| 34 | Smart and Connected Actuated Mobile and Sensing Suit to Encourage Motion in Developmentally Delayed Infants. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2015, 9, . | 0.7 | 16 |
| 35 | Modeling of Soft Fiber-Reinforced Bending Actuators. <i>IEEE Transactions on Robotics</i> , 2015, 31, 778-789. | 10.3 | 688 |
| 36 | Shape Deposition Manufacturing of a Soft, Atraumatic, and Deployable Surgical Grasper. <i>Journal of Mechanisms and Robotics</i> , 2015, 7, . | 2.2 | 37 |

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|----|--|------|-----------|
| 37 | Mechanical Programming of Soft Actuators by Varying Fiber Angle. <i>Soft Robotics</i> , 2015, 2, 26-32. | 8.0 | 382 |
| 38 | A light-reflecting balloon catheter for atraumatic tissue defect repair. <i>Science Translational Medicine</i> , 2015, 7, 306ra149. | 12.4 | 34 |
| 39 | Soft robotic glove for hand rehabilitation and task specific training. , 2015, , . | | 161 |
| 40 | EMG controlled soft robotic glove for assistance during activities of daily living. , 2015, , . | | 111 |
| 41 | Soft robotic glove for combined assistance and at-home rehabilitation. <i>Robotics and Autonomous Systems</i> , 2015, 73, 135-143. | 5.1 | 1,168 |
| 42 | Cervical Spine Immobilization Device for Emergency Response ¹ . <i>Journal of Medical Devices, Transactions of the ASME</i> , 2014, 8, . | 0.7 | 2 |
| 43 | An intraventricular soft robotic pulsatile assist device for right ventricular heart failure. , 2014, , . | | 1 |
| 44 | Biologically Inspired Soft Robot for Thumb Rehabilitation ¹ . <i>Journal of Medical Devices, Transactions of the ASME</i> , 2014, 8, . | 0.7 | 75 |
| 45 | Mechanical and electrical numerical analysis of soft liquid-embedded deformation sensors analysis. <i>Extreme Mechanics Letters</i> , 2014, 1, 42-46. | 4.1 | 38 |
| 46 | Pneumatic Networks for Soft Robotics that Actuate Rapidly. <i>Advanced Functional Materials</i> , 2014, 24, 2163-2170. | 14.9 | 1,125 |
| 47 | The Soft Robotics Toolkit: Shared Resources for Research and Design. <i>Soft Robotics</i> , 2014, 1, 224-230. | 8.0 | 109 |
| 48 | Shape Deposition Manufacturing of a Soft, Atraumatic, Deployable Surgical Grasper ¹ . <i>Journal of Medical Devices, Transactions of the ASME</i> , 2014, 8, . | 0.7 | 31 |
| 49 | An Intraventricular Soft Robotic Pulsatile Assist Device for Right Ventricular Heart Failure ¹ . <i>Journal of Medical Devices, Transactions of the ASME</i> , 2014, 8, . | 0.7 | 8 |
| 50 | Triaxial Catheter-Tip Force Sensor for MRI-Guided Cardiac Procedures. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013, 18, 386-396. | 5.8 | 95 |
| 51 | Mechanically programmable bend radius for fiber-reinforced soft actuators. , 2013, , . | | 183 |
| 52 | Towards a soft pneumatic glove for hand rehabilitation. , 2013, , . | | 336 |
| 53 | MRI-Compatible Intensity-Modulated Force Sensor for Cardiac Catheterization Procedures. <i>IEEE Transactions on Biomedical Engineering</i> , 2011, 58, 721-726. | 4.2 | 73 |
| 54 | Modeling of Light Intensity-Modulated Fiber-Optic Displacement Sensors. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2011, 60, 1408-1415. | 4.7 | 46 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Novel miniature MRI-compatible fiber-optic force sensor for cardiac catheterization procedures. , 2010, , . | | 56 |
| 56 | Tactile sensor array using prismatic-tip optical fibers for dexterous robotic hands. , 2010, , . | | 10 |
| 57 | MRI-Compatible Fiber-Optic Force Sensors for Catheterization Procedures. IEEE Sensors Journal, 2010, 10, 1598-1608. | 4.7 | 115 |
| 58 | Measuring tip and side forces of a novel catheter prototype: A feasibility study. , 2009, , . | | 12 |
| 59 | A fibre-optic catheter-tip force sensor with MRI compatibility: A feasibility study. , 2009, 2009, 1501-054. | | 22 |
| 60 | A novel MRI compatible air-cushion tactile sensor for Minimally Invasive Surgery. , 2009, , . | | 11 |