

# CITATION REPORT

List of articles citing

## Soft Robotic Grippers for Biological Sampling on Deep Reefs

DOI: 10.1089/soro.2015.0019  
Soft Robotics, 2016, 3, 23-33.

**Source:** <https://exaly.com/paper-pdf/63503948/citation-report.pdf>

**Version:** 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
524	Fin Ray□ Effect Inspired Soft Robotic Gripper: From the RoboSoft Grand Challenge toward Optimization. <b>2016</b> , 3,		42
523	Flexible and Stretchable Strain Sensing Actuator for Wearable Soft Robotic Applications. <b>2016</b> , 1, 1600018		133
522	A 3D printed soft gripper integrated with curvature sensor for studying soft grasping. <b>2016</b> ,		21
521	Cyclic hydraulic actuation for soft robotic devices. <b>2016</b> ,		12
520	Sensing the motion of bellows through changes in mutual inductance. <b>2016</b> ,		8
519	Data-Driven Bending Angle Prediction of Soft Pneumatic Actuators with Embedded Flex Sensors. <b>2016</b> , 49, 513-520		9
518	High-Force Soft Printable Pneumatics for Soft Robotic Applications. <i>Soft Robotics</i> , <b>2016</b> , 3, 144-158	9.2	279
517	3D Printed Flexure Hinges for Soft Monolithic Prosthetic Fingers. <i>Soft Robotics</i> , <b>2016</b> , 3, 120-133	9.2	90
516	. <b>2016</b> , 23, 20-29		78
515	Soft robot review. <b>2017</b> , 15, 3-15		226
514	Bioinspired Robotic Fingers Based on Pneumatic Actuator and 3D Printing of Smart Material. <i>Soft Robotics</i> , <b>2017</b> , 4, 147-162	9.2	107
513	Soft Gripper Dynamics Using a Line-Segment Model With an Optimization-Based Parameter Identification Method. <b>2017</b> , 2, 624-631		55
512	Variable-Grasping-Mode Underactuated Soft Gripper With Environmental Contact-Based Operation. <b>2017</b> , 2, 1164-1171		34
511	The Ocean One hands: An adaptive design for robust marine manipulation. <b>2017</b> , 36, 150-166		65
510	Force Measurement Toward the Instability Theory of Soft Pneumatic Actuators. <b>2017</b> , 2, 985-992		21
509	Soft-Material Robotics. <b>2017</b> , 5, 191-259		25
508	A Soft-Robotic Gripper With Enhanced Object Adaptation and Grasping Reliability. <b>2017</b> , 2, 2287-2293		118

507	Design of a Variable Stiffness Soft Dexterous Gripper. <i>Soft Robotics</i> , <b>2017</b> , 4, 274-284	9.2	68
506	Smart Braid Feedback for the Closed-Loop Control of Soft Robotic Systems. <i>Soft Robotics</i> , <b>2017</b> , 4, 261-273		16
505	Surface Texture of Deformable Robotic Fingertips for a Stable Grasp Under Both Dry and Wet Conditions. <b>2017</b> , 2, 2048-2055		11
504	Stiffness Customization and Patterning for Property Modulation of Silicone-Based Soft Pneumatic Actuators. <i>Soft Robotics</i> , <b>2017</b> , 4, 251-260	9.2	50
503	A Prestressed Soft Gripper: Design, Modeling, Fabrication, and Tests for Food Handling. <b>2017</b> , 2, 1909-1916		111
502	Using Vision for Pre- and Post-grasping Object Localization for Soft Hands. <b>2017</b> , 601-612		4
501	Dielectric Elastomer Actuators for Soft Wave-Handling Systems. <i>Soft Robotics</i> , <b>2017</b> , 4, 61-69	9.2	12
500	Design and Analysis of a Soft-Fingered Hand With Contact Feedback. <b>2017</b> , 2, 491-498		22
499	Elastic Inflatable Actuators for Soft Robotic Applications. <b>2017</b> , 29, 1604977		174
498	Survey of robotic manipulation studies intending practical applications in real environments -object recognition, soft robot hand, and challenge program and benchmarking-. <b>2017</b> , 31, 1114-1132		27
497	Shape Memory Alloy-Based Soft Gripper with Variable Stiffness for Compliant and Effective Grasping. <i>Soft Robotics</i> , <b>2017</b> , 4, 379-389	9.2	137
496	Microgripper-Embedded Fluid Fingertip-Enhancing Positioning and Holding Abilities for Versatile Grasping. <b>2017</b> , 9,		6
495	Adaptive robotic end-effector with embedded 3D-printed sensing Circuits. <b>2017</b> , 121, 08008		5
494	Stronger at Depth: Jamming Grippers as Deep Sea Sampling Tools. <i>Soft Robotics</i> , <b>2017</b> , 4, 305-316	9.2	39
493	Omni Directional Multimaterial Soft Cylindrical Actuator and Its Application as a Steerable Catheter. <i>Soft Robotics</i> , <b>2017</b> , 4, 224-240	9.2	16
492	Origami and Kirigami Nanocomposites. <b>2017</b> , 11, 7587-7599		139
491	. <b>2017</b> ,		20
490	. <b>2017</b> ,		7

489	Passive gripper inspired by Manduca sexta and the Fin Ray□ Effect. <b>2017</b> , 14, 172988141772115	30
488	Grasp Mode and Compliance Control of an Underactuated Origami Gripper Using Adjustable Stiffness Joints. <b>2017</b> , 22, 2165-2173	53
487	Fluid-driven origami-inspired artificial muscles. <b>2017</b> , 114, 13132-13137	291
486	Geometric Gait Design for a Starfish-Inspired Robot With Curvature-Controlled Soft Actuators. <b>2017</b> ,	1
485	Fabrication and performance comparison of different soft pneumatic actuators for lunch box packaging. <b>2017</b> ,	6
484	A kind of soft pneumatic actuator based on multi-material 3D print technology. <b>2017</b> ,	5
483	3D printing of a thin-wall soft and monolithic gripper using fused filament fabrication. <b>2017</b> ,	17
482	Fabric-based actuator modules for building soft pneumatic structures with high payload-to-weight ratio. <b>2017</b> ,	10
481	Handshakiness: Benchmarking for human-robot hand interactions. <b>2017</b> ,	16
480	. <b>2017</b> ,	2
479	A 3D printed monolithic soft gripper with adjustable stiffness. <b>2017</b> ,	13
478	Integrating Soft Robotics with the Robot Operating System: A Hybrid Pick and Place Arm. <b>2017</b> , 4,	11
477	Pneumatic Multi-Pocket Elastomer Actuators for Metacarpophalangeal Joint Flexion and Abduction-Adduction. <b>2017</b> , 6, 27	9
476	Stimuli-Responsive Soft Untethered Grippers for Drug Delivery and Robotic Surgery. <b>2017</b> , 3,	69
475	Design and Preliminary Feasibility Study of a Soft Robotic Glove for Hand Function Assistance in Stroke Survivors. <b>2017</b> , 11, 547	66
474	Comparison of different soft grippers for lunch box packaging. <b>2017</b> , 4, 10	21
473	Model-Free Control for Continuum Robots Based on an Adaptive Kalman Filter. <b>2018</b> , 23, 286-297	77
472	Modeling and Design of Smart Braid□Inductance Sensors for Fiber-Reinforced Elastomeric Enclosures. <b>2018</b> , 18, 2827-2835	5

471	A soft robot capable of 2D mobility and self-sensing for obstacle detection and avoidance. <b>2018</b> , 27, 045017		14
470	Use of Deep Learning for Characterization of Microfluidic Soft Sensors. <b>2018</b> , 3, 873-880		66
469	A digital light processing 3D printer for fast and high-precision fabrication of soft pneumatic actuators. <b>2018</b> , 273, 285-292		76
468	Echinoderm-Inspired Tube Feet for Robust Robot Locomotion and Adhesion. <b>2018</b> , 3, 2222-2228		14
467	A Modular Soft Robotic Wrist for Underwater Manipulation. <i>Soft Robotics</i> , <b>2018</b> , 5, 399-409	9.2	50
466	Fully Soft 3D-Printed Electroactive Fluidic Valve for Soft Hydraulic Robots. <i>Soft Robotics</i> , <b>2018</b> , 5, 258-274	9.2	40
465	Softer is Harder: What Differentiates Soft Robotics from Hard Robotics?. <b>2018</b> , 3, 1557-1568		52
464	Programmable design of soft pneu-net actuators with oblique chambers can generate coupled bending and twisting motions. <b>2018</b> , 271, 131-138		74
463	A Soft Robotic Gripper With Gecko-Inspired Adhesive. <b>2018</b> , 3, 903-910		144
462	Slit Tubes for Semisoft Pneumatic Actuators. <b>2018</b> , 30, 1704446		44
461	A Bio-inspired Soft Robotic Arm: Kinematic Modeling and Hydrodynamic Experiments. <b>2018</b> , 15, 204-219		28
460	Size recognition and adaptive grasping using an integration of actuating and sensing soft pneumatic gripper. <b>2018</b> , 104, 14-24		30
459	Untethered soft robot capable of stable locomotion using soft electrostatic actuators. <b>2018</b> , 21, 9-16		89
458	A statistical review of industrial robotic grippers. <b>2018</b> , 49, 88-97		63
457	Fiber-Reinforced Origamic Robotic Actuator. <i>Soft Robotics</i> , <b>2018</b> , 5, 81-92	9.2	40
456	Novel Design of a Soft Lightweight Pneumatic Continuum Robot Arm with Decoupled Variable Stiffness and Positioning. <i>Soft Robotics</i> , <b>2018</b> , 5, 54-70	9.2	63
455	Bending angle prediction and control of soft pneumatic actuators with embedded flex sensors via data-driven approach. <b>2018</b> , 50, 234-247		89
454	Intuitive Control of Humanoid Soft-Robotic Hand BCL-13. <b>2018</b> ,		9

453	Soft Curvature and Contact Force Sensors for Deep-Sea Grasping via Soft Optical Waveguides. <b>2018</b>	13
452	Real-time Dynamic Models for Soft Bending Actuators. <b>2018,</b>	1
451	A Soft Gripper with Adjustable Stiffness and Variable Working Length for Handling Food Material. <b>2018,</b>	5
450	Design of a Multi-Stage Stiffness Enhancing Unit for a Soft Robotic Finger and its Robust Motion Control. <b>2018,</b>	0
449	Development of a Hybrid Gripper with Soft Material and Rigid Structures. <b>2018,</b>	5
448	Working towards the design framework for an fluid actuated softwing. <b>2018,</b>	0
447	Design, Manufacturing, and Characterization of a Pneumatically-Actuated Soft Hand. <b>2018,</b>	
446	Design and Control of a Hexacopter With Soft Grasper for Autonomous Object Detection and Grasping. <b>2018,</b>	9
445	Parametric Design of a Soft Gripper Actuated Using the Electrostrictive PVDF-Based Terpolymer. <b>2018,</b>	1
444	Design and fabrication of soft gripper using 3D printer. <b>2018,</b> 402, 012026	1
443	A Soft Modular End Effector for Underwater Manipulation: A Gentle, Adaptable Grasp for the Ocean Depths. <b>2018,</b> 25, 45-56	14
442	Soft Robots Manufacturing: A Review. <b>2018,</b> 5, 84	102
441	Contact Detection and Size Estimation Using a Modular Soft Gripper with Embedded Flex Sensors. <b>2018,</b>	1
440	A New Manufacturing Process for Soft Robots and Soft/Rigid Hybrid Robots. <b>2018,</b>	6
439	Development of a Pneumatically Driven Flexible Finger with Feedback Control of a Polyurethane Bend Sensor. <b>2018,</b>	3
438	Soft Robotic Finger with Integrated Stretchable Strain Sensor. <b>2018,</b>	7
437	Vacuum-Actuated Bending for Grasping. <b>2018,</b> 7, 73	1
436	Compliant Low Profile Multi-Axis Force Sensors. <b>2018,</b>	2

435	A Dexterous, Glove-Based Teleoperable Low-Power Soft Robotic Arm for Delicate Deep-Sea Biological Exploration. <b>2018</b> , 8, 14779	43
434	Antibiotics from Deep-Sea Microorganisms: Current Discoveries and Perspectives. <b>2018</b> , 16,	59
433	Thrust force characterization of free-swimming soft robotic jellyfish. <b>2018</b> , 13, 064001	48
432	PASCAV Gripper: a Pneumatically Actuated Soft Cubical Vacuum Gripper. <b>2018</b> ,	3
431	Augmented reality visualization of scene depth for aiding ROV pilots in underwater manipulation. <b>2018</b> , 168, 140-154	9
430	A Structural Optimisation Method for a Soft Pneumatic Actuator. <b>2018</b> , 7, 24	28
429	Novel ink for ambient condition printing of liquid crystal elastomers for 4D printing. <b>2018</b> , 27, 125011	95
428	A Modular Dielectric Elastomer Actuator to Drive Miniature Autonomous Underwater Vehicles. <b>2018</b> ,	23
427	OmniSkins: Robotic skins that turn inanimate objects into multifunctional robots. <b>2018</b> , 3,	60
426	Precise In-Hand Motion Control of Objects Using Soft Actuators and Visual Feedback. <b>2018</b> ,	1
425	Fabrication of Soft Pneumatic Network Actuators with Oblique Chambers. <b>2018</b> ,	5
424	Adaptive Soft Robotic Gripper Based on Shape Morphing Compliant System. <b>2018</b> ,	2
423	Design of Multifunctional Soft Doming Actuator for Soft Machines. <b>2018</b> , 3, 1800069	8
422	Biomedical applications of soft robotics. <b>2018</b> , 3, 143-153	437
421	Design and control of a novel variable stiffness soft arm. <b>2018</b> , 32, 605-622	10
420	Soft Robotic Grippers. <b>2018</b> , 30, e1707035	555
419	Hand Design Hybrid Soft and Hard Structures Based on Human Fingertips for Dexterity. <b>2018</b> , 115-147	1
418	Artificial muscle driven soft hydraulic robot: electromechanical actuation and simplified modeling. <b>2018</b> , 27, 095016	12

417	Robotics and High-Throughput Techniques. <b>2018</b> , 155-166		2
416	Continuum-Based Geometry/Analysis Approach for Flexible and Soft Robotic Systems. <i>Soft Robotics</i> , <b>2018</b> , 5, 613-621	9.2	8
415	Directly Printable Flexible Strain Sensors for Bending and Contact Feedback of Soft Actuators. <b>2018</b> , 5, 2		32
414	Towards Pneumatic Spiral Grippers: Modeling and Design Considerations. <i>Soft Robotics</i> , <b>2018</b> , 5, 695-709	9.2	26
413	Topology Optimization and Prototype of a Three-Dimensional Printed Compliant Finger for Grasping Vulnerable Objects With Size and Shape Variations. <b>2018</b> , 10,		14
412	Sleeved Bending Actuators for Soft Grippers: A Durable Solution for High Force-to-Weight Applications. <b>2018</b> , 7, 40		30
411	Shipboard design and fabrication of custom 3D-printed soft robotic manipulators for the investigation of delicate deep-sea organisms. <b>2018</b> , 13, e0200386		32
410	Chamber dimension optimization of a bellow-type soft actuator for food material handling. <b>2018</b> ,		7
409	. <b>2018</b> ,		6
408	Enhancing Perception with Tactile Object Recognition in Adaptive Grippers for Human-Robot Interaction. <b>2018</b> , 18,		31
407	State and stiffness estimation using robotic fabrics. <b>2018</b> ,		9
406	Exploiting Textile Mechanical Anisotropy for Fabric-Based Pneumatic Actuators. <i>Soft Robotics</i> , <b>2018</b> , 5, 662-674	9.2	76
405	A soft robotic approach to robust and dexterous grasping. <b>2018</b> ,		25
404	Optimal Design of a Soft Robotic Gripper for Grasping Unknown Objects. <i>Soft Robotics</i> , <b>2018</b> , 5, 452-465	9.2	38
403	Controllable helical deformations on printed anisotropic composite soft actuators. <b>2018</b> , 112, 181905		8
402	A Reconfigurable Pneumatic Bending Actuator with Replaceable Inflation Modules. <i>Soft Robotics</i> , <b>2018</b> , 5, 304-317	9.2	21
401	In situ Observations of the Meso-Bathypelagic Scyphozoan, <i>Deepstaria enigmatica</i> (Semaestomeae: Ulmaridae). <b>2018</b> , 3900, 1-14		1
400	Precharged Pneumatic Soft Actuators and Their Applications to Untethered Soft Robots. <i>Soft Robotics</i> , <b>2018</b> , 5, 567-575	9.2	28



399	A Soft-Robotic Approach to Anthropomorphic Robotic Hand Dexterity. <b>2019</b> , 7, 101483-101495	39
398	Reducing Out-of-Plane Deformation of Soft Robotic Actuators for Stable Grasping. <b>2019</b> ,	8
397	A Vacuum-driven Origami Magic-ball Soft Gripper. <b>2019</b> ,	50
396	Simplifying Soft Robots Through Adhesive-backed Fabrics. <b>2019</b> ,	1
395	Linear and Nonlinear Low Level Control of a Soft Pneumatic Actuator. <b>2019</b> ,	10
394	Development of MEMS-fabricated bidirectional ECF (electro-conjugate fluid) micropumps. <b>2019</b> , 295, 317-323	8
393	Development of Active Soft Robotic Manipulators for Stable Grasping Under Slippery Conditions. <b>2019</b> , 7, 97604-97613	4
392	Dynamic photovoltaic building envelopes for adaptive energy and comfort management. <b>2019</b> , 4, 671-682	36
391	On Planar Discrete Elastic Rod Models for the Locomotion of Soft Robots. <i>Soft Robotics</i> , <b>2019</b> , 6, 595-610.2	27
390	Soft Robots for Extreme Environments: Removing Electronic Control. <b>2019</b> ,	19
389	A Wrapping Gripper for Packaging Chopped and Granular Food Materials. <b>2019</b> ,	15
388	Octopus-Inspired Soft Arm with Suction Cups for Enhanced Grasping Tasks in Confined Environments. <b>2019</b> , 1, 1900041	31
387	Soft Robotic Gripper with Chambered Fingers for Performing In-Hand Manipulation. <b>2019</b> , 9, 2967	13
386	Multi-functional soft-bodied jellyfish-like swimming. <b>2019</b> , 10, 2703	182
385	Soft Robotic Fingers with Embedded Ionogel Sensors and Discrete Actuation Modes for Somatosensitive Manipulation. <b>2019</b> ,	22
384	Novel Smart and Compliant Robotic Gripper: Design, Modelling, Experiments and Control. <b>2019</b> ,	0
383	Fully 3D Printed Monolithic Soft Gripper with High Conformal Grasping Capability. <b>2019</b> ,	15
382	Combining Locomotion and Grasping Functionalities in Soft Robots. <b>2019</b> , 1, 1900089	14

381	Ultragentle manipulation of delicate structures using a soft robotic gripper. <b>2019</b> , 4,		77
380	Design, Fabrication, and Characterization of an Untethered Amphibious Sea Urchin-Inspired Robot. <b>2019</b> , 4, 3348-3354		13
379	STAS: An Antagonistic Soft Pneumatic Actuator Assembly for High Torque Output. <b>2019</b> ,		3
378	A 3D Printed Paper-Based Thermally Driven Soft Robotic Gripper Inspired by Cabbage. <b>2019</b> , 20, 1915-1928		14
377	On the use of soft continuum robots for remote measurement tasks in constrained environments: a brief overview of applications. <b>2019</b> ,		6
376	Development of a Sensorized Hybrid Gripper to Evaluate Grasping Quality. <b>2019</b> ,		2
375	Development of Fast Prototyping Pneumatic Actuated Grippers. <b>2019</b> , 20, 2183-2192		4
374	Large-Magnitude Transformable Liquid-Metal Composites. <b>2019</b> , 4, 2311-2319		21
373	A Deformable Motor Driven by Dielectric Elastomer Actuators and Flexible Mechanisms. <b>2019</b> , 6, 1		40
372	Topology and SizeShape Optimization of an Adaptive Compliant Gripper with High Mechanical Advantage for Grasping Irregular Objects. <b>2019</b> , 37, 1383-1400		17
371	Pre-Charged Pneumatic Soft Gripper With Closed-Loop Control. <b>2019</b> , 4, 1402-1408		20
370	Fiber Optic Shape Sensing for Soft Robotics. <i>Soft Robotics</i> , <b>2019</b> , 6, 671-684	9.2	44
369	Tubular Jamming: A Variable Stiffening Method Toward High-Force Applications with Soft Robotic Components. <i>Soft Robotics</i> , <b>2019</b> , 6, 468-482	9.2	9
368	Robotic Artificial Muscles: Current Progress and Future Perspectives. <b>2019</b> , 35, 761-781		110
367	Fabric-Based Soft Grippers Capable of Selective Distributed Bending for Assistance of Daily Living Tasks. <b>2019</b> ,		5
366	Evaluation Environment for Control Design of Soft Pneumatic Actuators. <b>2019</b> , 74-83		2
365	A Century of Robotic Hands. <b>2019</b> , 2, 1-32		97
364	An Opposite-Bending-and-Extension Soft Robotic Manipulator for Delicate Grasping in Shallow Water. <b>2019</b> , 6, 26		14

363	Folded-Tube Soft Pneumatic Actuators for Bending. <i>Soft Robotics</i> , <b>2019</b> , 6, 174-183	9.2	12
362	A Soft Ring-Shaped Actuator for Radial Contracting Deformation: Design and Modeling. <i>Soft Robotics</i> , <b>2019</b> , 6, 444-454	9.2	13
361	Vacuum-Powered Soft Pneumatic Twisting Actuators to Empower New Capabilities for Soft Robots. <b>2019</b> , 4, 1800429		32
360	Emerging Material Technologies for Haptics. <b>2019</b> , 4, 1900042		54
359	Soft Robotic Grippers Based on Particle Transmission. <b>2019</b> , 24, 969-978		23
358	Robotic Skins That Learn to Control Passive Structures. <b>2019</b> , 4, 2485-2492		6
357	Layer-Jamming Suction Grippers With Variable Stiffness. <b>2019</b> , 11,		14
356	Design and Control of an Electrohydraulic Soft Actuator System for Robotic Grippers. <b>2019</b> ,		2
355	Introduction of a Flexible Adaptive AUV-Capture Device Based on bio-inspired hydraulic Soft Robot. <b>2019</b> ,		
354	. <b>2019</b> ,		1
353	Design and Fabrication of Long Soft-Robotic Elastomeric Actuator Inspired by Octopus Arm. <b>2019</b> ,		3
352	. <b>2019</b> ,		1
351	. <b>2019</b> ,		28
350	Design, Modeling and Testing of a Flagellum-inspired Soft Underwater Propeller Exploiting Passive Elasticity. <b>2019</b> ,		1
349	Stability Analysis of Rod-Driven Continuum Robots Based on Finite Element Models to Avoid Buckling. <b>2019</b> ,		1
348	. <b>2019</b> ,		3
347	High-Precision 6DOF Object Manipulation Using Redundant Parallel Drive Soft Fingers and Visual Feedback. <b>2019</b> ,		
346	. <b>2019</b> ,		4

345	Programmable Design of Soft Actuators and Robots*. <b>2019</b> ,			3
344	Hardware Sequencing of Inflatable Nonlinear Actuators for Autonomous Soft Robots. <b>2019</b> , 31, e1804598			25
343	High-Load Soft Grippers Based on Bionic Winding Effect. <i>Soft Robotics</i> , <b>2019</b> , 6, 276-288	9.2		19
342	. <b>2019</b> , 4, 65-72			29
341	A Novel Fabric-Based Versatile and Stiffness-Tunable Soft Gripper Integrating Soft Pneumatic Fingers and Wrist. <i>Soft Robotics</i> , <b>2019</b> , 6, 1-20	9.2		41
340	Tunable Contact Conditions and Grasp Hydrodynamics Using Gentle Fingertip Suction. <b>2019</b> , 35, 295-306			7
339	Design and Manufacturing of Tendon-Driven Soft Foam Robots. <b>2020</b> , 38, 88-105			10
338	Soft Robotic Pad Maturing for Practical Applications. <i>Soft Robotics</i> , <b>2020</b> , 7, 30-43	9.2		10
337	4D printing of materials for the future: Opportunities and challenges. <b>2020</b> , 18, 100490			81
336	A soft gripper with variable stiffness inspired by pangolin scales, toothed pneumatic actuator and autonomous controller. <b>2020</b> , 61, 101848			38
335	Bioinspired Three-Dimensional-Printed Helical Soft Pneumatic Actuators and Their Characterization. <i>Soft Robotics</i> , <b>2020</b> , 7, 267-282	9.2		43
334	Wireless manipulation using magnetic polymer composites. <b>2020</b> , 29, 035035			1
333	MakeSense: Automated Sensor Design for Proprioceptive Soft Robots. <i>Soft Robotics</i> , <b>2020</b> , 7, 332-345	9.2		31
332	A Bioinspired Soft Swallowing Robot Based on Compliant Guiding Structure. <i>Soft Robotics</i> , <b>2020</b> , 7, 491-499			9
331	Body Wave Generation for Anguilliform Locomotion Using a Fiber-Reinforced Soft Fluidic Elastomer Actuator Array Toward the Development of the Eel-Inspired Underwater Soft Robot. <i>Soft Robotics</i> , <b>2020</b> , 7, 233-250	9.2		18
330	Soft Tactile Fingertip to Estimate Orientation and the Contact State of Thin Rectangular Objects. <b>2020</b> , 5, 159-166			5
329	A soft gripper with programmable effective length, tactile and curvature sensory feedback. <b>2020</b> , 29, 035006			16
328	Hands in the Real World. <b>2019</b> , 6, 147			5

327	A Tri-Stable Soft Robotic Finger Capable of Pinch and Wrap Grasps. <b>2020</b> ,		3
326	A Soft Gripper with Retractable Nails for Advanced Grasping and Manipulation. <b>2020</b> ,		3
325	Tactile sensing based on fingertip suction flow for submerged dexterous manipulation. <b>2020</b> ,		0
324	Mechanically Programmed Miniature Origami Grippers. <b>2020</b> ,		3
323	An obstacle-interaction planning method for navigation of actuated vine robots. <b>2020</b> ,		7
322	Fiber pattern optimization for soft robotic pad. <b>2020</b> , 41, 101055		2
321	Flexible electromagnetic capturer with a rapid ejection feature inspired by a biologically ballistic tongue. <b>2020</b> ,		0
320	Development and Performance Analysis of Pneumatic Soft-Bodied Bionic Basic Execution Unit. <b>2020</b> , 2020, 1-13		2
319	Ultra-sensitive and resilient compliant strain gauges for soft machines. <b>2020</b> , 587, 219-224		109
318	A Pneumatically Driven, Disposable, Soft Robotic Gripper Equipped with Retractable, Telescopic Fingers. <b>2020</b> ,		1
317	Characterization and Modeling of Layer Jamming for Designing Engineering Materials with Programmable Elastic-Plastic Behavior. <b>2020</b> , 60, 1187-1203		4
316	A Cephalopod-Inspired Soft-Robotic Siphon for Thrust Vectoring and Flow Rate Regulation. <i>Soft Robotics</i> , <b>2021</b> , 8, 416-431	9.2	4
315	A3D Printed Modular Soft Gripper for Conformal Grasping. <b>2020</b> ,		3
314	A Pneumatic Soft Gripper with Configurable Workspace and Self-sensing. <b>2020</b> ,		1
313	Parallel Helix Actuators for Soft Robotic Applications. <b>2020</b> , 7, 119		5
312	Compliant Underwater Manipulator with Integrated Tactile Sensor for Nonlinear Force Feedback Control of an SMA Actuation System. <b>2020</b> , 315, 112221-112221		3
311	Employing Pneumatic, Telescopic Actuators for the Development of Soft and Hybrid Robotic Grippers. <b>2020</b> , 7, 601274		3
310	Preparation and properties characterization of a novel soft robots partially made of silicone/W-based composites for gamma ray shielding. <b>2020</b> , 130, 103531		0

309	Design and closed loop control of a 3D printed soft actuator. <b>2020</b> ,		3
308	Design and Motion Analysis of Adjustable Pneumatic Soft Manipulator for Grasping Objects. <b>2020</b> , 8, 191920-191929		1
307	. <b>2020</b> , 27, 12-26		11
306	A Bidirectional 3D-printed Soft Pneumatic Actuator and Graphite-based Flex Sensor for Versatile Grasping*. <b>2020</b> ,		4
305	Soft Actuators for Soft Robotic Applications: A Review. <b>2020</b> , 2, 2000128		81
304	Model-Free Tracking Control of Continuum Manipulators With Global Stability and Assigned Accuracy. <b>2020</b> , 1-11		8
303	Magnetorheological Fluid-Based Flow Control for Soft Robots. <b>2020</b> , 2, 2000139		12
302	Circular Shell Gripper for Handling Food Products. <i>Soft Robotics</i> , <b>2021</b> , 8, 542-554	9.2	9
301	Tactile sensor array laden 3D-printed soft robotic gripper. <b>2020</b> ,		0
300	Simultaneous Motion and Force Sensing for a Flexure Finger. <b>2020</b> ,		0
299	Bio-Inspired Conformable and Helical Soft Fabric Gripper with Variable Stiffness and Touch Sensing. <b>2020</b> , 5, 2000724		19
298	Contact-less Manipulation of Millimeter-scale Objects via Ultrasonic Levitation. <b>2020</b> ,		3
297	Soft Pneumatic Gripper With a Tendon-Driven Soft Origami Pump. <b>2020</b> , 8, 461		16
296	3D printed, modularized rigid-flexible integrated soft finger actuators for anthropomorphic hands. <b>2020</b> , 312, 112090		11
295	A Compression Valve for Sanitary Control of Fluid-Driven Actuators. <b>2020</b> , 25, 1005-1015		3
294	Exploring the Role of Palm Concavity and Adaptability in Soft Synergistic Robotic Hands. <b>2020</b> , 1-1		3
293	Closing the Loop with Liquid-Metal Sensing Skin for Autonomous Soft Robot Gripping. <b>2020</b> ,		4
292	A Computational Design Framework for Pressure-driven Soft Robots through Nonlinear Topology Optimization. <b>2020</b> ,		6

291	Structural and Mechanical Characteristics of a Capsule-Type Soft Pneumatic Actuator with Large Thrust Force and High-Contraction Ratio. <b>2020</b> , 2020, 1-13	0
290	Characterization of a Soft Gripper with Detachable Fingers through Rapid Evaporation. <b>2020</b> ,	1
289	Controllable Stiffness Origami Skeletons for Lightweight and Multifunctional Artificial Muscles. <b>2020</b> , 30, 2000349	11
288	Multi-segment soft robotic fingers enable robust precision grasping. <b>2020</b> , 39, 1647-1667	30
287	A Layered Manufacturing Approach for Soft and Soft-Rigid Hybrid Robots. <i>Soft Robotics</i> , <b>2020</b> , 7, 218-230.2	5
286	Fabrication and study of miniaturized soft pneumatic fingers. <b>2020</b> , 59, SIIL07	1
285	Design and Modeling of a High Force Soft Actuator for Assisted Elbow Flexion. <b>2020</b> , 5, 3731-3736	12
284	. <b>2020</b> , 5, 3854-3860	5
283	Three-Dimensional Programmable, Reconfigurable, and Recyclable Biomass Soft Actuators Enabled by Designing an Inverse Opal-Mimetic Structure with Exchangeable Interfacial Crosslinks. <b>2020</b> , 12, 15757-15764	12
282	A Two-Finger Soft-Robotic Gripper With Enveloping and Pinching Grasping Modes. <b>2020</b> , 1-1	10
281	Design and Optimize of a Novel Segmented Soft Pneumatic Actuator. <b>2020</b> , 8, 122304-122313	5
280	A Mathematical Modeling Method Elucidating the Integrated Gripping Performance of Ant Mandibles and Bio-inspired Grippers. <b>2020</b> , 17, 732-746	2
279	Damping effect of particle-jamming structure for soft actuators with 3D-printed particles. <b>2020</b> , 29, 095012	4
278	A Dexterous Soft Robotic Hand for Delicate In-Hand Manipulation. <b>2020</b> , 5, 5502-5509	39
277	A Tendon-Driven, Preloaded, Pneumatically Actuated, Soft Robotic Gripper with a Telescopic Palm. <b>2020</b> ,	6
276	Design and Characterization of a Miniature Hydraulic Power Supply for High-Bandwidth Control of Soft Robotics. <b>2020</b> ,	2
275	Feedback Control of a Soft Swinging Appendage. <b>2020</b> ,	0
274	A Hybrid Underwater Manipulator System With Intuitive Muscle-Level sEMG Mapping Control. <b>2020</b> , 5, 3198-3205	3

273	Ultra-gentle soft robotic fingers induce minimal transcriptomic response in a fragile marine animal. <b>2020</b> , 30, R157-R158		4
272	An Underwater Robotic Manipulator with Soft Bladders and Compact Depth-Independent Actuation. <i>Soft Robotics</i> , <b>2020</b> , 7, 535-549	9.2	13
271	A Sensorized Hybrid Gripper to Evaluate a Grasping Quality Based on a Largest Minimum Wrench. <b>2020</b> , 5, 3243-3250		6
270	Geometric Gait Design for a Starfish-Inspired Robot Using a Planar Discrete Elastic Rod Model. <b>2020</b> , 2, 1900186		4
269	A dual-mode soft gripper for food packaging. <b>2020</b> , 125, 103427		43
268	Experimental Investigation into the Dynamics of a Radially Contracting Actuator with Embedded Sensing Capability. <i>Soft Robotics</i> , <b>2020</b> , 7, 478-490	9.2	5
267	A Probabilistic Model-Based Online Learning Optimal Control Algorithm for Soft Pneumatic Actuators. <b>2020</b> , 5, 1437-1444		8
266	Basic design of a biomimetic underwater soft robot with switchable swimming modes and programmable artificial muscles. <b>2020</b> , 29, 035038		9
265	Integration of Self-Sealing Suction Cups on the FLEXotendon Glove-II Robotic Exoskeleton System. <b>2020</b> , 5, 867-874		4
264	Soft Robotics: A Review of Recent Developments of Pneumatic Soft Actuators. <b>2020</b> , 9, 3		79
263	Bionic torus as a self-adaptive soft grasper in robots. <b>2020</b> , 116, 023701		9
262	Deformation Mechanism Formulation of Differential-Stiffness-Films-Laminated Pouch Motor. <b>2020</b> ,		
261	Design of a self-adaptive gripper with rigid fingers for Industrial Internet. <b>2020</b> , 65, 101976		9
260	Enhancing the Scientific Value of Industry Remotely Operated Vehicles (ROVs) in Our Oceans. <b>2020</b> , 7,		12
259	Experimental study of multi-stable morphing structures actuated by pneumatic actuation. <b>2020</b> , 108, 1203-1216		13
258	A Systematic Review and Meta-analysis of Robotic Gripper. <b>2020</b> , 782, 042055		1
257	On the use of textile materials in robotics. <b>2020</b> , 15, 155892502091072		5
256	Low-Cost Sensor-Rich Fluidic Elastomer Actuators Embedded with Paper Electronics. <b>2020</b> , 2, 2000025		5



255	A soft manipulator for efficient delicate grasping in shallow water: Modeling, control, and real-world experiments. <b>2021</b> , 40, 449-469		35
254	Variable stiffness structural design of a dual-segment continuum with independent stiffness and angular position. <b>2021</b> , 67, 102000		13
253	Bioinspired Sensing, Actuation, and Control in Underwater Soft Robotic Systems. <b>2021</b> ,		2
252	Hybrid System Analysis and Control of a Soft Robotic Gripper with Embedded Proprioceptive Sensing for Enhanced Gripping Performance. <b>2021</b> , 3, 2000061		3
251	Soft Humanoid Hands with Large Grasping Force Enabled by Flexible Hybrid Pneumatic Actuators. <i>Soft Robotics</i> , <b>2021</b> , 8, 175-185	9.2	13
250	A Multimodal, Enveloping Soft Gripper: Shape Conformation, Bioinspired Adhesion, and Expansion-Driven Suction. <b>2021</b> , 37, 350-362		17
249	Bending analysis and contact force modeling of soft pneumatic actuators with pleated structures. <b>2021</b> , 193, 106150		15
248	For safe and compliant interaction: an outlook of soft underwater manipulators. <b>2021</b> , 235, 3-14		2
247	Model-based online learning and adaptive control for a human-wearable soft robot-Integrated system. <b>2021</b> , 40, 256-276		20
246	Controlling the deformation space of soft membranes using fiber reinforcement. <b>2021</b> , 40, 178-196		4
245	Substantial capabilities of robotics in enhancing industry 4.0 implementation. <b>2021</b> , 1, 58-75		31
244	Synergizing microfluidics with soft robotics: A perspective on miniaturization and future directions. <b>2021</b> , 15, 011302		12
243	Grasping Force Control of Robotic Gripper with High Stiffness. <b>2021</b> , 1-1		3
242	Advances in printing technologies for soft robotics devices applications. <b>2021</b> , 45-89		3
241	Modeling of a Soft-Rigid Gripper Actuated by a Linear-Extension Soft Pneumatic Actuator. <b>2021</b> , 21,		4
240	Sensorized Reconfigurable Soft Robotic Gripper System for Automated Food Handling. <b>2021</b> , 1-12		3
239	Enhancing the Universality of a Pneumatic Gripper via Continuously Adjustable Initial Grasp Postures. <b>2021</b> , 1-15		9
238	Soft Robots for Ocean Exploration and Offshore Operations: A Perspective. <i>Soft Robotics</i> , <b>2021</b> , 8, 625-639		8

237	A Compliant Adaptive Gripper and Its Intrinsic Force Sensing Method. <b>2021</b> , 1-20	4
236	Theoretical modelling of soft robotic gripper with bioinspired fibrillar adhesives. 1-19	1
235	Design of Low Pressure Driven Soft Actuators for Soft Gripper. <b>2021</b> , 16, 23-28	
234	Self-powered soft robot in the Mariana Trench. <b>2021</b> , 591, 66-71	131
233	A Gas-Ribbon-Hybrid Actuated Soft Finger with Active Variable Stiffness. <i>Soft Robotics</i> , <b>2021</b> , 9.2	3
232	Bio-Inspired Soft Grippers Based on Impactive Gripping. <b>2021</b> , 8, 2002017	13
231	Motion and shape control of soft robots and materials. <b>2021</b> , 104, 165-189	3
230	Development and Grasp Stability Estimation of Sensorized Soft Robotic Hand. <b>2021</b> , 8, 619390	2
229	Soft Grippers for Automatic Crop Harvesting: A Review. <b>2021</b> , 21,	12
228	Water hydraulic soft actuators for underwater autonomous robotic systems. <b>2021</b> , 109, 102551	9
227	Design and Analysis of Pneumatic Bending Actuator Used in Soft Robotics. 105, 194-201	0
226	Characterizing Continuous Manipulation Families for Dexterous Soft Robot Hands. <b>2021</b> , 8, 645290	0
225	Feedback control of a pneumatically driven soft finger using a photoelastic polyurethane bending sensor. 1-16	2
224	A Dual-Mode Actuator for Soft Robotic Hand. <b>2021</b> , 6, 1144-1151	5
223	Comparison of Different Technologies for Soft Robotics Grippers. <b>2021</b> , 21,	5
222	Research Trends and Future Perspectives in Marine Biomimicking Robotics. <b>2021</b> , 21,	7
221	Re-foldable origami-inspired bidirectional twisting of artificial muscles reproduces biological motion. <b>2021</b> , 2, 100407	1
220	A four-tendon robotic finger with tendon transmission inspired by the human extensor mechanism. <b>2021</b> , 16,	0

219	Sensorized Foam Actuator with Intrinsic Proprioception and Tunable Stiffness Behavior for Soft Robots. <b>2021</b> , 3, 2100022		1
218	Design Optimization of a Pneumatic Soft Robotic Actuator Using Model-Based Optimization and Deep Reinforcement Learning. <b>2021</b> , 8, 639102		3
217	A two-stage design optimization framework for multifield origami-inspired structures. 1045389X2110116		
216	Elastomeric Haptic Devices for Virtual and Augmented Reality. <b>2021</b> , 31, 2009364		7
215	A methodology for design and simulation of soft grippers. <b>2021</b> , 97, 779-791		
214	Multimode Grasping Soft Gripper Achieved by Layer Jamming Structure and Tendon-Driven Mechanism. <i>Soft Robotics</i> , <b>2021</b> ,	9.2	4
213	Soft Robotic Hands and Tactile Sensors for Underwater Robotics. <b>2021</b> , 2, 356-383		4
212	Optimal Soft Composites for Under-Actuated Soft Robots. <b>2021</b> , 6, 2100361		4
211	Design and Feasibility Tests of a Lightweight Soft Gripper for Compliant and Flexible Envelope Grasping. <i>Soft Robotics</i> , <b>2021</b> ,	9.2	2
210	Research on performance of rigid-hoop-reinforced multi-DOF soft actuator. <b>2021</b> , 13, 168781402110267		0
209	Static Modeling of the Fiber-Reinforced Soft Pneumatic Actuators Including Inner Compression: Bending in Free Space, Block Force, and Deflection upon Block Force. <i>Soft Robotics</i> , <b>2021</b> ,	9.2	1
208	A Novel Soft Robotic Hand Design With Human-Inspired Soft Palm: Achieving a Great Diversity of Grasps. <b>2021</b> , 28, 37-49		9
207	Experimentally Identified Models of McKibben Soft Actuators as Primary Movers and Passive Structures. <b>2022</b> , 14,		2
206	Soft Directional Adhesion Gripper Fabricated by 3D Printing Process for Gripping Flexible Printed Circuit Boards. 1		0
205	Programmable Mechanically Active Hydrogel-Based Materials. <b>2021</b> , 33, e2006600		9
204	A 22-DOFs Bio-inspired Soft Hand Achieving 6 Kinds of In-hand Manipulation. <b>2021</b> ,		
203	A review on self-healing polymers for soft robotics. <b>2021</b> , 47, 187-205		32
202	Modeling and analysis of a passively adaptive soft gripper with the bio-inspired compliant mechanism. <b>2021</b> , 16,		0

201	A Method for Supervisory Control of Manipulator of Underwater Vehicle. <b>2021</b> , 9, 740	1
200	A pneumatic random-access memory for controlling soft robots. <b>2021</b> , 16, e0254524	3
199	A Perspective on Cephalopods Mimicry and Bioinspired Technologies toward Proprioceptive Autonomous Soft Robots. 2100437	4
198	Performance Metrics for Fluidic Soft Robot Rotational Actuators. <b>2021</b> , 8, 632835	
197	A Pneumatically Driven, Disposable, Soft Robotic Gripper Equipped With Multi-Stage, Retractable, Telescopic Fingers. <b>2021</b> , 3, 573-582	0
196	Soft Gripper Design Based on the Integration of Flat Dry Adhesive, Soft Actuator, and Microspine. <b>2021</b> , 37, 1065-1080	6
195	Active learning in robotics: A review of control principles. <b>2021</b> , 77, 102576	4
194	Paper-Based Robotics with Stackable Pneumatic Actuators. <i>Soft Robotics</i> , <b>2021</b> ,	9.2 0
193	Contact force estimation of hydraulic soft bending actuators for gripping. <b>2021</b> , 35, 1098-1106	0
192	Diaphragm-Type Pneumatic-Driven Soft Grippers for Precision Harvesting. <b>2021</b> , 11, 1727	1
191	A dynamic electrically driven soft valve for control of soft hydraulic actuators. <b>2021</b> , 118,	3
190	Design of a Flexible Capture Mechanism Inspired by Sea Anemone for Non-cooperative Targets. <b>2021</b> , 34,	2
189	Kinematics modeling and grasping experiment of pneumatic four-finger flexible robotic hand. 095440622110282	
188	A Modular and Self-Contained Fluidic Engine for Soft Actuators. 2100094	1
187	Mechanical Valves for On-Board Flow Control of Inflatable Robots. <b>2021</b> , 8, e2101941	9
186	Active Ecological Restoration of Cold-Water Corals: Techniques, Challenges, Costs and Future Directions. <b>2021</b> , 8,	0
185	Origami-inspired magnetic-driven soft actuators with programmable designs and multiple applications. <b>2021</b> , 89, 106424	9
184	A Multimode Flow Control Valve for Simplifying the Driving System of Pneumatic Soft Robots. <b>2021</b> , 68, 12472-12481	2

183	Optimal Structure and Size of Multi-segment Soft Robotic Arms with Finite Element Method. <b>2021</b> , 233, 04023	
182	Mechanically Programmable Dip Molding of High Aspect Ratio Soft Actuator Arrays. <b>2020</b> , 30, 1908919	14
181	Design and testing of the JPL-Nautilus Gripper for deep-ocean geological sampling. <b>2020</b> , 37, 972-986	5
180	Artificial Muscles for Underwater Soft Robotic System. <b>2021</b> , 71-97	3
179	Soft Fingers with Controllable Compliance to Enable Realization of Low Cost Grippers. <b>2017</b> , 544-550	5
178	An experimental study of bellows-type fluidic soft bending actuators under external water pressure. <b>2020</b> , 29, 087005	3
177	A Soft, Modular, and Bi-stable Dome Actuator for Programmable Multi-Modal Locomotion. <b>2020</b> ,	3
176	A Pneumatic Needle Gripper for Handling Shredded Food Products. <b>2020</b> ,	5
175	Easily Fabricatable Shell Gripper for Packaging Multiple Cucumbers Simultaneously. <b>2020</b> ,	3
174	A Novel Simple, Adaptive, and Versatile Soft-Robotic Compliant Two-Finger Gripper With an Inherently Gentle Touch. <b>2021</b> , 13,	5
173	Improving Structural Design of Soft Actuators Using Finite Element Method Analysis. <b>2020</b> , 18, 490-500	1
172	An Active Palm Enhances Dexterity of Soft Robotic In-Hand Manipulation. <b>2021</b> ,	3
171	Processing of Self-Healing Polymers for Soft Robotics. <b>2021</b> , e2104798	10
170	Injection Molding of Soft Robots. 2100605	4
169	Survey of Robotic Manipulation Studies Intending Practical Applications in Real Environments. <b>2018</b> , 36, 338-347	
168	Tile-based rigidization surface parametric design study. <b>2018</b> ,	
167	An Active Steering Soft Robot for Small-Bore T-Branch Pipeline. <b>2019</b> , 556-567	
166	A Review of Biomimetic Artificial Lateral Line Detection Technology for Unmanned Underwater Vehicles. <b>2019</b> , 501-516	2

165	Research and analysis of factors affecting bending performance of multi-cavity flexible actuator. <b>2020</b> , 11, 6283-6292		
164	Flexible and stable grasping by multi-jointed pneumatic actuator mimicking the human finger-impacts of structural parameters on performance.		0
163	Modeling and Analysis of Fiber-reinforced Soft Bending Actuators. <b>2020</b> ,		0
162	Textiles in soft robots: Current progress and future trends. <b>2022</b> , 196, 113690		6
161	Dynamic modeling of hyper-elastic soft robots using spatial curves. <b>2020</b> , 53, 9238-9243		1
160	Research Progress of Underwater Vehicle-manipulator Systems: Configuration, Modeling and Control. <b>2020</b> , 56, 53		1
159	Emergence of flexible technology in developing advanced systems for post-stroke rehabilitation: a comprehensive review. <b>2021</b> , 18,		3
158	Distributed Control of a Planar Discrete Elastic Rod for Eel-Inspired Underwater Locomotion. <b>2021</b> , 261-279		1
157	Force and Pressure Control of Soft Robotic Actuators. <b>2018</b> , 2018, 39-43		
156	An Enveloping Soft Gripper With High-Load Carrying Capacity: Design, Characterization and Application. <b>2022</b> , 7, 373-380		1
155	Type synthesis of single-loop deployable mechanisms based on improved atlas method for single-DOF grasping manipulators. <b>2022</b> , 169, 104656		2
154	A Study and Fabrication of SMA based 3D Printed Adaptive Gripper. <b>2021</b> ,		
153	Characterization of Sustainable Robotic Materials and Finite Element Analysis of Soft Actuators Under Biodegradation.. <b>2021</b> , 8, 760485		4
152	Review of Soft Fluidic Actuators: Classification and Materials Modeling Analysis.		6
151	Propaedeutic Study of Biocomposites Obtained With Natural Fibers for Oceanographic Observing Platforms. 8,		
150	Design principles for creating synthetic underwater adhesives. <b>2021</b> , 50, 13321-13345		17
149	Soft Actuator with Programmable Design: Modeling, Prototyping, and Applications.. <i>Soft Robotics</i> , <b>2022</b> ,	9.2	2
148	A coupled electro-chemo-mechanical theory for polyelectrolyte gels with application to modeling their chemical stimuli-driven swelling response. <b>2022</b> , 159, 104734		1

147	A Two-Fingered Robot Gripper with Variable Stiffness Flexure Hinges Based on Shape Morphing. <b>2020,</b>		
146	Safe Grasping with a Force Controlled Soft Robotic Hand. <b>2020,</b>		2
145	A Soft-Robotic Gripper for Ultra-High-Voltage Transmission Line Operations. <b>2020,</b>		3
144	A Thermoplastic Elastomer Belt Based Robotic Gripper. <b>2020,</b>		0
143	Development and Control of an Enhanced Active Compliance based Soft Pneumatically Actuated Robotic Hand. <b>2020,</b>		
142	SoMo: Fast and Accurate Simulations of Continuum Robots in Complex Environments. <b>2021,</b>		3
141	The Role of Digit Arrangement in Soft Robotic In-Hand Manipulation. <b>2021,</b>		1
140	Deformable Elasto-Plastic Object Shaping using an Elastic Hand and Model-Based Reinforcement Learning. <b>2021,</b>		0
139	Analytical Modeling of a Soft Pneu-net Actuator Based on Finite Strain Beam Theory. <b>2021,</b>		1
138	Underwater Soft Robotics: A Review of Bioinspiration in Design, Actuation, Modeling, and Control.. <b>2022, 13,</b>		7
137	Roadmap on soft robotics: multifunctionality, adaptability and growth without borders.		7
136	A Shift from Efficiency to Adaptability: Recent Progress in Biomimetic Interactive Soft Robotics in Wet Environments.. <b>2022, e2104347</b>		5
135	From Two-Dimensional to Three-Dimensional: Diversified Bending Modality of a Cable-Driven Actuator and Its Grasping Characteristics.. <i>Soft Robotics</i> , <b>2022,</b>	9.2	1
134	Marine Robotics for Deep-Sea Specimen Collection: A Systematic Review of Underwater Grippers.. <b>2022, 22,</b>		1
133	Soft robotic surface enhances the grasping adaptability and reliability of pneumatic grippers. <b>2022,</b> 219, 107094		0
132	Freeform Fabrication of Pneumatic Soft Robots via Multi-Material Jointed Direct Ink Writing. 2100813		0
131	Topology Optimization Design and Experiment of a Soft Pneumatic Bending Actuator for Grasping Applications. <b>2022, 7,</b> 2086-2093		1
130	A Bidirectional Soft Biomimetic Hand Driven by Water Hydraulic for Dexterous Underwater Grasping. <b>2022, 7,</b> 2186-2193		1

129	Controlling Palm-Object Interactions Via Friction for Enhanced In-Hand Manipulation. <b>2022</b> , 7, 2258-2265	1
128	Synergistic control of soft robotic hands for human-like grasp postures. <b>2022</b> , 65, 553	1
127	In-Hand Object Recognition for Sensorized Soft Hand. <b>2022</b> , 351-364	
126	Evaluation Criteria for Trajectories of Robotic Arms. <b>2022</b> , 11, 29	2
125	Marine Robotics for Deep-Sea Specimen Collection: A Taxonomy of Underwater Manipulative Actions.. <b>2022</b> , 22,	1
124	Bistable and Multistable Actuators for Soft Robots: Structures, Materials, and Functionalities.. <b>2022</b> , e2110384	17
123	Tuning the grasping strength of soft actuators with magnetic elastomer fingertips. <b>2022</b> , 31, 045013	0
122	Simulation Data Driven Design Optimization for Reconfigurable Soft Gripper System. <b>2022</b> , 7, 5803-5810	0
121	Design Consideration Investigation of Soft-Valve Pipe.. <b>2022</b> , 13,	
120	Anthropomorphic soft robotic end-effector for use with collaborative robots in the construction industry. <b>2022</b> , 138, 104218	1
119	Hardware Programming of a Single-input Pneumatic Mechanism to Control Multiple Elastic Inflatable Actuators. <b>2021</b> ,	
118	Assistive Hand Device Using Silicone Actuators. <b>2021</b> ,	0
117	Towards Safely Grasping Group Objects by Hybrid Robot Hand. <b>2021</b> ,	2
116	A fast humanoid robot arm for boxing based on servo motors. <b>2021</b> ,	0
115	Deformation control method based on reaction current for soft pneumatic actuator actuated by electrochemical reactions. <b>2021</b> ,	
114	A soft actuator with integrated pneumatic source using electrically induced liquid-to-gas conversion. <b>2021</b> ,	
113	A Data-Driven Review of Soft Robotics. 2100163	2
112	Rigid-Soft Interactive Design of a Lobster-Inspired Finger Surface for Enhanced Grasping Underwater.. <b>2021</b> , 8, 787187	1



111	Effect of Geometrical Parameters on PneuNet Bending Performance. <b>2021,</b>		0
110	An Ambidextrous STarfish-Inspired Exploration and Reconnaissance Robot (The ASTER-bot).. <i>Soft Robotics</i> , <b>2021,</b>	9.2	2
109	Flexure based gripper to grasp hollow objects by internal surface interaction. 095440622110498		1
108	Modeling nonlinear viscoelastic responses of flexible composites for soft robotics applications. 1-13		1
107	Data_Sheet 1.PDF. <b>2020,</b>		
106	Video_1.MP4. <b>2020,</b>		
105	Video_2.MP4. <b>2020,</b>		
104	Video_3.MP4. <b>2020,</b>		
103	Data_Sheet_1.PDF. <b>2020,</b>		
102	Table_1.pdf. <b>2020,</b>		
101	Presentation1.PDF. <b>2017,</b>		
100	Table_1.docx. <b>2018,</b>		
99	Video_1.mp4. <b>2019,</b>		
98	Video_2.mp4. <b>2019,</b>		
97	Video_3.mp4. <b>2019,</b>		
96	Video_4.mp4. <b>2019,</b>		
95	Video_5.mp4. <b>2019,</b>		
94	Video_6.mp4. <b>2019,</b>		

93	Video_1.MP4. <b>2020</b> ,		
92	Video_2.MP4. <b>2020</b> ,		
91	Video_1.MP4. <b>2020</b> ,		
90	Analytical Modeling of a Soft Pneu-Net Actuator Subjected to Planar Tip Contact. <b>2022</b> , 1-14		0
89	RBO Hand 3: A Platform for Soft Dexterous Manipulation. <b>2022</b> , 1-16		4
88	Deformation Modeling and Simulation of a Novel Bionic Software Robotics Gripping Terminal Driven by Negative Pressure Based on Classical Differential Algorithm.. <b>2022</b> , 2022, 2207906		
87	Bioinspired Multimodal Multipose Hybrid Fingers for Wide-Range Force, Compliant, and Stable Grasping.. <i>Soft Robotics</i> , <b>2022</b> ,	9.2	1
86	Aerial-aquatic robots capable of crossing the air-water boundary and hitchhiking on surfaces.. <b>2022</b> , 7, eabm6695		4
85	Advances and future outlooks in soft robotics for minimally invasive marine biology.. <b>2022</b> , 7, eabm6807		4
84	Design, additive manufacturing and component testing of pneumatic rotary vane actuators for lightweight robots. <b>2022</b> , 28, 20-32		1
83	Evaluation of two complementary modeling approaches for fiber-reinforced soft actuators. <b>2022</b> , 9,		
82	Use of hydrogen bonded layer-by-layer assemblies for particle manipulation. <b>2022</b> , 648, 129251		
81	A Soft Robotic Gripper With Neutrally Buoyant Jamming Pads for Gentle Yet Secure Grasping of Underwater Objects. <b>2022</b> , 1-9		1
80	Switching control of latex balloon expansion by using switching valve mediated with the Coanda effect. <b>2022</b> , 9,		
79	Twisting for soft intelligent autonomous robot in unstructured environments. <b>2022</b> , 119,		6
78	A Framework for the Classification of Human-Robot Interactions Within the Internet of Production. <b>2022</b> , 427-454		
77	Control-Oriented Models for Hyperelastic Soft Robots Through Differential Geometry of Curves. <i>Soft Robotics</i> ,	9.2	2
76	4D printing: Technological developments in robotics applications. <b>2022</b> , 343, 113670		5

75	Development of an Anti-Hydropressure Miniature Underwater Robot with Multi-Locomotion Mode Using Piezoelectric Pulsed-Jet Actuator. <b>2022</b> , 1-10	1
74	Locomotion via active suction in a sea star-inspired soft robot. <b>2022</b> , 1-8	
73	Towards a Microfluidic Microcontroller Circuit Library for Soft Robots. <b>2022</b> ,	1
72	Multi-Dimensional Compliance of Soft Grippers Enables Gentle Interaction with Thin, Flexible Objects. <b>2022</b> ,	
71	A novel soft-rigid wheeled crawling robot with high payload and passing capability. 1-22	
70	Modeling and Analysis of a Composite Structure-Based Soft Pneumatic Actuators for Soft-Robotic Gripper. <b>2022</b> , 22, 4851	0
69	Octopus-inspired adhesive skins for intelligent and rapidly switchable underwater adhesion. <b>2022</b> , 8,	7
68	A novel soft gripper with enhanced gripping adaptability based on spring-reinforced soft pneumatic actuators.	
67	A Ball Joint With Continuously Adjustable Load Capacity Based on Positive Pressure Method. <b>2022</b> , 7, 8415-8422	
66	Lessons for Robotics From the Control Architecture of the Octopus. 9,	1
65	A comparison of plane, slow pneu-net, and fast pneu-net designs of soft pneumatic actuators based on bending behavior. <b>2022</b> ,	0
64	Design, Fabrication, and Performance Test of a New Type of Soft-Robotic Gripper for Grasping. <b>2022</b> , 22, 5221	
63	Controlling Soft Fluidic Actuators Using Soft DEA-Based Valves. <b>2022</b> , 7, 8837-8844	1
62	Locomotion of an untethered, worm-inspired soft robot driven by a shape-memory alloy skeleton. <b>2022</b> , 12,	2
61	Design of Hybrid Fully-Actuated and Self-Adaptive Mechanism for Anthropomorphic Robotic Finger. 1-35	
60	Necrobotics: Biotic Materials as Ready-to-Use Actuators. 2201174	3
59	A Method for 3D Printing and Rapid Prototyping of Fieldable Untethered Soft Robots.	
58	Bistable Helical Origami Gripper for Sensor Placement on Branches. 2200087	1

57	Design of a Novel Soft Pneumatic Gripper with Variable Gripping Size and Mode. <b>2022</b> , 106,	1
56	Deep Learning-Based 3D Pose Reconstruction of an Underwater Soft Robotic Hand and Its Biomimetic Evaluation. <b>2022</b> , 7, 11070-11077	
55	A high-load bioinspired soft gripper with force booster fingers. <b>2022</b> , 177, 105048	0
54	A Biomimetic Tactile Palm for Robotic Object Manipulation. <b>2022</b> , 7, 11500-11507	0
53	Continuum-Body-Pose Estimation From Partial Sensor Information Using Recurrent Neural Networks. <b>2022</b> , 7, 11244-11251	1
52	Electrically actuated soft actuator integrated with an electrochemical reactor. <b>2022</b> , 56, 101891	0
51	Design of Enveloping Underwater Soft Gripper Based on the Bionic Structure. <b>2022</b> , 311-322	0
50	Toward Intrinsic Force Sensing and Control in Parallel Soft Robots. <b>2022</b> , 1-12	0
49	A Highly Adaptive Robotic Gripper Palm with Tactile Sensing*. <b>2022</b> ,	0
48	An Insect-Inspired Terrains-Adaptive Soft Millirobot with Multimodal Locomotion and Transportation Capability. <b>2022</b> , 13, 1578	0
47	Programmable soft valves for digital and analog control. <b>2022</b> , 119,	1
46	Geometry-controlled instabilities for soft-soft adhesive interfaces. <b>2022</b> , 18, 8098-8105	0
45	Soft Robotics-Fingered Hand Based on Working Principle of Asymmetric Soft Actuator. <b>2022</b> , 83-90	0
44	Anthropomorphic hand based on twisted-string-driven da Vinci mechanism for approaching human dexterity and power of grasp. <b>2022</b> , 23, 771-782	0
43	Develop Control Architectures to Enhance Soft Actuator Motion and Force. <b>2022</b> , 10, 178	1
42	Versatile Like a Seahorse Tail: A Bio-Inspired Programmable Continuum Robot For Conformal Grasping. 2200263	1
41	Powerful 2D Soft Morphing Actuator Propels Giant Manta Ray Robot. 2200186	1
40	Soft Gripper Design and Fabrication for Underwater Grasping. <b>2022</b> , 12, 10694	0

- 39 A design of underwater soft gripper with water pressure sensing and enhanced stiffness. 1-18 ○
- 38 4D Multiscale Origami Soft Robots: A Review. **2022**, 14, 4235 ○
- 37 Modular Bioinspired Hand with Multijoint Rigid-Soft Finger Possessing Proprioception. ○
- 36 Flexural biomimetic responsive building façade using a hybrid soft robot actuator and fabric membrane. **2023**, 145, 104660 ○
- 35 A Soft, Fast and Versatile Electrohydraulic Gripper with Capacitive Object Size Detection. 2209080 1
- 34 An Overview of Soft Robotics. **2023**, 6, ○
- 33 A Multimodal, Reconfigurable Workspace Soft Gripper for Advanced Grasping Tasks. ○
- 32 Numerical investigation of novel 3D-SPA for gripping analysis in multi-environment. **2022**, 107916 ○
- 31 Design of multi-stimuli responsive hybrid pneumatic magnetic soft actuator with novel channel integration. **2022**, 29, 101681 ○
- 30 Bioinspired and Hierarchically Textile-Structured Soft Actuators for Healthcare Wearables. 2210351 ○
- 29 Inverse dynamics modelling and tracking control of conical dielectric elastomer actuator based on GRU neural network. **2023**, 118, 105668 ○
- 28 Multi-Robot Visual Control of Autonomous Soft Robotic Fish. **2022**, ○
- 27 Effect of Segment Types on Characterization of Soft Sensing Textile Actuators for Soft Wearable Robots. **2022**, 7, 249 ○
- 26 Reconfigurable bionic soft pneumatic gripper for fruit handling based on shape and size adaptation. **2023**, 56, 044003 ○
- 25 Fingerprint-inspired surface texture for the enhanced tip pinch performance of a soft robotic hand in lubricated conditions. ○
- 24 An Omnidirectional Encircled Deployable Polyhedral Gripper for Contactless Delicate Midwater Creatures Sampling. 2201416 ○
- 23 A hydraulic soft microgripper for biological studies. **2022**, 12, 1
- 22 Performa of SCARA based intelligent 3 axis robotic soft gripper for enhanced material handling. **2023**, 176, 103366 ○

- 21 Contact-implicit Trajectory and Grasp Planning for Soft Continuum Manipulators. **2022**, ○
- 20 Soft, Multi-Layer, Disposable, Kirigami Based Robotic Grippers: On Handling of Delicate, Contaminated, and Everyday Objects. **2022**, ○
- 19 Collision-Aware Fast Simulation for Soft Robots by Optimization-Based Geometric Computing. **2022**, ○
- 18 A High-Performance Optical Waveguide Sensor for Curvature Sensing of Enveloped Soft Actuators. **2022**, ○
- 17 A 0.5-meter-scale, high-load, soft-enclosed gripper capable of grasping the human body. ○
- 16 A bioinspired modular soft robotic arm. **2023**, 5, 015021 ○
- 15 Soft pneumatic actuator with an embedded flexible polymeric piezoelectric membrane for sensing bending deformation. **2023**, 35, 105910 ○
- 14 Modular Morphing Lattices for Large-Scale Underwater Continuum Robotic Structures. ○
- 13 Proprioceptive Touch of a Soft Actuator Containing an Embedded Intrinsically Soft Sensor using Kinesthetic Feedback. **2023**, 107, ○
- 12 Electrically Driven Robotic Pistons Exploiting Liquid-Vapor Phase Transition for Underwater Applications. **2023**, 8, 2118-2125 ○
- 11 Kirigami-Inspired 3D Printable Soft Pneumatic Actuators with Multiple Deformation Modes for Soft Robotic Applications. ○
- 10 Harnessing the nonlinear properties of buckling inflatable tubes for complex robotic behaviors. **2023**, 63, 59-88 ○
- 9 A Passively Conforming Soft Robotic Gripper with Three-Dimensional Negative Bending Stiffness Fingers. ○
- 8 Towards Flexible Manipulation with a Wiring-Base Robot Hand. **2023**, 385-392 ○
- 7 A Versatile Continuum Gripping Robot with a Concealable Gripper. **2023**, 4, ○
- 6 Soft Robotics-Fingered Hand Based on the Working Principle of an Asymmetric Soft Actuator. **2023**, 89-95 ○
- 5 Electroactive Thermo-Pneumatic Soft Actuator with Self-Healing Features: A Critical Evaluation. ○
- 4 Multimaterial Embedded 3D Printing of Composite Reinforced Soft Actuators. **2023**, 6, ○

- 3 User-Driven Design and Development of an Underwater Soft Gripper for Biological Sampling and Litter Collection. **2023**, 11, 771 ○
- 2 Tunable, Textile-Based Joint Impedance Module for Soft Robotic Applications. ○
- 1 Tunable Adhesion of Shape Memory Polymer Dry Adhesive Soft Robotic Gripper via Stiffness Control. **2023**, 12, 59 ○