# Barbara Mazzolai

List of Publications by Year
in descending order



| 282 | 12,485 | 38660 50 | 32761 100 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 297 | 297 | 297 | 13250 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Bio-inspired geotechnical engineering: principles, current work, opportunities and challenges. Geotechnique, 2022, 72, 687-705. | 2.2 | 74 |
| 2 | Bioinspired microneedle patches: Biomimetic designs, fabrication, and biomedical applications. Matter, 2022, 5, 390-429. | 5.0 | 54 |
| 3 | A Plant Tendril-Like Soft Robot That Grasps and Anchors by Exploiting its Material Arrangement. IEEE Robotics and Automation Letters, 2022, 7, 5191-5197. | 3.3 | 14 |
| 4 | Multisource energy conversion in plants with soft epicuticular coatings. Energy and Environmental Science, 2022, 15, 2545-2556. | 15.6 | 11 |
| 5 | A plant-hybrid system for wind monitoring connected with social media. , 2022, , . | | 1 |
| 6 | 3D micromolding of seed-like probes for self-burying soft robots. , 2022, , . | | 3 |
| 7 | The softness distribution index: towards the creation of guidelines for the modeling of soft-bodied robots. International Journal of Robotics Research, 2021, 40, 197-223. | 5.8 | 9 |
| 8 | Transcriptional Regulation of Genes Involved in Zinc Uptake, Sequestration and Redistribution Following Foliar Zinc Application to Medicago sativa. Plants, 2021, 10, 476. | 1.6 | 17 |
| 9 | Bioinspired materials and approaches for soft robotics. MRS Bulletin, 2021, 46, 345-349. | 1.7 | 5 |
| 10 | 3D and 4D printing in dentistry and maxillofacial surgery: Printing techniques, materials, and applications. Acta Biomaterialia, 2021, 122, 26-49. | 4.1 | 175 |
| 11 | Ultraconformable, Selfâ€Adhering Surface Electrodes for Measuring Electrical Signals in Plants. Advanced Materials Technologies, 2021, 6, 2001182. | 3.0 | 15 |
| 12 | Organic Electronics: Ultraconformable, Selfâ€Adhering Surface Electrodes for Measuring Electrical Signals in Plants (Adv. Mater. Technol. 4/2021). Advanced Materials Technologies, 2021, 6, 2170024. | 3.0 | 0 |
| 13 | Support localization strategy for growing robots aided by light perception inspired by climbing plants. , 2021, , . | | 2 |
| 14 | Direct transfer of zinc between plants is channelled by common mycorrhizal network of arbuscular mycorrhizal fungi and evidenced by changes in expression of zinc transporter genes in fungus and plant. Environmental Microbiology, 2021, 23, 5883-5900. | 1.8 | 14 |
| 15 | Selective Stiffening in Soft Actuators by Triggered Phase Transition of Hydrogelâ€Filled Elastomers. Advanced Functional Materials, 2021, 31, 2101121. | 7.8 | 17 |
| 16 | Sensorized Foam Actuator with Intrinsic Proprioception and Tunable Stiffness Behavior for Soft Robots. Advanced Intelligent Systems, 2021, 3, 2100022. | 3.3 | 4 |
| 17 | Conditions for the emergence of circumnutations in plant roots. PLoS ONE, 2021, 16, e0252202. | 1.1 | 7 |
| 18 | Editorial: Generation Growbots: Materials, Mechanisms, and Biomimetic Design for Growing Robots. Frontiers in Robotics and AI, 2021, 8, 711942. | 2.0 | 3 |

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|---|---|---|---|
| 19 | A Perspective on Cephalopods Mimicry and Bioinspired Technologies toward Proprioceptive Autonomous Soft Robots. Advanced Materials Technologies, 2021, 6, 2100437. | 3.0 | 18 |
| 20 | Biohybrid generators based on living plants and artificial leaves: influence of leaf motion and real wind outdoor energy harvesting. Bioinspiration and Biomimetics, 2021, 16, 055009. | 1.5 | 10 |
| 21 | Towards new frontiers for distributed environmental monitoring based on an ecosystem of plant seed-like soft robots. , 2021, , . | | 8 |
| 22 | Plant-like hooked miniature machines for on-leaf sensing and delivery. Communications Materials, 2021, 2, . | 2.9 | 16 |
| 23 | Morphological Computation in Plant Seeds for a New Generation of Self-Burial and Flying Soft Robots. Frontiers in Robotics and AI, 2021, 8, 797556. | 2.0 | 6 |
| 24 | Quantitative Measurements of Octopus vulgaris Arms for Bioinspired Soft Robotics. Cognitive Systems Monographs, 2020, , 3-14. | 0.1 | 3 |
| 25 | Spider (Linothele megatheloides) and silkworm (Bombyx mori) silks: Comparative physical and biological evaluation. Materials Science and Engineering C, 2020, 107, 110197. | 3.8 | 21 |
| 26 | Passive Morphological Adaptation for Obstacle Avoidance in a Self-Growing Robot Produced by Additive Manufacturing. Soft Robotics, 2020, 7, 85-94. | 4.6 | 40 |
| 27 | Plant root penetration and growth as a mechanical inclusion problem. International Journal of Non-Linear Mechanics, 2020, 120, 103344. | 1.4 | 5 |
| 28 | Optimized production of a highâ€performance hybrid biomaterial: biomineralized spider silk for bone tissue engineering. Journal of Applied Polymer Science, 2020, 137, 48739. | 1.3 | 15 |
| 29 | Climbing Plantâ€Inspired Micropatterned Devices for Reversible Attachment. Advanced Functional Materials, 2020, 30, 2003380. | 7.8 | 23 |
| 30 | Micropatterned Devices: Climbing Plantâ€Inspired Micropatterned Devices for Reversible Attachment (Adv. Funct. Mater. 38/2020). Advanced Functional Materials, 2020, 30, 2070256. | 7.8 | 1 |
| 31 | A protein-coated micro-sucker patch inspired by octopus for adhesion in wet conditions. Scientific Reports, 2020, 10, 15480. | 1.6 | 21 |
| 32 | The Bio-Engineering Approach for Plant Investigations and Growing Robots. A Mini-Review. Frontiers in Robotics and AI, 2020, 7, 573014. | 2.0 | 18 |
| 33 | Optimal control of plant root tip dynamics in soil. Bioinspiration and Biomimetics, 2020, 15, 056006. | 1.5 | 10 |
| 34 | Pneumatic Quasi-Passive Actuation for Soft Assistive Lower Limbs Exoskeleton. Frontiers in Neurorobotics, 2020, 14, 31. | 1.6 | 37 |
| 35 | 3D printed composites from heat extruded polycaprolactone/sodium alginate filaments and their heavy metal adsorption properties. Materials Chemistry Frontiers, 2020, 4, 2472-2483. | 3.2 | 30 |
| 36 | Taking inspiration from climbing plants: methodologies and benchmarksâ€"a review. Bioinspiration and Biomimetics, 2020, 15, 031001. | 1.5 | 38 |

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| 37 | A vision for future bioinspired and biohybrid robots. Science Robotics, 2020, 5, . | 9.9 | 70 |
| 38 | Plantâ€Inspired Soft Bistable Structures Based on Hygroscopic Electrospun Nanofibers. Advanced Materials Interfaces, 2020, 7, 1901310. | 1.9 | 50 |
| 39 | Autonomic perspiration in 3D-printed hydrogel actuators. Science Robotics, 2020, 5, . | 9.9 | 121 |
| 40 | The role of hairs in the adhesion of octopus suckers: a hierarchical peeling approach. Bioinspiration and Biomimetics, 2020, 15, 035006. | 1.5 | 13 |
| 41 | Living Plantâ€Hybrid Generators for Multidirectional Wind Energy Conversion. Energy Technology, 2020, 8, 2000236. | 1.8 | 31 |
| 42 | A Soft Sensorized Foot Module to Understand Anisotropic Terrains During Soft Robot Locomotion. IEEE Robotics and Automation Letters, 2020, 5, 4055-4061. | 3.3 | 4 |
| 43 | HyLength: a semi-automated digital image analysis tool for measuring the length of roots and fungal hyphae of dense mycelia. Mycorrhiza, 2020, 30, 229-242. | 1.3 | 8 |
| 44 | Biohybrid Wind Energy Generators Based on Living Plants. Lecture Notes in Computer Science, 2020, , 234-244. | 1.0 | 2 |
| 45 | Biomechanical Characterization of Hook-Climber Stems for Soft Robotic Applications. Lecture Notes in Computer Science, 2020, , 97-103. | 1.0 | 0 |
| 46 | An Image-Based Method for the Morphological Analysis of Tendrils with 2D Piece-Wise Clothoid Approximation Model. Lecture Notes in Computer Science, 2020, , 80-91. | 1.0 | 1 |
| 47 | INFORA: A Novel Inflatable Origami-based Actuator. , 2019, , . | | 2 |
| 48 | A Vacuum Powered Soft Textile-Based Clutch. Actuators, 2019, 8, 47. | 1.2 | 14 |
| 49 | Rose-Inspired Micro-device with Variable Stiffness for Remotely Controlled Release of Objects in Robotics. Lecture Notes in Computer Science, 2019, , 122-133. | 1.0 | 8 |
| 50 | Octopusâ€Inspired Soft Arm with Suction Cups for Enhanced Grasping Tasks in Confined Environments. Advanced Intelligent Systems, 2019, 1, 1900041. | 3.3 | 73 |
| 51 | Suberin/trans-Cinnamaldehyde Oil Nanoparticles with Antimicrobial Activity and Anticancer Properties When Loaded with Paclitaxel. ACS Applied Bio Materials, 2019, 2, 3484-3497. | 2.3 | 10 |
| 52 | Control strategies for cleaning robots in domestic applications: A comprehensive review. International Journal of Advanced Robotic Systems, 2019, 16, 172988141985743. | 1.3 | 36 |
| 53 | Characterization of the Growing From the Tip as Robot Locomotion Strategy. Frontiers in Robotics and AI, 2019, 6, 45. | 2.0 | 11 |
| 54 | Octopusâ€Inspired Soft Arm with Suction Cups for Enhanced Grasping Tasks in Confined Environments. Advanced Intelligent Systems, 2019, 1, 1970061. | 3.3 | 6 |

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| 55 | Remotely Lightâ€Powered Soft Fluidic Actuators Based on Plasmonicâ€Driven Phase Transitions in Elastic Constraint. Advanced Materials, 2019, 31, e1905671. | 11.1 | 26 |
| 56 | A Wearable Sensory Textileâ€Based Clutch with High Blocking Force. Advanced Engineering Materials, 2019, 21, 1900886. | 1.6 | 14 |
| 57 | Antagonistic Pneumatic Actuators with Variable Stiffness for Soft Robotic Applications. , 2019, , . | | 11 |
| 58 | Dynamic Obstacles Detection for Robotic Soil Explorations*. , 2019, , . | | 1 |
| 59 | Fluid-structure interaction study of spiderâ€™s hair flow-sensing system. Materials Today: Proceedings, 2019, 7, 418-425. | 0.9 | 5 |
| 60 | A variable-stiffness tendril-like soft robot based on reversible osmotic actuation. Nature Communications, 2019, 10, 344. | 5.8 | 130 |
| 61 | Soft Robotics. Biomimetics, 2019, 4, 22. | 1.5 | 2 |
| 62 | Easy, Scalable, Robust, Micropatterned Silk Fibroin Cell Substrates. Advanced Materials Interfaces, 2019, 6, 1801822. | 1.9 | 29 |
| 63 | Imaging and mechanical characterization of different junctions in spider orb webs. Scientific Reports, 2019, 9, 5776. | 1.6 | 24 |
| 64 | Finite-Element Modeling and Design of a Pneumatic Braided Muscle Actuator With Multifunctional Capabilities. IEEE/ASME Transactions on Mechatronics, 2019, 24, 109-119. | 3.7 | 25 |
| 65 | Preliminary Experimental Study on Variable Stiffness Structures Based on Textile Jamming for Wearable Robotics. Biosystems and Biorobotics, 2019, , 49-52. | 0.2 | 5 |
| 66 | Assessment of the Effects of a Wireless Neural Stimulation Mediated by Piezoelectric Nanoparticles. Neuromethods, 2018, , 109-120. | 0.2 | 0 |
| 67 | Three-dimensional reconstruction of root shape in the moth orchid Phalaenopsis sp.: a biomimicry methodology for robotic applications. BMC Research Notes, 2018, 11, 258. | 0.6 | 4 |
| 68 | Approximating gecko setae via direct laser lithography. Smart Materials and Structures, 2018, 27, 075009. | 1.8 | 16 |
| 69 | Natural Triboelectric Generators: Energy Conversion at the Cuticle of Living Plants (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Overlock | 7.8 | 0 |
| 70 | Continuous Growth in Plant-Inspired Robots Through 3D Additive Manufacturing. , 2018, , . | | 10 |
| 71 | The Rise of the Robots: The European Robotics Flagship [Regional Spotlight]. IEEE Robotics and Automation Magazine, 2018, 25, 121-122. | 2.2 | 1 |
| 72 | Energy Conversion at the Cuticle of Living Plants. Advanced Functional Materials, 2018, 28, 1806689. | 7.8 | 49 |

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| 73 | A study on plant root apex morphology as a model for soft robots moving in soil. PLoS ONE, 2018, 13, e0197411. | 1.1 | 16 |
| 74 | Shape estimation based on Kalman filtering: Towards fully soft proprioception. , 2018, , . | | 22 |
| 75 | Toward Growing Robots: A Historical Evolution from Cellular to Plant-Inspired Robotics. Frontiers in Robotics and AI, 2018, 5, 16. | 2.0 | 51 |
| 76 | From plant root's sloughing and radial expansion mechanisms to a soft probe for soil exploration. , 2018, , . | | 3 |
| 77 | Swarming Behavior Emerging from the Uptakeâ€“Kinetics Feedback Control in a Plant-Root-Inspired Robot. Applied Sciences (Switzerland), 2018, 8, 47. | 1.3 | 13 |
| 78 | Modular Continuum Manipulator: Analysis and Characterization of Its Basic Module. Biomimetics, 2018, 3, 3. | 1.5 | 31 |
| 79 | Artificial System Inspired by Climbing Mechanism of Galium Aparine Fabricated via 3D Laser Lithography. Lecture Notes in Computer Science, 2018, , 168-178. | 1.0 | 9 |
| 80 | A plant-inspired kinematic model for growing robots. , 2018, , . | | 9 |
| 81 | Soft sucker shoe for anti-slippage application. , 2018, , . | | 2 |
| 82 | An efficient soil penetration strategy for explorative robots inspired by plant root circumnutation movements. Bioinspiration and Biomimetics, 2018, 13, 015003. | 1.5 | 33 |
| 83 | Growth and tropism. , 2018, , . | | 1 |
| 84 | Gold Nanoshell-Mediated Remote Myotube Activation. ACS Nano, 2017, 11, 2494-2508. | 7.3 | 69 |
| 85 | A plant-inspired robot with soft differential bending capabilities. Bioinspiration and Biomimetics, 2017, 12, 015001. | 1.5 | 60 |
| 86 | Can a robot grow? Plants give us the answer. Proceedings of SPIE, 2017, , . | 0.8 | 3 |
| 87 | Toward Self-Growing Soft Robots Inspired by Plant Roots and Based on Additive Manufacturing Technologies. Soft Robotics, 2017, 4, 211-223. | 4.6 | 161 |
| 88 | Towards ultra-responsive biodegradable polysaccharide humidity sensors. Materials Today Chemistry, 2017, 6, 1-12. | 1.7 | 18 |
| 89 | A Biomechanical Characterization of Plant Root Tissues by Dynamic Nanoindentation Technique for Biomimetic Technologies. Lecture Notes in Computer Science, 2017, , 532-536. | 1.0 | 2 |
| 90 | Chlorophyll derivatives enhance invertebrate red-light and ultraviolet phototaxis. Scientific Reports, 2017, 7, 3374. | 1.6 | 8 |

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| 91 | Anchoring like octopus: biologically inspired soft artificial sucker. Journal of the Royal Society Interface, 2017, 14, 20170395. | 1.5 | 52 |
| 92 | Active-Braid, a Bioinspired Continuum Manipulator. IEEE Robotics and Automation Letters, 2017, 2, 2104-2110. | 3.3 | 17 |
| 93 | Plant-Inspired Growing Robots. Biosystems and Biorobotics, 2017, , 57-63. | 0.2 | 15 |
| 94 | SIMBA: Tendon-Driven Modular Continuum Arm with Soft Reconfigurable Gripper. Frontiers in Robotics and AI, 2017, 4, . | 2.0 | 45 |
| 95 | Micromechanical Analysis of Soft Tactile Sensors. Frontiers in Materials, 2017, 4, . | 1.2 | 0 |
| 96 | Air Trapping Mechanism in Artificial Salvinia-Like Micro-Hairs Fabricated via Direct Laser Lithography. Micromachines, 2017, 8, 366. | 1.4 | 8 |
| 97 | Soft Plant Robotic Solutions: Biological Inspiration and Technological Challenges. Emergence, Complexity and Computation, 2017, , 687-707. | 0.2 | 1 |
| 98 | Dry Adhesion of Artificial Gecko Setae Fabricated via Direct Laser Lithography. Lecture Notes in Computer Science, 2017, , 631-636. | 1.0 | 6 |
| 99 | Soft-Legged Wheel-Based Robot with Terrestrial Locomotion Abilities. Frontiers in Robotics and AI, 2016, 3, . | 2.0 | 8 |
| 100 | Circumnutations as a penetration strategy in a plant-root-inspired robot. , 2016, , . | | 33 |
| 101 | Plant root tortuosity: an indicator of root path formation in soil with different composition and density. Annals of Botany, 2016, 118, 685-698. | 1.4 | 64 |
| 102 | Osmolyte cooperation affects turgor dynamics in plants. Scientific Reports, 2016, 6, 30139. | 1.6 | 17 |
| 103 | Soft robotics: Technologies and systems pushing the boundaries of robot abilities. Science Robotics, 2016, 1, . | 9.9 | 987 |
| 104 | Unveiling the kinematics of the avoidance response in maize (Zea mays) primary roots. Biologia (Poland), 2016, 71, 161-168. | 0.8 | 1 |
| 105 | Three-Dimensional Soft Material Micropatterning via Direct Laser Lithography of Flexible Molds. ACS Applied Materials & Interfaces, 2016, 8, 25019-25023. | 4.0 | 23 |
| 106 | Variable Stiffness Fiber with Selfâ€Healing Capability. Advanced Materials, 2016, 28, 10142-10148. | 11.1 | 142 |
| 107 | Lessons from Animals and Plants: The Symbiosis of Morphological Computation and Soft Robotics. IEEE Robotics and Automation Magazine, 2016, 23, 107-114. | 2.2 | 62 |
| 108 | Generation soft. Nature, 2016, 536, 400-401. | 13.7 | 28 |

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| 109 | Sculpting Soft Machines. Soft Robotics, 2016, 3, 101-108. | 4.6 | 26 |
| 110 | Self sufficient wireless transmitter powered by foot-pumped urine operating wearable MFC. Bioinspiration and Biomimetics, 2016, 11, 016001. | 1.5 | 22 |
| 111 | Biology for Robotics - A Multidisciplinary Approach to a Researcher's Life [Women in Engineering]. IEEE Robotics and Automation Magazine, 2016, 23, 114-115. | 2.2 | 1 |
| 112 | Highly stretchable electroluminescent skin for optical signaling and tactile sensing. Science, 2016, 351, 1071-1074. | 6.0 | 1,106 |
| 113 | Electrorheological Valves for Flexible Fluidic Actuators. Soft Robotics, 2016, 3, 34-41. | 4.6 | 56 |
| 114 | Modulation of cellular responses: The two-photon polymerization approach in the control of the physical micro/nanoenvironment. , 2015, 2015, 1865-8. | | 0 |
| 115 | Revealing bending and force in a soft body through a plant root inspired approach. Scientific Reports, 2015, 5, 8788. | 1.6 | 45 |
| 116 | Octopus-inspired robotics. Bioinspiration and Biomimetics, 2015, 10, 030301. | 1.5 | 1 |
| 117 | Cryoâ€scanning electron microscopy investigation of the Octopus Vulgaris arm structures for the design of an octopusâ€like arm artefact. Microscopy Research and Technique, 2015, 78, 1133-1145. | 1.2 | 2 |
| 118 | Barium titanate nanoparticles and hypergravity stimulation improve differentiation of mesenchymal stem cells into osteoblasts. International Journal of Nanomedicine, 2015, 10, 433. | 3.3 | 32 |
| 119 | Hypergravity Stimulation Enhances PC12 Neuron-Like Cell Differentiation. BioMed Research International, 2015, 2015, 1-10. | 0.9 | 30 |
| 120 | 3D Micropatterned Surface Inspired by Salvinia molesta via Direct Laser Lithography. ACS Applied Materials & Interfaces, 2015, 7, 25560-25567. | 4.0 | 103 |
| 121 | Two-Photon Lithography of 3D Nanocomposite Piezoelectric Scaffolds for Cell Stimulation. ACS Applied Materials & Interfaces, 2015, 7, 25574-25579. | 4.0 | 113 |
| 122 | Hierarchical surface patterning for triboelectric nanogenerators and sensors. , 2015, , . | | 3 |
| 123 | Folate-grafted boron nitride nanotubes: Possible exploitation in cancer therapy. International Journal of Pharmaceutics, 2015, 481, 56-63. | 2.6 | 48 |
| 124 | On the preliminary design of hyperthermia treatments based on infusion and heating of magnetic nanofluids. Mathematical Biosciences, 2015, 262, 105-116. | 0.9 | 17 |
| 125 | Chemical synthesis of a biodegradable PEGylated copolymer from Îµ-caprolactone and Î³-valerolactone: evaluation of reaction and functional properties. Journal of Polymer Research, 2015, 22, 1. | 1.2 | 14 |
| 126 | Toward a New Generation of Electrically Controllable Hygromorphic Soft Actuators. Advanced Materials, 2015, 27, 1668-1675. | 11.1 | 267 |

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| 127 | Triboelectric smart machine elements and self-powered encoder. Nano Energy, 2015, 13, 92-102. | 8.2 | 17 |
| 128 | Design of a compact bistable mechanism based on dielectric elastomer actuators. Meccanica, 2015, 50, 2741-2749. | 1.2 | 26 |
| 129 | Piezoelectric Nanoparticle-Assisted Wireless Neuronal Stimulation. ACS Nano, 2015, 9, 7678-7689. | 7.3 | 236 |
| 130 | A soft, stretchable and conductive biointerface for cell mechanobiology. Biomedical Microdevices, 2015, 17, 46. | 1.4 | 17 |
| 131 | Octopus-like suction cups: from natural to artificial solutions. Bioinspiration and Biomimetics, 2015, 10, 035004. | 1.5 | 46 |
| 132 | Unveiling the morphology of the acetabulum in octopus suckers and its role in attachment. Interface Focus, 2015, 5, 20140050. | 1.5 | 51 |
| 133 | Molecularly imprinted polymeric micro- and nano-particles for the targeted delivery of active molecules. Future Medicinal Chemistry, 2015, 7, 123-138. | 1.1 | 25 |
| 134 | Biomimicry at the nanoscale: current research and perspectives of two-photon polymerization. Nanoscale, 2015, 7, 2841-2850. | 2.8 | 77 |
| 135 | Hairy suckers: the surface microstructure and its possible functional significance in the Octopus vulgaris sucker. Beilstein Journal of Nanotechnology, 2014, 5, 561-565. | 1.5 | 60 |
| 136 | Another Lesson from Plants: The Forward Osmosis-Based Actuator. PLoS ONE, 2014, 9, e102461. | 1.1 | 38 |
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| 138 | The potential of recombinant human elastin-like polypeptides for drug delivery. Expert Opinion on Drug Delivery, 2014, 11, 1507-1512. | 2.4 | 17 |
| 139 | Recombinant Human Elastinâ€like Magnetic Microparticles for Drug Delivery and Targeting. Macromolecular Bioscience, 2014, 14, 632-642. | 2.1 | 17 |
| 140 | Pulsatile Viscous Flows in Elliptical Vessels and Annuli: Solution to the Inverse Problem, with Application to Blood and Cerebrospinal Fluid Flow. SIAM Journal on Applied Mathematics, 2014, 74, 40-59. | 0.8 | 9 |
| 141 | Flexible Threeâ€Axial Force Sensor for Soft and Highly Sensitive Artificial Touch. Advanced Materials, 2014, 26, 2659-2664. | 11.1 | 383 |
| 142 | Towards accurate robot-assisted neuroendoscopy using an ergonomic handling interface and a lightweight robot. , 2014, 2014, 6876-9. | | 1 |
| 143 | Sensors: Flexible Threeâ€Axial Force Sensor for Soft and Highly Sensitive Artificial Touch (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Ove | 11.1 | 4 |
| 144 | Navigation of Magnetic Microrobots With Different User Interaction Levels. IEEE Transactions on Automation Science and Engineering, 2014, 11, 818-827. | 3.4 | 15 |

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| 145 | Active-elastic bistable minimum energy structures. Applied Physics Letters, 2014, 105, . | 1.5 | 19 |
| 146 | Dielectric elastomer actuators for octopus inspired suction cups. Bioinspiration and Biomimetics, 2014, 9, 046002. | 1.5 | 68 |
| 147 | Structure and mechanical properties ofOctopus vulgarissuckers. Journal of the Royal Society Interface, 2014, 11, 20130816. | 1.5 | 78 |
| 148 | Influence of nanoparticleâ€embedded polymeric surfaces on cellular adhesion, proliferation, and differentiation. Journal of Biomedical Materials Research - Part A, 2014, 102, 2652-2661. | 2.1 | 18 |
| 149 | Boron nitride nanotube-mediated stimulation modulates F/G-actin ratio and mechanical properties of human dermal fibroblasts. Journal of Nanoparticle Research, 2014, 16, 1. | 0.8 | 17 |
| 150 | Cerium Oxide Nanoparticles Inhibit Adipogenesis in Rat Mesenchymal Stem Cells: Potential Therapeutic Implications. Pharmaceutical Research, 2014, 31, 2952-2962. | 1.7 | 38 |
| 151 | Transcriptional profile of genes involved in oxidative stress and antioxidant defense in PC12 cells following treatment with cerium oxide nanoparticles. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 495-506. | 1.1 | 69 |
| 152 | Highâ€Performance, Totally Flexible, Tubular Microbial Fuel Cell. ChemElectroChem, 2014, 1, 1994-1999. | 1.7 | 21 |
| 153 | A Novel Soft Metalâ€Polymer Composite for Multidirectional Pressure Energy Harvesting. Advanced Energy Materials, 2014, 4, 1400024. | 10.2 | 30 |
| 154 | Hierarchical multiple peeling simulations. RSC Advances, 2014, 4, 25447-25452. | 1.7 | 18 |
| 155 | Nanostructured Brownian Surfaces Prepared through Two-Photon Polymerization: Investigation of Stem Cell Response. ACS Nano, 2014, 8, 11869-11882. | 7.3 | 27 |
| 156 | Triboelectric-based harvesting of gas flow energy and powerless sensing applications. Applied Surface Science, 2014, 323, 82-87. | 3.1 | 25 |
| 157 | NMR Relaxation Enhancement of Water Protons by Gd-Doped Boron Nitride Nanotubes. Journal of Physical Chemistry C, 2014, 118, 6473-6479. | 1.5 | 4 |
| 158 | Gold Nanoshell/Polysaccharide Nanofilm for Controlled Laser-Assisted Tissue Thermal Ablation. ACS Nano, 2014, 8, 5552-5563. | 7.3 | 30 |
| 159 | Cytocompatibility evaluation of gum Arabic-coated ultra-pure boron nitride nanotubes on human cells. Nanomedicine, 2014, 9, 773-788. | 1.7 | 61 |
| 160 | Emerging Technologies Inspired by Plants. , 2014, , 111-132. | | 4 |
| 161 | The Osteoprint: A bioinspired two-photon polymerized 3-D structure for the enhancement of bone-like cell differentiation. Acta Biomaterialia, 2014, 10, 4304-4313. | 4.1 | 92 |
| 162 | Detection of Fluorescent Nanoparticle Interactions with Primary Immune Cell Subpopulations by Flow Cytometry. Journal of Visualized Experiments, 2014, , . | 0.2 | 7 |

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| 163 | Wearable Self Sufficient MFC Communication System Powered by Urine. Lecture Notes in Computer Science, 2014, , 131-138. | 1.0 | 4 |
| 164 | A Novel Growing Device Inspired by Plant Root Soil Penetration Behaviors. PLoS ONE, 2014, 9, e90139. | 1.1 | 117 |
| 165 | Synthesizing tubular and trapezoidal shaped ZnO nanowires by an aqueous solution method. Nanoscale, 2013, 5, 3505. | 2.8 | 12 |
| 166 | Osmotic actuation modelling for innovative biorobotic solutions inspired by the plant kingdom. Bioinspiration and Biomimetics, 2013, 8, 025002. | 1.5 | 28 |
| 167 | PMMA/Polysaccharides Nanofilm Loaded with Adenosine Deaminase Inhibitor for Targeted Anti-inflammatory Drug Delivery. Langmuir, 2013, 29, 13190-13197. | 1.6 | 32 |
| 168 | A novel tracking tool for the analysis of plant-root tip movements. Bioinspiration and Biomimetics, 2013, 8, 025004. | 1.5 | 19 |
| 169 | Patterned Free-Standing Conductive Nanofilms for Ultraconformable Circuits and Smart Interfaces. ACS Applied Materials & Interfaces, 2013, 5, 9461-9469. | 4.0 | 35 |
| 170 | Mechanical and rheological behavior of pNIPAAM crosslinked macrohydrogel. Reactive and Functional Polymers, 2013, 73, 1306-1318. | 2.0 | 38 |
| 171 | Liquid single crystal elastomer/conducting polymer bilayer composite actuator: modelling and experiments. Soft Matter, 2013, 9, 11405. | 1.2 | 42 |
| 172 | Bio/non-bio interfaces: A straightforward method for obtaining long term PDMS/muscle cell biohybrid constructs. Colloids and Surfaces B: Biointerfaces, 2013, 105, 144-151. | 2.5 | 31 |
| 173 | Microwrinkled Conducting Polymer Interface for Anisotropic Multicellular Alignment. ACS Applied Materials & Interfaces, 2013, 5, 573-584. | 4.0 | 106 |
| 174 | Boron Nitride Nanotubes: Biocompatibility and Potential Spillâ€Over in Nanomedicine. Small, 2013, 9, 1672-1685. | 5.2 | 186 |
| 175 | Measurements of octopus arm elongation: Evidence of differences by body size and gender. Journal of Experimental Marine Biology and Ecology, 2013, 447, 160-164. | 0.7 | 15 |
| 176 | Biocompatibility of boron nitride nanotubes: An up-date of in vivo toxicological investigation. International Journal of Pharmaceutics, 2013, 444, 85-88. | 2.6 | 94 |
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