

Bradley J Nelson

List of Publications by Citations

Source: <https://exaly.com/author-pdf/1950354/bradley-j-nelson-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. 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.

516
papers

23,358
citations

79
h-index

137
g-index

580
ext. papers

28,149
ext. citations

8.3
avg, IF

7.33
L-index

#	Paper	IF	Citations
516	Microrobots for minimally invasive medicine. <i>Annual Review of Biomedical Engineering</i> , 2010 , 12, 55-85	12	1191
515	Magnetic helical micromachines: fabrication, controlled swimming, and cargo transport. <i>Advanced Materials</i> , 2012 , 24, 811-6	24	777
514	Artificial bacterial flagella: Fabrication and magnetic control. <i>Applied Physics Letters</i> , 2009 , 94, 064107	3.4	728
513	OctoMag: An Electromagnetic System for 5-DOF Wireless Micromanipulation. <i>IEEE Transactions on Robotics</i> , 2010 , 26, 1006-1017	6.5	681
512	Bio-inspired magnetic swimming microrobots for biomedical applications. <i>Nanoscale</i> , 2013 , 5, 1259-72	7.7	494
511	The grand challenges of. <i>Science Robotics</i> , 2018 , 3,	18.6	464
510	How Should Microrobots Swim?. <i>International Journal of Robotics Research</i> , 2009 , 28, 1434-1447	5.7	442
509	Characterizing the swimming properties of artificial bacterial flagella. <i>Nano Letters</i> , 2009 , 9, 3663-7	11.5	365
508	Soft micromachines with programmable motility and morphology. <i>Nature Communications</i> , 2016 , 7, 12263-4	6.4	356
507	Controlled in vivo swimming of a swarm of bacteria-like microrobotic flagella. <i>Advanced Materials</i> , 2015 , 27, 2981-8	24	308
506	Autofocusing in computer microscopy: selecting the optimal focus algorithm. <i>Microscopy Research and Technique</i> , 2004 , 65, 139-49	2.8	286
505	Monolithically Fabricated Microgripper With Integrated Force Sensor for Manipulating Microobjects and Biological Cells Aligned in an Ultrasonic Field. <i>Journal of Microelectromechanical Systems</i> , 2007 , 16, 7-15	2.5	274
504	Fabrication and characterization of magnetic microrobots for three-dimensional cell culture and targeted transportation. <i>Advanced Materials</i> , 2013 , 25, 5863-8	24	267
503	Robotics in the Small, Part I: Microbotics. <i>IEEE Robotics and Automation Magazine</i> , 2007 , 14, 92-103	3.4	256
502	Biological Cell Injection Using an Autonomous MicroRobotic System. <i>International Journal of Robotics Research</i> , 2002 , 21, 861-868	5.7	238
501	Recent developments in magnetically driven micro- and nanorobots. <i>Applied Materials Today</i> , 2017 , 9, 37-48	6.6	228
500	Magnetic Helical Microswimmers Functionalized with Lipoplexes for Targeted Gene Delivery. <i>Advanced Functional Materials</i> , 2015 , 25, 1666-1671	15.6	228

499	Mechanical property characterization of mouse zona pellucida. <i>IEEE Transactions on Nanobioscience</i> , 2003 , 2, 279-86	3.4	226
498	Artificial bacterial flagella for micromanipulation. <i>Lab on A Chip</i> , 2010 , 10, 2203-15	7.2	225
497	Controlled propulsion and cargo transport of rotating nickel nanowires near a patterned solid surface. <i>ACS Nano</i> , 2010 , 4, 6228-34	16.7	216
496	Modeling Magnetic Torque and Force for Controlled Manipulation of Soft-Magnetic Bodies 2007 , 23, 1247-1252		213
495	An integrated microrobotic platform for on-demand, targeted therapeutic interventions. <i>Advanced Materials</i> , 2014 , 26, 952-7	24	200
494	Fibronectin forms the most extensible biological fibers displaying switchable force-exposed cryptic binding sites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 18267-72	11.5	192
493	Magnetic helical micromachines. <i>Chemistry - A European Journal</i> , 2013 , 19, 28-38	4.8	173
492	Nanomagnetic encoding of shape-morphing micromachines. <i>Nature</i> , 2019 , 575, 164-168	50.4	155
491	Nanorobotic spot welding: controlled metal deposition with attogram precision from copper-filled carbon nanotubes. <i>Nano Letters</i> , 2007 , 7, 58-63	11.5	155
490	Degradable Magnetic Composites for Minimally Invasive Interventions: Device Fabrication, Targeted Drug Delivery, and Cytotoxicity Tests. <i>Advanced Materials</i> , 2016 , 28, 533-8	24	150
489	Artificial bacterial flagella for remote-controlled targeted single-cell drug delivery. <i>Small</i> , 2014 , 10, 1953-7		150
488	3D Printed Microtransporters: Compound Micromachines for Spatiotemporally Controlled Delivery of Therapeutic Agents. <i>Advanced Materials</i> , 2015 , 27, 6644-50	24	148
487	Undulatory Locomotion of Magnetic Multilink Nanoswimmers. <i>Nano Letters</i> , 2015 , 15, 4829-33	11.5	147
486	Small, Fast, and Under Control: Wireless Resonant Magnetic Micro-agents. <i>International Journal of Robotics Research</i> , 2010 , 29, 613-636	5.7	145
485	Anomalous coiling of SiGe/Si and SiGe/Si/Cr helical nanobelts. <i>Nano Letters</i> , 2006 , 6, 1311-7	11.5	141
484	Artificial Swimmers Propelled by Acoustically Activated Flagella. <i>Nano Letters</i> , 2016 , 16, 4968-74	11.5	140
483	Magnetically actuated microrobots as a platform for stem cell transplantation. <i>Science Robotics</i> , 2019 , 4,	18.6	131
482	3D Printed Enzymatically Biodegradable Soft Helical Microswimmers. <i>Advanced Functional Materials</i> , 2018 , 28, 1804107	15.6	131

481	Multiwavelength Light-Responsive Au/B-TiO Janus Micromotors. <i>ACS Nano</i> , 2017 , 11, 6146-6154	16.7	130
480	Selective trapping and manipulation of microscale objects using mobile microvortices. <i>Nano Letters</i> , 2012 , 12, 156-60	11.5	129
479	Adaptive locomotion of artificial microswimmers. <i>Science Advances</i> , 2019 , 5, eaau1532	14.3	127
478	Mobility experiments with microrobots for minimally invasive intraocular surgery 2013 , 54, 2853-63		125
477	Small-Scale Machines Driven by External Power Sources. <i>Advanced Materials</i> , 2018 , 30, e1705061	24	124
476	Piezoelectrically Enhanced Photocatalysis with BiFeO Nanostructures for Efficient Water Remediation. <i>IScience</i> , 2018 , 4, 236-246	6.1	124
475	Fabrication and characterization of three-dimensional InGaAs/GaAs nanosprings. <i>Nano Letters</i> , 2006 , 6, 725-9	11.5	124
474	Hybrid Magnetoelectric Nanowires for Nanorobotic Applications: Fabrication, Magnetoelectric Coupling, and Magnetically Assisted In Vitro Targeted Drug Delivery. <i>Advanced Materials</i> , 2017 , 29, 1605438	24	123
473	A bulk microfabricated multi-axis capacitive cellular force sensor using transverse comb drives. <i>Journal of Micromechanics and Microengineering</i> , 2002 , 12, 832-840	2	123
472	Three-Dimensional Magnetic Manipulation of Micro- and Nanostructures for Applications in Life Sciences. <i>IEEE Transactions on Magnetics</i> , 2013 , 49, 321-330	2	120
471	Cellular force microscopy for in vivo measurements of plant tissue mechanics. <i>Plant Physiology</i> , 2012 , 158, 1514-22	6.6	116
470	Synthesis and characterization of a nanocomposite of goethite nanorods and reduced graphene oxide for electrochemical capacitors. <i>Journal of Solid State Chemistry</i> , 2012 , 185, 191-197	3.3	111
469	Hermetically Coated Superparamagnetic Fe ₂ O ₃ Particles with SiO ₂ Nanofilms. <i>Chemistry of Materials</i> , 2009 , 21, 2094-2100	9.6	110
468	Biocompatibility characteristics of the metal organic framework ZIF-8 for therapeutical applications. <i>Applied Materials Today</i> , 2018 , 11, 13-21	6.6	108
467	A Six-Axis MEMS Force/Torque Sensor With Micro-Newton and Nano-Newtonmeter Resolution. <i>Journal of Microelectromechanical Systems</i> , 2009 , 18, 433-441	2.5	106
466	Neutrophil-inspired propulsion in a combined acoustic and magnetic field. <i>Nature Communications</i> , 2017 , 8, 770	17.4	105
465	Recent Advances in Wearable Transdermal Delivery Systems. <i>Advanced Materials</i> , 2018 , 30, 1704530	24	105
464	Targeted cargo delivery using a rotating nickel nanowire. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2012 , 8, 1074-80	6	105

463	Characterizing fruit fly flight behavior using a microforce sensor with a new comb-drive configuration. <i>Journal of Microelectromechanical Systems</i> , 2005 , 14, 4-11	2.5	103
462	Soft Micro- and Nanorobotics. <i>Annual Review of Control, Robotics, and Autonomous Systems</i> , 2018 , 1, 53-75.8	15.8	101
461	A Magnetically Controlled Soft Microrobot Steering a Guidewire in a Three-Dimensional Phantom Vascular Network. <i>Soft Robotics</i> , 2019 , 6, 54-68	9.2	100
460	Shape-switching microrobots for medical applications: the influence of shape in drug delivery and locomotion. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 6803-11	9.5	97
459	Trends in Micro-/Nanorobotics: Materials Development, Actuation, Localization, and System Integration for Biomedical Applications. <i>Advanced Materials</i> , 2021 , 33, e2002047	24	97
458	Magnetically Driven Silver-Coated Nanocoils for Efficient Bacterial Contact Killing. <i>Advanced Functional Materials</i> , 2016 , 26, 1063-1069	15.6	96
457	B4C-nanowires/carbon-microfiber hybrid structures and composites from cotton T-shirts. <i>Advanced Materials</i> , 2010 , 22, 2055-9	24	94
456	Vision-based force measurement. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2004 , 26, 290-8	13.3	94
455	Hybrid helical magnetic microrobots obtained by 3D template-assisted electrodeposition. <i>Small</i> , 2014 , 10, 1284-8	11	93
454	The pollen tube: a soft shell with a hard core. <i>Plant Journal</i> , 2013 , 73, 617-27	6.9	93
453	Wireless resonant magnetic microactuator for untethered mobile microrobots. <i>Applied Physics Letters</i> , 2008 , 92, 144103	3.4	91
452	Artificial bacterial flagella functionalized with temperature-sensitive liposomes for controlled release. <i>Sensors and Actuators B: Chemical</i> , 2014 , 196, 676-681	8.5	89
451	Transition metal oxide and graphene nanocomposites for high-performance electrochemical capacitors. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 16331-7	3.6	89
450	Micropositioning of a weakly calibrated microassembly system using coarse-to-fine visual servoing strategies. <i>IEEE Transactions on Electronics Packaging Manufacturing</i> , 2000 , 23, 123-131		88
449	Behavior of rotating magnetic microrobots above the step-out frequency with application to control of multi-microrobot systems. <i>Applied Physics Letters</i> , 2014 , 104, 144101	3.4	87
448	Highly Efficient Coaxial TiO ₂ -PtPd Tubular Nanomachines for Photocatalytic Water Purification with Multiple Locomotion Strategies. <i>Advanced Functional Materials</i> , 2016 , 26, 6995-7002	15.6	86
447	Chitosan electrodeposition for microrobotic drug delivery. <i>Advanced Healthcare Materials</i> , 2013 , 2, 1037-44	14.1	85
446	MOFBOTS: Metal-Organic-Framework-Based Biomedical Microrobots. <i>Advanced Materials</i> , 2019 , 31, e1901592	15.92	84

445	Morphology, structure and magnetic properties of cobalt-fickel films obtained from acidic electrolytes containing glycine. <i>Electrochimica Acta</i> , 2011 , 56, 1399-1408	6.7	83
444	Magnetically driven Bi ₂ O ₃ /BiOCl-based hybrid microrobots for photocatalytic water remediation. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 23670-23676	13	82
443	3D-Printed Soft Magnetolectric Microswimmers for Delivery and Differentiation of Neuron-Like Cells. <i>Advanced Functional Materials</i> , 2020 , 30, 1910323	15.6	82
442	Superparamagnetic microrobots: fabrication by two-photon polymerization and biocompatibility. <i>Biomedical Microdevices</i> , 2013 , 15, 997-1003	3.7	82
441	Ultrasound-mediated piezoelectric differentiation of neuron-like PC12 cells on PVDF membranes. <i>Scientific Reports</i> , 2017 , 7, 4028	4.9	82
440	Magnetic control of continuum devices. <i>International Journal of Robotics Research</i> , 2017 , 36, 68-85	5.7	79
439	Carbon nanotubes for nanorobotics. <i>Nano Today</i> , 2007 , 2, 12-21	17.9	77
438	Magnetic cilia carpets with programmable metachronal waves. <i>Nature Communications</i> , 2020 , 11, 2637	17.4	74
437	Fabrication and Manipulation of Ciliary Microrobots with Non-reciprocal Magnetic Actuation. <i>Scientific Reports</i> , 2016 , 6, 30713	4.9	74
436	Cellular forces and matrix assembly coordinate fibrous tissue repair. <i>Nature Communications</i> , 2016 , 7, 11036	17.4	74
435	Nanocrystalline Electroplated CuNi: Metallic Thin Films with Enhanced Mechanical Properties and Tunable Magnetic Behavior. <i>Advanced Functional Materials</i> , 2010 , 20, 983-991	15.6	73
434	Synthetic and living micropropellers for convection-enhanced nanoparticle transport. <i>Science Advances</i> , 2019 , 5, eaav4803	14.3	72
433	Magnetic Helical Micro- and Nanorobots: Toward Their Biomedical Applications. <i>Engineering</i> , 2015 , 1, 021-026	9.7	72
432	A Magnetically Controlled Wireless Optical Oxygen Sensor for Intraocular Measurements. <i>IEEE Sensors Journal</i> , 2008 , 8, 29-37	4	72
431	Superparamagnetic Twist-Type Actuators with Shape-Independent Magnetic Properties and Surface Functionalization for Advanced Biomedical Applications. <i>Advanced Functional Materials</i> , 2014 , 24, 5269-5276	15.6	71
430	A Supervisory Wafer-Level 3D Microassembly System for Hybrid MEMS Fabrication. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2003 , 37, 43-68	2.9	69
429	Sensor-based microassembly of hybrid MEMS devices. <i>IEEE Control Systems</i> , 1998 , 18, 35-45	2.9	68
428	Electroforming of implantable tubular magnetic microrobots for wireless ophthalmologic applications. <i>Advanced Healthcare Materials</i> , 2015 , 4, 209-14	10.1	67

427	Assembly, disassembly, and anomalous propulsion of microscopic helices. <i>Nano Letters</i> , 2013 , 13, 4263-811.5	66
426	Strategies for Increasing the Tracking Region of an Eye-in-Hand System by Singularity and Joint Limit Avoidance. <i>International Journal of Robotics Research</i> , 1995 , 14, 255-269	5.7 66
425	Ultrasound Doppler-guided real-time navigation of a magnetic microswarm for active endovascular delivery. <i>Science Advances</i> , 2021 , 7,	14.3 63
424	A Capsule-Type Microrobot with Pick-and-Drop Motion for Targeted Drug and Cell Delivery. <i>Advanced Healthcare Materials</i> , 2018 , 7, e1700985	10.1 61
423	Electrodeposition of low residual stress CoNiMnP hard magnetic thin films for magnetic MEMS actuators. <i>Journal of Magnetism and Magnetic Materials</i> , 2005 , 292, 49-58	2.8 61
422	. <i>IEEE Transactions on Robotics</i> , 2015 , 31, 714-722	6.5 60
421	Near-Infrared Light-Sensitive Polyvinyl Alcohol Hydrogel Photoresist for Spatiotemporal Control of Cell-Instructive 3D Microenvironments. <i>Advanced Materials</i> , 2018 , 30, 1705564	24 60
420	Tutorial - Robotics in the small Part II: Nanorobotics. <i>IEEE Robotics and Automation Magazine</i> , 2007 , 14, 111-121	3.4 59
419	Force and vision resolvability for assimilating disparate sensory feedback. <i>IEEE Transactions on Automation Science and Engineering</i> , 1996 , 12, 714-731	59
418	Mobile Magnetic Nanocatalysts for Bioorthogonal Targeted Cancer Therapy. <i>Advanced Functional Materials</i> , 2018 , 28, 1705920	15.6 58
417	A micro-particle positioning technique combining an ultrasonic manipulator and a microgripper. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 1562-1570	2 58
416	Surface-Chemistry-Mediated Control of Individual Magnetic Helical Microswimmers in a Swarm. <i>ACS Nano</i> , 2018 , 12, 6210-6217	16.7 58
415	Piezoresistive InGaAs/GaAs nanosprings with metal connectors. <i>Nano Letters</i> , 2009 , 9, 554-61	11.5 56
414	. <i>IEEE Transactions on Automation Science and Engineering</i> , 2006 , 3, 228-235	4.9 56
413	A high-aspect-ratio two-axis electrostatic microactuator with extended travel range. <i>Sensors and Actuators A: Physical</i> , 2002 , 102, 49-60	3.9 54
412	Magnetolectric micromachines with wirelessly controlled navigation and functionality. <i>Materials Horizons</i> , 2016 , 3, 113-118	14.4 53
411	Noncytotoxic artificial bacterial flagella fabricated from biocompatible ORMOCOMP and iron coating. <i>Journal of Materials Chemistry B</i> , 2014 , 2, 357-362	7.3 53
410	Noncontact manipulation using a transversely magnetized rolling robot. <i>Applied Physics Letters</i> , 2013 , 103, 114101	3.4 53

409	Imaging Technologies for Biomedical Micro- and Nanoswimmers. <i>Advanced Materials Technologies</i> , 2019 , 4, 1800575	6.8	53
408	Grain boundary segregation and interdiffusion effects in nickel-copper alloys: an effective means to improve the thermal stability of nanocrystalline nickel. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 2265-74	9.5	52
407	MEMS capacitive force sensors for cellular and flight biomechanics. <i>Biomedical Materials (Bristol)</i> , 2007 , 2, S16-22	3.5	52
406	Mechanical analysis of chorion softening in prehatching stages of zebrafish embryos. <i>IEEE Transactions on Nanobioscience</i> , 2006 , 5, 89-94	3.4	52
405	The rise of robots in surgical environments during COVID-19. <i>Nature Machine Intelligence</i> , 2020 , 2, 566-572.5	5.5	52
404	3D Fabrication of Fully Iron Magnetic Microrobots. <i>Small</i> , 2019 , 15, e1805006	11	51
403	Robust Electromagnetic Control of Microrobots Under Force and Localization Uncertainties. <i>IEEE Transactions on Automation Science and Engineering</i> , 2014 , 11, 310-316	4.9	50
402	A photopatternable superparamagnetic nanocomposite: Material characterization and fabrication of microstructures. <i>Sensors and Actuators B: Chemical</i> , 2011 , 156, 433-443	8.5	49
401	Three-dimensional nanosprings for electromechanical sensors. <i>Sensors and Actuators A: Physical</i> , 2006 , 130-131, 54-61	3.9	49
400	Magnetically guided capsule endoscopy. <i>Medical Physics</i> , 2017 , 44, e91-e111	4.4	48
399	A smart multifunctional drug delivery nanoplatform for targeting cancer cells. <i>Nanoscale</i> , 2016 , 8, 12723-7	7.8	48
398	Visually Servoing Magnetic Intraocular Microdevices. <i>IEEE Transactions on Robotics</i> , 2012 , 28, 798-809	6.5	48
397	Indirect 3D and 4D Printing of Soft Robotic Microstructures. <i>Advanced Materials Technologies</i> , 2019 , 4, 1900332	6.8	47
396	Calibration of Multi-Axis MEMS Force Sensors Using the Shape-From-Motion Method. <i>IEEE Sensors Journal</i> , 2007 , 7, 344-351	4	47
395	Batch fabrication of carbon nanotube bearings. <i>Nanotechnology</i> , 2007 , 18, 075703	3.4	47
394	Magnetically driven piezoelectric soft microswimmers for neuron-like cell delivery and neuronal differentiation. <i>Materials Horizons</i> , 2019 , 6, 1512-1516	14.4	46
393	Flagella-like Propulsion for Microrobots Using a Nanocoil and a Rotating Electromagnetic Field 2007 ,		46
392	Magnetic Continuum Device with Variable Stiffness for Minimally Invasive Surgery. <i>Advanced Intelligent Systems</i> , 2020 , 2, 1900086	6	46

391	Catalytic Locomotion of Core-Shell Nanowire Motors. <i>ACS Nano</i> , 2016 , 10, 9983-9991	16.7	45
390	Calibration of a parametric model of an optical microscope. <i>Optical Engineering</i> , 1999 , 38, 1989	1.1	45
389	Magnetoelectrically Driven Catalytic Degradation of Organics. <i>Advanced Materials</i> , 2019 , 31, e1901378	24	44
388	Real-time Rigid-body Visual Tracking in a Scanning Electron Microscope. <i>International Journal of Robotics Research</i> , 2009 , 28, 498-511	5.7	44
387	Localized non-contact manipulation using artificial bacterial flagella. <i>Applied Physics Letters</i> , 2011 , 99, 174101	3.4	44
386	Artificial Acousto-Magnetic Soft Microswimmers. <i>Advanced Materials Technologies</i> , 2017 , 2, 1700050	6.8	43
385	A comparison between fine-grained and nanocrystalline electrodeposited CuNi films. Insights on mechanical and corrosion performance. <i>Surface and Coatings Technology</i> , 2011 , 205, 5285-5293	4.4	43
384	Dumbbell Fluidic Tweezers for Dynamical Trapping and Selective Transport of Microobjects. <i>Advanced Functional Materials</i> , 2017 , 27, 1604571	15.6	42
383	Travel range extension of a MEMS electrostatic microactuator. <i>IEEE Transactions on Control Systems Technology</i> , 2005 , 13, 138-145	4.8	42
382	Motile Piezoelectric Nanoels for Targeted Drug Delivery. <i>Advanced Functional Materials</i> , 2019 , 29, 1808136	13.6	41
381	In situ construction of potato starch based carbon nanofiber/activated carbon hybrid structure for high-performance electrical double layer capacitor. <i>Journal of Power Sources</i> , 2012 , 207, 199-204	8.9	41
380	Microrobots: a new era in ocular drug delivery. <i>Expert Opinion on Drug Delivery</i> , 2014 , 11, 1815-26	8	41
379	. <i>IEEE Transactions on Automation Science and Engineering</i> , 1995 , 11, 725-732		41
378	Measuring the Mechanical Properties of Plant Cell Walls. <i>Plants</i> , 2015 , 4, 167-82	4.5	40
377	A CAD model based tracking system for visually guided microassembly. <i>Robotica</i> , 2005 , 23, 409-418	2.1	40
376	Helical and tubular lipid microstructures that are electroless-coated with CoNiReP for wireless magnetic manipulation. <i>Small</i> , 2012 , 8, 1498-502	11	39
375	4D printing and robotics. <i>Science Robotics</i> , 2018 , 3,	18.6	39
374	Polymer-Based Wireless Resonant Magnetic Microrobots. <i>IEEE Transactions on Robotics</i> , 2014 , 30, 26-32	6.5	38

373	Micro- and nanorobots swimming in heterogeneous liquids. <i>ACS Nano</i> , 2014 , 8, 8718-24	16.7	38
372	Graphite Coating of Iron Nanowires for Nanorobotic Applications: Synthesis, Characterization and Magnetic Wireless Manipulation. <i>Advanced Functional Materials</i> , 2013 , 23, 823-831	15.6	38
371	Optomechatronic design of microassembly systems for manufacturing hybrid microsystems. <i>IEEE Transactions on Industrial Electronics</i> , 2005 , 52, 1013-1023	8.9	38
370	Robotically controlled microprey to resolve initial attack modes preceding phagocytosis. <i>Science Robotics</i> , 2017 , 2,	18.6	37
369	Cooperative manipulation and transport of microobjects using multiple helical microcarriers. <i>RSC Advances</i> , 2014 , 4, 26771-26776	3.7	37
368	Three-axis micro-force sensor with sub-micro-Newton measurement uncertainty and tunable force range. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 025011	2	37
367	Superparamagnetic photocurable nanocomposite for the fabrication of microcantilevers. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 025023	2	37
366	Nanotube fluidic junctions: internanotube attogram mass transport through walls. <i>Nano Letters</i> , 2009 , 9, 210-4	11.5	37
365	Shaping Nanoelectrodes for High-Precision Dielectrophoretic Assembly of Carbon Nanotubes. <i>IEEE Nanotechnology Magazine</i> , 2009 , 8, 449-456	2.6	37
364	Strategies for single particle manipulation using acoustic and flow fields. <i>Ultrasonics</i> , 2010 , 50, 247-57	3.5	36
363	MiniMag: A Hemispherical Electromagnetic System for 5-DOF Wireless Micromanipulation. <i>Springer Tracts in Advanced Robotics</i> , 2014 , 317-329	0.5	36
362	Generating mobile fluidic traps for selective three-dimensional transport of microobjects. <i>Applied Physics Letters</i> , 2014 , 105, 114102	3.4	35
361	Effects of the anion in glycine-containing electrolytes on the mechanical properties of electrodeposited CoNi films. <i>Materials Chemistry and Physics</i> , 2011 , 130, 1380-1386	4.4	35
360	Metal-Organic Frameworks in Motion. <i>Chemical Reviews</i> , 2020 , 120, 11175-11193	68.1	35
359	Model-Based Calibration for Magnetic Manipulation. <i>IEEE Transactions on Magnetics</i> , 2017 , 53, 1-6	2	34
358	In vitro oxygen sensing using intraocular microrobots. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 3104-9	5	34
357	OctoMag: An electromagnetic system for 5-DOF wireless micromanipulation 2010 ,		34
356	Microfluidic-Based Droplet and Cell Manipulations Using Artificial Bacterial Flagella. <i>Micromachines</i> , 2016 , 7,	3.3	34

355	High-Resolution SPECT Imaging of Stimuli-Responsive Soft Microrobots. <i>Small</i> , 2019 , 15, e1900709	11	33
354	Non-ideal swimming of artificial bacterial flagella near a surface 2010 ,		33
353	A Microassembly System for the Flexible Assembly of Hybrid Robotic Mems Devices. <i>International Journal of Optomechatronics</i> , 2009 , 3, 69-90	3.5	33
352	Fabrication of segmented Au/Co/Au nanowires: insights in the quality of Co/Au junctions. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 14583-9	9.5	32
351	Biodegradable Metal-Organic Framework-Based Microrobots (MOFBOTs). <i>Advanced Healthcare Materials</i> , 2020 , 9, e2001031	10.1	32
350	Comparison, optimization, and limitations of magnetic manipulation systems. <i>Journal of Micro-Bio Robotics</i> , 2013 , 8, 107-120	1.4	31
349	Voltage-Induced Coercivity Reduction in Nanoporous Alloy Films: A Boost toward Energy-Efficient Magnetic Actuation. <i>Advanced Functional Materials</i> , 2017 , 27, 1701904	15.6	31
348	3D hierarchically porous Cu-BiOCl nanocomposite films: one-step electrochemical synthesis, structural characterization and nanomechanical and photoluminescent properties. <i>Nanoscale</i> , 2013 , 5, 12542-50	7.7	31
347	MEMS FOR CELLULAR FORCE MEASUREMENTS AND MOLECULAR DETECTION. <i>International Journal of Information Acquisition</i> , 2004 , 01, 23-32		31
346	Electrochemical Codeposition of Magnetic Particle-Ferromagnetic Matrix Composites for Magnetic MEMS Actuator Applications. <i>Journal of the Electrochemical Society</i> , 2004 , 151, C545	3.9	31
345	Integrating Optical Force Sensing with Visual Servoing for Microassembly. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2000 , 28, 259-276	2.9	31
344	Hyperthermia with rotating magnetic nanowires inducing heat into tumor by fluid friction. <i>Journal of Applied Physics</i> , 2016 , 120, 064304	2.5	31
343	Controlled Propulsion of Two-Dimensional Microswimmers in a Precessing Magnetic Field. <i>Small</i> , 2018 , 14, e1800722	11	30
342	Colloidal polycrystalline monolayers under oscillatory shear. <i>Physical Review E</i> , 2017 , 95, 012610	2.4	30
341	Fabrication and characterization of freestanding Si/Cr micro- and nanospirals. <i>Microelectronic Engineering</i> , 2006 , 83, 1237-1240	2.5	30
340	Acoustically Mediated Controlled Drug Release and Targeted Therapy with Degradable 3D Porous Magnetic Microrobots. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2001096	10.1	30
339	Protein crystal harvesting using the RodBot: a wireless mobile microrobot. <i>Journal of Applied Crystallography</i> , 2014 , 47, 692-700	3.8	29
338	Toward targeted retinal drug delivery with wireless magnetic microrobots 2008 ,		29

337	Robotic visual servoing and robotic assembly tasks. <i>IEEE Robotics and Automation Magazine</i> , 1996 , 3, 23-31	3.4	29
336	Investigation of Magnetotaxis of Reconfigurable Micro-Origami Swimmers with Competitive and Cooperative Anisotropy. <i>Advanced Functional Materials</i> , 2018 , 28, 1802110	15.6	28
335	Quantifying growth mechanics of living, growing plant cells in situ using microrobotics. <i>Micro and Nano Letters</i> , 2011 , 6, 311	0.9	28
334	Supermolecular switches based on multiwalled carbon nanotubes. <i>Applied Physics Letters</i> , 2010 , 96, 073116	3.16	28
333	Magnetic composite electroplating for depositing micromagnets. <i>Journal of Microelectromechanical Systems</i> , 2006 , 15, 330-337	2.5	28
332	Massively Parallelized Pollen Tube Guidance and Mechanical Measurements on a Lab-on-a-Chip Platform. <i>PLoS ONE</i> , 2016 , 11, e0168138	3.7	28
331	The tethered magnet: Force and 5-DOF pose control for cardiac ablation 2017 ,		27
330	Assembling reconfigurable endoluminal surgical systems: opportunities and challenges. <i>International Journal of Biomechatronics and Biomedical Robotics</i> , 2009 , 1, 3	0	27
329	Design and calibration of a MEMS sensor for measuring the force and torque acting on a magnetic microrobot. <i>Journal of Micromechanics and Microengineering</i> , 2008 , 18, 025004	2	27
328	A Needle-Type Microrobot for Targeted Drug Delivery by Affixing to a Microtissue. <i>Advanced Healthcare Materials</i> , 2020 , 9, e1901697	10.1	26
327	Estimation-Based Control of a Magnetic Endoscope without Device Localization. <i>Journal of Medical Robotics Research</i> , 2018 , 03, 1850002	1.1	26
326	Single-camera focus-based localization of intraocular devices. <i>IEEE Transactions on Biomedical Engineering</i> , 2010 , 57, 2064-74	5	26
325	Pulse-Reverse Electrodeposited Nanograinsized CoNiP Thin Films and Microarrays for MEMS Actuators. <i>Journal of the Electrochemical Society</i> , 2005 , 152, C190	3.9	26
324	Bio-inspired Acousto-magnetic Microswarm Robots with Upstream Motility. <i>Nature Machine Intelligence</i> , 2021 , 3, 116-124	22.5	26
323	Characterization of size-dependent mechanical properties of tip-growing cells using a lab-on-chip device. <i>Lab on A Chip</i> , 2016 , 17, 82-90	7.2	25
322	Electroplated porous polypyrrole nanostructures patterned by colloidal lithography for drug-delivery applications. <i>Nanoscale</i> , 2012 , 4, 3083-8	7.7	25
321	. <i>IEEE Nanotechnology Magazine</i> , 2008 , 7, 508-517	2.6	25
320	Real-time automated characterization of 3D morphology and mechanics of developing plant cells. <i>International Journal of Robotics Research</i> , 2015 , 34, 1136-1146	5.7	24

319	. <i>IEEE Robotics and Automation Letters</i> , 2018 , 3, 2123-2128	4.2	24
318	Design of a Micro-Gripper and an Ultrasonic Manipulator for Handling Micron Sized Objects 2006 ,		24
317	On-the-fly catalytic degradation of organic pollutants using magneto-photoresponsive bacteria-templated microcleaners. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 24847-24856	13	24
316	A Magnetically Navigated Microcannula for Subretinal Injections. <i>IEEE Transactions on Biomedical Engineering</i> , 2021 , 68, 119-129	5	24
315	Hard-magnetic cell microscaffolds from electroless coated 3D printed architectures. <i>Materials Horizons</i> , 2018 , 5, 699-707	14.4	24
314	Optimization of Tail Geometry for the Propulsion of Soft Microrobots. <i>IEEE Robotics and Automation Letters</i> , 2017 , 2, 727-732	4.2	23
313	3D Manipulation and Imaging of Plant Cells using Acoustically Activated Microbubbles. <i>Small Methods</i> , 2019 , 3, 1800527	12.8	23
312	Magnetic needle guidance for neurosurgery: Initial design and proof of concept 2016 ,		23
311	Simulation of Rotary Motion Generated by Head-to-Head Carbon Nanotube Shuttles. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013 , 18, 130-137	5.5	23
310	Mechanically interlocked 3D multi-material micromachines. <i>Nature Communications</i> , 2020 , 11, 5957	17.4	23
309	Fabrication of hard magnetic microarrays by electroless codeposition for MEMS actuators. <i>Sensors and Actuators A: Physical</i> , 2005 , 118, 307-312	3.9	22
308	Three-dimensional microfabrication for a multi-degree-of-freedom capacitive force sensor using fibre-chip coupling. <i>Journal of Micromechanics and Microengineering</i> , 2000 , 10, 492-497	2	22
307	Robotic manipulation using high bandwidth force and vision feedback. <i>Mathematical and Computer Modelling</i> , 1996 , 24, 11-29		22
306	A decade retrospective of medical robotics research from 2010 to 2020. <i>Science Robotics</i> , 2021 , 6, eabi80176	18.6	22
305	Protective coatings for intraocular wirelessly controlled microrobots for implantation: Corrosion, cell culture, and in vivo animal tests. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2017 , 105, 836-845	3.5	21
304	Magnetic quadrupole assemblies with arbitrary shapes and magnetizations. <i>Science Robotics</i> , 2019 , 4,	18.6	21
303	Magnetic polymer composite artificial bacterial flagella. <i>Bioinspiration and Biomimetics</i> , 2014 , 9, 046014	2.6	21
302	Monolithically Integrated Two-Axis Microtensile Tester for the Mechanical Characterization of Microscopic Samples. <i>Journal of Microelectromechanical Systems</i> , 2010 , 19, 1223-1233	2.5	21

301	Artificial vitreous humor for in vitro experiments. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007 , 2007, 6407-10		21
300	Nanorobotics for creating NEMS from 3D helical nanostructures. <i>Journal of Physics: Conference Series</i> , 2007 , 61, 257-261	0.3	21
299	Image-based 3D reconstruction using helical nanobelts for localized rotations. <i>Journal of Microscopy</i> , 2010 , 237, 122-35	1.9	20
298	Dual-Chirality Helical Nanobelts: Linear-to-Rotary Motion Converters for Three-Dimensional Microscopy. <i>Journal of Microelectromechanical Systems</i> , 2009 , 18, 1047-1053	2.5	20
297	3-D InGaAs/GaAs Helical Nanobelts for Optoelectronic Devices. <i>International Journal of Optomechatronics</i> , 2008 , 2, 88-103	3.5	20
296	Passive wireless MEMS microphones for biomedical applications. <i>Journal of Biomechanical Engineering</i> , 2005 , 127, 1030-4	2.1	20
295	How Should Microrobots Swim?. <i>Springer Tracts in Advanced Robotics</i> , 2010 , 157-167	0.5	20
294	Magnetic actuation of a cylindrical microrobot using time-delay-estimation closed-loop control: modeling and experiments. <i>Smart Materials and Structures</i> , 2014 , 23, 035013	3.4	19
293	Porous polysulfone coatings for enhanced drug delivery. <i>Biomedical Microdevices</i> , 2012 , 14, 603-12	3.7	19
292	Design and calibration of a microfabricated 6-axis force-torque sensor for microrobotic applications 2009 ,		19
291	Manufacturing of a Hybrid Acoustic Transmitter Using an Advanced Microassembly System. <i>IEEE Transactions on Industrial Electronics</i> , 2009 , 56, 2657-2666	8.9	19
290	Bending and buckling of rolled-up SiGeBi microtubes using nanorobotic manipulation. <i>Applied Physics Letters</i> , 2008 , 92, 243102	3.4	19
289	Underpinning transport phenomena for the patterning of biomolecules. <i>Chemical Society Reviews</i> , 2019 , 48, 1236-1254	58.5	18
288	Feeling the force: how pollen tubes deal with obstacles. <i>New Phytologist</i> , 2018 , 220, 187-195	9.8	18
287	Mineralization-Inspired Synthesis of Magnetic Zeolitic Imidazole Framework Composites. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 13550-13555	16.4	18
286	Artificial helical microswimmers with mastigoneme-inspired appendages. <i>Biomicrofluidics</i> , 2013 , 7, 61101	3.2	18
285	Characterization of Puncture Forces for Retinal Vein Cannulation. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2011 , 5,	1.3	18
284	Magnetoelastic Strain Sensor for Optimized Assessment of Bone Fracture Fixation. <i>IEEE Sensors Journal</i> , 2009 , 9, 961-968	4	18

283	Ultrasound emitter localization in heterogeneous media. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007 , 2007, 2867-70		18
282	Fusing force and vision feedback for manipulating deformable objects. <i>Journal of Field Robotics</i> , 2001 , 18, 103-117		18
281	3D path planning for flexible needle steering in neurosurgery. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2019 , 15, e1998	2.9	17
280	Enhanced catalytic degradation of organic pollutants by multi-stimuli activated multiferroic nanoarchitectures. <i>Nano Research</i> , 2020 , 13, 2183-2191	10	17
279	Tailoring Staircase-like Hysteresis Loops in Electrodeposited Trisegmented Magnetic Nanowires: a Strategy toward Minimization of Interwire Interactions. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 4109-17	9.5	17
278	Model Predictive Control of a Magnetically Guided Rolling Microrobot. <i>IEEE Robotics and Automation Letters</i> , 2016 , 1, 455-460	4.2	17
277	Automated capsulorhexis based on a hybrid magnetic-mechanical actuation system 2014 ,		17
276	Structural and magnetic characterization of batch-fabricated nickel encapsulated multi-walled carbon nanotubes. <i>Nanotechnology</i> , 2011 , 22, 275713	3.4	17
275	Electrostatic actuation and electromechanical switching behavior of one-dimensional nanostructures. <i>ACS Nano</i> , 2009 , 3, 2953-64	16.7	17
274	Modeling assembled-MEMS microrobots for wireless magnetic control 2008 ,		17
273	Magmites - wireless resonant magnetic microrobots 2008 ,		17
272	Microassembly of hybrid magnetic MEMS. <i>Journal of Micromechatronics</i> , 2001 , 1, 99-116		17
271	3D mechanical characterization of single cells and small organisms using acoustic manipulation and force microscopy. <i>Nature Communications</i> , 2021 , 12, 2583	17.4	17
270	Matryoshka-Inspired Micro-Origami Capsules to Enhance Loading, Encapsulation, and Transport of Drugs. <i>Soft Robotics</i> , 2019 , 6, 150-159	9.2	17
269	Magnetic Control of a Flexible Needle in Neurosurgery. <i>IEEE Transactions on Biomedical Engineering</i> , 2021 , 68, 616-627	5	17
268	Design and control of in-vivo magnetic microrobots. <i>Lecture Notes in Computer Science</i> , 2005 , 8, 819-26	0.9	17
267	Measuring localized viscoelasticity of the vitreous body using intraocular microprobes. <i>Biomedical Microdevices</i> , 2015 , 17, 85	3.7	16
266	Bio-inspired microrobots. <i>Materials Today</i> , 2012 , 15, 463	21.8	16

265	The effect of saccharine on the localized electrochemical deposition of Cu-rich Cu ₂ Ni microcolumns. <i>Electrochemistry Communications</i> , 2011 , 13, 973-976	5.1	16
264	Electrodeposition of cobalt/aluminum hydroxide/oxide nanocomposite films from particle-free aqueous baths containing chloride salts. <i>Electrochimica Acta</i> , 2011 , 56, 5142-5150	6.7	16
263	Experimental investigation of magnetic self-assembly for swallowable modular robots 2008 ,		16
262	Ring closure of rolled-up Si ₃ N ₄ nanoribbons. <i>Applied Physics Letters</i> , 2008 , 92, 143110	3.4	16
261	Analysis and design of wireless magnetically guided microrobots in body fluids 2004 ,		16
260	High precision, localized proton gradients and fluxes generated by a microelectrode device induce differential growth behaviors of pollen tubes. <i>Lab on A Chip</i> , 2017 , 17, 671-680	7.2	15
259	Magnetically navigable 3D printed multifunctional microdevices for environmental applications. <i>Additive Manufacturing</i> , 2019 , 28, 127-135	6.1	15
258	Shared control of a magnetic microcatheter for vitreoretinal targeted drug delivery 2017 ,		15
257	Redox cycling for passive modification of polypyrrole surface properties: effects on cell adhesion and proliferation. <i>Advanced Healthcare Materials</i> , 2013 , 2, 591-8	10.1	15
256	Frequency response of lift control in <i>Drosophila</i> . <i>Journal of the Royal Society Interface</i> , 2010 , 7, 1603-16	4.1	15
255	Long-range linear elasticity and mechanical instability of self-scrolling binormal nanohelices under a uniaxial load. <i>Nanoscale</i> , 2011 , 3, 4301-6	7.7	15
254	The Influence of Shape on Parallel Self-Assembly. <i>Entropy</i> , 2009 , 11, 643-666	2.8	15
253	A Submillimeter Continuous Variable Stiffness Catheter for Compliance Control. <i>Advanced Science</i> , 2021 , 8, e2101290	13.6	15
252	Kinematic Analysis of Magnetic Continuum Robots Using Continuation Method and Bifurcation Analysis. <i>IEEE Robotics and Automation Letters</i> , 2018 , 3, 3646-3653	4.2	14
251	Modeling the Motion of Microrobots on Surfaces Using Nonsmooth Multibody Dynamics. <i>IEEE Transactions on Robotics</i> , 2012 , 28, 1058-1068	6.5	14
250	Acousto-fluidic system assisting in-liquid self-assembly of microcomponents. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 125026	2	14
249	A Deformable Object Tracking Algorithm Based on the Boundary Element Method that is Robust to Occlusions and Spurious Edges. <i>International Journal of Computer Vision</i> , 2008 , 78, 29-45	10.6	14
248	Directed batch assembly of three-dimensional helical nanobelts through angular winding and electroplating. <i>Nanotechnology</i> , 2007 , 18, 055304	3.4	14

247	Robust CAD model based visual tracking for 3D microassembly using image space potentials 2004 ,		14
246	Mechanical property characterization of the zebrafish embryo chorion. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 5061-4		14
245	Optically transparent gripper for microassembly 2001 , 4568, 40		14
244	Adhesion force modeling and measurement for micromanipulation 1998 ,		14
243	Biological Cell Injection Using an Autonomous MicroRobotic System		14
242	Steerable intravitreal inserts for drug delivery: in vitro and ex vivo mobility experiments. <i>Lecture Notes in Computer Science</i> , 2011 , 14, 33-40	0.9	14
241	Progress in robotics for combating infectious diseases. <i>Science Robotics</i> , 2021 , 6,	18.6	14
240	Autonomous Injection of Biological Cells Using Visual Servoing 2001 , 169-178		14
239	RodBot: A rolling microrobot for micromanipulation 2015 ,		13
238	Inkjet printed superparamagnetic polymer composite hemispheres with programmed magnetic anisotropy. <i>Nanoscale</i> , 2014 , 6, 10495-9	7.7	13
237	Inkjet Printing of High Aspect Ratio Superparamagnetic SU-8 Microstructures with Preferential Magnetic Directions. <i>Micromachines</i> , 2014 , 5, 583-593	3.3	13
236	Visual servoing and characterization of resonant magnetic actuators for decoupled locomotion of multiple untethered mobile microrobots 2009 ,		13
235	Dielectrophoretic assembly of carbon nanotube-based NEMS devices using floating electrodes. <i>Microelectronic Engineering</i> , 2011 , 88, 2703-2706	2.5	13
234	Adaptive backstepping and MEMS force sensor for an MRI-guided microrobot in the vasculature 2011 ,		13
233	CANDYBOTS: A New Generation of 3D-Printed Sugar-Based Transient Small-Scale Robots. <i>Advanced Materials</i> , 2020 , 32, e2005652	24	13
232	Chiral anisotropic magnetoresistance of ferromagnetic helices. <i>Applied Physics Letters</i> , 2018 , 112, 242403.4	3.4	12
231	Electromagnetic Steering of a Magnetic Cylindrical Microrobot Using Optical Feedback Closed-Loop Control. <i>International Journal of Optomechatronics</i> , 2014 , 8, 129-145	3.5	12
230	Precise control of the number of walls formed during carbon nanotube growth using chemical vapor deposition. <i>Nanotechnology</i> , 2012 , 23, 065604	3.4	12

229	Programmable Locomotion Mechanisms of Nanowires with Semihard Magnetic Properties Near a Surface Boundary. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 3214-3223	9.5	12
228	Template-Assisted Electroforming of Fully Semi-Hard-Magnetic Helical Microactuators. <i>Advanced Engineering Materials</i> , 2018 , 20, 1800179	3.5	12
227	Biodegradable Small-Scale Swimmers for Biomedical Applications. <i>Advanced Materials</i> , 2021 , 33, e2102049	4.9	12
226	Real-Time Holographic Tracking and Control of Microrobots. <i>IEEE Robotics and Automation Letters</i> , 2017 , 2, 143-148	4.2	11
225	Spatiotemporally controlled electrodeposition of magnetically driven micromachines based on the inverse opal architecture. <i>Electrochemistry Communications</i> , 2017 , 81, 97-101	5.1	11
224	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. <i>PLoS Biology</i> , 2020 , 18, e3000740	9.7	11
223	Electrochemically synthesized amorphous and crystalline nanowires: dissimilar nanomechanical behavior in comparison with homologous flat films. <i>Nanoscale</i> , 2016 , 8, 1344-51	7.7	11
222	Ordered arrays of ferromagnetic, compositionally graded Cu _{1-x} Ni _x alloy nanopillars prepared by template-assisted electrodeposition. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 7215	7.1	11
221	Electroforming of Magnetic Microtubes for Microrobotic Applications. <i>IEEE Transactions on Magnetics</i> , 2014 , 50, 1-3	2	11
220	Movement of artificial bacterial flagella in heterogeneous viscous environments at the microscale 2012 ,		11
219	Micro/Nanorobots 2008 , 411-450		11
218	Local control of electric current driven shell etching of multiwalled carbon nanotubes. <i>Applied Physics A: Materials Science and Processing</i> , 2007 , 89, 133-139	2.6	11
217	Magnetic helical micro-/nanomachines: Recent progress and perspective. <i>Matter</i> , 2022 , 5, 77-109	12.7	11
216	Magnetometry of Individual Polycrystalline Ferromagnetic Nanowires. <i>Small</i> , 2016 , 12, 6363-6369	11	11
215	A Magnetically Steered Endolaser Probe for Automated Panretinal Photocoagulation. <i>IEEE Robotics and Automation Letters</i> , 2019 , 4, xvii-xxiii	4.2	11
214	Magnetostriction in electroplated CoFe alloys. <i>Electrochemistry Communications</i> , 2017 , 76, 15-19	5.1	10
213	Swimming characteristics of helical microrobots in fibrous environments 2016 ,		10
212	Electrophoretic deposition as a new approach to produce optical sensing films adaptable to microdevices. <i>Nanoscale</i> , 2014 , 6, 263-71	7.7	10

211	Holonomic 5-DOF magnetic control of 1D nanostructures 2012 ,		10
210	The magnetic self-aligning hermaphroditic connector a scalable approach for modular microrobots 2007 ,		10
209	Maskless writing of a flexible nanoscale transistor with Au-contacted carbon nanotube electrodes. <i>Applied Physics Letters</i> , 2007 , 91, 243118	3.4	10
208	Measuring the Magnetic and Hydrodynamic Properties of Assembled-MEMS Microrobots. <i>Proceedings - IEEE International Conference on Robotics and Automation</i> , 2007 ,		10
207	Nano-3D-Printed Photochromic Micro-Objects. <i>Small</i> , 2021 , 17, e2101337	11	10
206	Dynamic Modeling of Magnetic Helical Microrobots. <i>IEEE Robotics and Automation Letters</i> , 2021 , 1-1	4.2	10
205	Silicon-supported aluminum oxide membranes with ultrahigh aspect ratio nanopores. <i>RSC Advances</i> , 2015 , 5, 94283-94289	3.7	9
204	One-pot electrosynthesis of multi-layered magnetic metallopolymer nanocomposites. <i>Nanoscale</i> , 2014 , 6, 4683-90	7.7	9
203	Superparamagnetic swimming microrobots with adjusted magnetic anisotropy 2013 ,		9
202	A magnetic force sensor on a catheter tip for minimally invasive surgery. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2015 , 2015, 7970-3	0.9	9
201	Self-folding mobile microrobots for biomedical applications 2014 ,		9
200	Lagrangian Modeling of the Magnetization and the Magnetic Torque on Assembled Soft-Magnetic MEMS Devices for Fast Computation and Analysis. <i>IEEE Transactions on Robotics</i> , 2012 , 28, 787-797	6.5	9
199	Bacteria-Inspired Microrobots 2012 , 165-199		9
198	High-performance electrodeposited Co-rich CoNiReP permanent magnets. <i>Electrochimica Acta</i> , 2011 , 56, 8979-8988	6.7	9
197	A Dynamic Region-of-Interest Vision Tracking System Applied to the Real-Time Wing Kinematic Analysis of Tethered Drosophila. <i>IEEE Transactions on Automation Science and Engineering</i> , 2010 , 7, 463-473	4.9	9
196	MRI magnetic signature imaging, tracking and navigation for targeted micro/nano-capsule therapeutics 2011 ,		9
195	Polymer-based Wireless Resonant Magnetic microrobots 2012 ,		9
194	Thermoset Shape Memory Polymer Variable Stiffness 4D Robotic Catheters. <i>Advanced Science</i> , 2021 , e2103277	13.6	9

193	Magnetic microrobots with addressable shape control 2016 ,		9
192	Non-contact Manipulation for Automated Protein Crystal Harvesting using a Rolling Microrobot. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014 , 47, 7480-7485		8
191	Optimization of receiver arrangements for passive emitter localization methods. <i>Ultrasonics</i> , 2012 , 52, 447-55	3.5	8
190	Nanorobotic drug delivery. <i>Materials Today</i> , 2011 , 14, 54	21.8	8
189	Micromanipulation using artificial bacterial flagella 2009 ,		8
188	Design and fabrication of a gold electroplated electromagnetic and electrostatic hybrid MEMS relay. <i>Journal of Applied Physics</i> , 2005 , 97, 10R506	2.5	8
187	Small, Fast, and under Control: Wireless Resonant Magnetic Micro-agents. <i>Springer Tracts in Advanced Robotics</i> , 2009 , 169-178	0.5	8
186	Reconfigurable Magnetic Microswarm for Thrombolysis under Ultrasound Imaging 2020 ,		8
185	Modeling Electromagnetic Navigation Systems. <i>IEEE Transactions on Robotics</i> , 2021 , 37, 1009-1021	6.5	8
184	Mobility-Enhancing Coatings for Vitreoretinal Surgical Devices: Hydrophilic and Enzymatic Coatings Investigated by Microrheology. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 22018-28	9.5	7
183	Dual-axis Cellular Force Microscope for mechanical characterization of living plant cells 2016 ,		7
182	3D Printing of Thermoplastic-Bonded Soft- and Hard-Magnetic Composites: Magnetically Tuneable Architectures and Functional Devices. <i>Advanced Intelligent Systems</i> , 2019 , 1, 1900069	6	7
181	Tailoring the physical properties of electrodeposited CoNiReP alloys with large Re content by direct, pulse, and reverse pulse current techniques. <i>Electrochimica Acta</i> , 2013 , 96, 43-50	6.7	7
180	Visible light curing of Epon SU-8 based superparamagnetic polymer composites with random and ordered particle configurations. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 193-200	9.5	7
179	OctoMag: An electromagnetic system for 5-DOF wireless micromanipulation 2010 ,		7
178	Fabricating devices with dielectrophoretically assembled, suspended single walled carbon nanotubes for improved nanoelectronic device characterization. <i>Microelectronic Engineering</i> , 2011 , 88, 2740-2743	2.5	7
177	A wireless acoustic emitter for passive localization in liquids 2009 ,		7
176	. <i>IEEE Nanotechnology Magazine</i> , 2009 , 8, 565-568	2.6	7

175	Functionalizing intraocular microrobots with surface coatings 2008 ,		7
174	Virtual reality for microassembly 2007 ,		7
173	A four degree of freedom MEMS microgripper with novel bi-directional thermal actuators 2005 ,		7
172	Bacteria-Inspired Magnetic Polymer Composite Microrobots. <i>Lecture Notes in Computer Science</i> , 2013 , 216-227	0.9	7
171	Force microscopy of the embryonic eggshell. <i>Microsystems and Nanoengineering</i> , 2020 , 6, 29	7.7	7
170	An Atomic Force Microscope with Dual Actuation Capability for Biomolecular Experiments. <i>Scientific Reports</i> , 2016 , 6, 27567	4.9	7
169	Helical Klinotactic Locomotion of Two-Link Nanoswimmers with Dual-Function Drug-Loaded Soft Polysaccharide Hinges. <i>Advanced Science</i> , 2021 , 8, 2004458	13.6	7
168	Actuation, Sensing, and Fabrication for In Vivo Magnetic Microrobots. <i>Springer Tracts in Advanced Robotics</i> , 2006 , 321-330	0.5	7
167	A Visually Servoed MEMS Manipulator 2003 , 255-264		7
166	The electrochemical manipulation of apolar solvent drops in aqueous electrolytes by altering the surface polarity of polypyrrole architectures. <i>Electrochemistry Communications</i> , 2015 , 54, 32-35	5.1	6
165	Internal Electron Tunneling Enabled Ultrasensitive Position/Force Peapod Sensors. <i>Nano Letters</i> , 2015 , 15, 7281-7	11.5	6
164	A Robotic Diathermy System for Automated Capsulotomy. <i>Journal of Medical Robotics Research</i> , 2018 , 03, 1850001	1.1	6
163	Self-folding hydrogel bilayer for enhanced drug loading, encapsulation, and transport. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 2103-2106	0.9	6
162	Magnetic imaging of a single ferromagnetic nanowire using diamond atomic sensors. <i>Nanotechnology</i> , 2018 , 29, 405502	3.4	6
161	Stability and analysis of configuration-tunable bi-directional MWNT bearings. <i>Nanotechnology</i> , 2009 , 20, 495704	3.4	6
160	Aging effect of rolled-up InGaAs/GaAs/Cr helical nanobelts. <i>Microelectronic Engineering</i> , 2009 , 86, 824-827	5	6
159	On imaging and localizing untethered intraocular devices with a stationary camera 2008 ,		6
158	Integrating force and vision feedback for microassembly 1998 , 3202, 30		6

157	Assistive Device for Efficient Intravitreal Injections. <i>Ophthalmic Surgery Lasers and Imaging Retina</i> , 2016 , 47, 752-62	1.4	6
156	Real-Time Microforce Sensors and High Speed Vision System for Insect Flight Control Analysis 2008 , 451-460		6
155	Reduced Etch Lag and High Aspect Ratios by Deep Reactive Ion Etching (DRIE). <i>Micromachines</i> , 2021 , 12,	3.3	6
154	A Microbotic System for Simultaneous Measurement of Turgor Pressure and Cell-Wall Elasticity of Individual Growing Plant Cells. <i>IEEE Robotics and Automation Letters</i> , 2019 , 4, 641-646	4.2	6
153	Tracking a magnetically guided catheter with a single rotating C-Arm 2015 ,		5
152	An in-plane cobalt-nickel microresonator sensor with magnetic actuation and readout. <i>Sensors and Actuators A: Physical</i> , 2012 , 188, 120-126	3.9	5
151	Modeling and analysis of wireless resonant magnetic microactuators 2010 ,		5
150	MagMites - Microrobots for wireless microhandling in dry and wet environments 2010 ,		5
149	Three-axis micro-force sensor with tunable force range and sub-micronewton measurement uncertainty 2010 ,		5
148	A multi-axis MEMS force-torque sensor for measuring the load on a microrobot actuated by magnetic fields 2007 ,		5
147	High-throughput cell manipulation using ultrasound fields. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 2571-4		5
146	Microrobotics for Molecular Biology: Manipulating Deformable Objects at the Microscale. <i>Springer Tracts in Advanced Robotics</i> , 2005 , 115-124	0.5	5
145	Electrotransport and deformation model of ion exchange membrane-based actuators 2000 ,		5
144	Performance of microcontacts tested with a novel MEMS device		5
143	Increasingly Intelligent Micromachines. <i>Annual Review of Control, Robotics, and Autonomous Systems</i> , 2022 , 5,	11.8	5
142	A Survey on Swarm Microrobotics. <i>IEEE Transactions on Robotics</i> , 2021 , 1-21	6.5	5
141	Wireless Intraocular Microrobots: Opportunities and Challenges 2011 , 271-311		5
140	A Biodegradable Magnetic Microrobot Based on Gelatin Methacrylate for Precise Delivery of Stem Cells with Mass Production Capability. <i>Small</i> , 2107888	11	5

139	Nanomechanics on FGF-2 and Heparin Reveal Slip Bond Characteristics with pH Dependency. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 1000-1007	5.5	4
138	REALITI: A Robotic Endoscope Automated via Laryngeal Imaging for Tracheal Intubation. <i>IEEE Transactions on Medical Robotics and Bionics</i> , 2020 , 2, 157-164	3.1	4
137	Probing the micromechanics of the fastest growing plant cell - the pollen tube. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 461-464	0.9	4
136	Parallel C4 Packaging of MEMS Using Self-Alignment: Simulation and Experiments. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2013 , 3, 1420-1429	1.7	4
135	Three-dimensional, automated magnetic biomanipulation with subcellular resolution 2013 ,		4
134	Navigation of a rolling microrobot in cluttered environments for automated crystal harvesting 2015 ,		4
133	SU-8-based nanoporous substrate for migration of neuronal cells. <i>Microelectronic Engineering</i> , 2015 , 141, 173-177	2.5	4
132	Cobalt-Bickel microcantilevers for biosensing. <i>Journal of Intelligent Material Systems and Structures</i> , 2013 , 24, 2215-2220	2.3	4
131	Tailoring the drug loading capacity of polypyrrole films for use in intraocular biomicrobots. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 4359-62	0.9	4
130	Model-based localization of intraocular microrobots for wireless electromagnetic control 2011 ,		4
129	The cellular force microscope (CFM): A microrobotic system for quantitating the growth mechanics of living, growing plant cells in situ 2011 ,		4
128	Plumbing the Depths of the Nanometer Scale. <i>IEEE Nanotechnology Magazine</i> , 2010 , 4, 13-22	1.7	4
127	Modeling magnetic torque and force for controlled manipulation of soft-magnetic bodies 2007 ,		4
126	Electrochemical surface reshaping of polycrystalline platinum: Morphology and crystallography. <i>Electrochimica Acta</i> , 2008 , 53, 4051-4058	6.7	4
125	Nano encoders based on vertical arrays of individual carbon nanotubes. <i>Advanced Robotics</i> , 2006 , 20, 1281-1301	1.7	4
124	Open-structure reconfigurable experimental workstation for fast and reliable microassembly 2000 , 4194, 21		4
123	Modeling microassembly tasks with interactive forces		4
122	Polymeric microellipsoids with programmed magnetic anisotropy for controlled rotation using low (10 mT) magnetic fields. <i>Applied Materials Today</i> , 2020 , 18, 100511	6.6	4

121	Laser thermal therapy for epilepsy surgery: current standing and future perspectives. <i>International Journal of Hyperthermia</i> , 2020 , 37, 77-83	3.7	4
120	Embedded Microbubbles for Acoustic Manipulation of Single Cells and Microfluidic Applications. <i>Analytical Chemistry</i> , 2021 , 93, 9760-9770	7.8	4
119	Magnetolectric effect in hydrogen harvesting: magnetic field as a trigger of catalytic reactions.. <i>Advanced Materials</i> , 2022 , e2110612	24	4
118	Gene Therapy: Magnetic Helical Microswimmers Functionalized with Lipoplexes for Targeted Gene Delivery (Adv. Funct. Mater. 11/2015). <i>Advanced Functional Materials</i> , 2015 , 25, 1764-1764	15.6	3
117	The biocompatibility and anti-biofouling properties of magnetic core-multishell Fe@C NWs-AAO nanocomposites. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 13274-9	3.6	3
116	Magnetically actuated and guided milli-gripper for medical applications 2015 ,		3
115	Magnetically and chemically propelled nanowire-based swimmers 2020 , 777-799		3
114	Hydrogels: Near-Infrared Light-Sensitive Polyvinyl Alcohol Hydrogel Photoresist for Spatiotemporal Control of Cell-Instructive 3D Microenvironments (Adv. Mater. 10/2018). <i>Advanced Materials</i> , 2018 , 30, 1870070	24	3
113	Backside Liquid Phase Photolithography for Fabricating Self-Organizing Hydrogel Bilayers. <i>Procedia Engineering</i> , 2012 , 47, 1219-1222		3
112	Oxygen sensing using microrobots. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 1958-61	0.9	3
111	Motion control of artificial bacterial flagella 2010 ,		3
110	Localized viscoelasticity measurements with untethered intravitreal microrobots. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 2813-6	0.9	3
109	Superparamagnetic photosensitive polymer nanocomposite for microactuators 2009 ,		3
108	Tracking intraocular microdevices based on colorspace evaluation and statistical color/shape information 2009 ,		3
107	In-situ nanorobotic soldering of three-dimensional helical nanobelts using gold nanoink 2007 ,		3
106	Boundary element deformable object tracking with equilibrium constraints 2004 ,		3
105	Virtual environment for operations in the microworld 2000 ,		3
104	Force and vision feedback for robotic manipulation of the microworld 2000 , 433-442		3

103	Visual servoing frameworks for microassembly of hybrid MEMS 1998 ,		3
102	MEMS-based single-cell penetration force sensor 1999 ,		3
101	Force-controlled microgripping 1999 ,		3
100	Vision resolvability for visually servoed manipulation. <i>Journal of Field Robotics</i> , 1996 , 13, 75-93		3
99	A Variable Stiffness Magnetic Catheter Made of a Conductive Phase-Change Polymer for Minimally Invasive Surgery. <i>Advanced Functional Materials</i> , 2107662	15.6	3
98	Kinematics Governing Mechanotransduction in the Sensory Hair of the. <i>International Journal of Molecular Sciences</i> , 2020 , 22,	6.3	3
97	Modeling Electromagnetic Navigation Systems for Medical Applications using Random Forests and Artificial Neural Networks 2020 ,		3
96	A Submillimeter Continuous Variable Stiffness Catheter for Compliance Control (Adv. Sci. 18/2021). <i>Advanced Science</i> , 2021 , 8, 2170118	13.6	3
95	Microforce-Sensing Tools and Methodologies for Micromechanical Metrology 2011 , 93-131		3
94	Magnetically Actuated Medical Robots: An in vivo Perspective. <i>Proceedings of the IEEE</i> , 2022 , 1-10	14.3	3
93	Magnetolectrics: Hybrid Magnetolectric Nanowires for Nanorobotic Applications: Fabrication, Magnetolectric Coupling, and Magnetically Assisted In Vitro Targeted Drug Delivery (Adv. Mater. 8/2017). <i>Advanced Materials</i> , 2017 , 29,	24	2
92	Miniaturized magnetic force sensor on a catheter tip 2015 ,		2
91	Bioinspired navigation in shape morphing micromachines for autonomous targeted drug delivery 2018 ,		2
90	Mineralization-Inspired Synthesis of Magnetic Zeolitic Imidazole Framework Composites. <i>Angewandte Chemie</i> , 2019 , 131, 13684-13689	3.6	2
89	Magnetolectric Catalysis: Magnetoelectrically Driven Catalytic Degradation of Organics (Adv. Mater. 28/2019). <i>Advanced Materials</i> , 2019 , 31, 1970201	24	2
88	Functional polypyrrole coatings for wirelessly controlled magnetic microrobots 2013 ,		2
87	Sensorless Closed-Loop and Selective Heating for SiP MEMS Flip Chip. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2013 , 3, 342-349	1.7	2
86	Microrobotics: Electroforming of Implantable Tubular Magnetic Microrobots for Wireless Ophthalmologic Applications (Adv. Healthcare Mater. 2/2015). <i>Advanced Healthcare Materials</i> , 2015 , 4, 208-208	10.1	2

85	Lithography: Hybrid Helical Magnetic Microrobots Obtained by 3D Template-Assisted Electrodeposition (Small 7/2014). <i>Small</i> , 2014 , 10, 1234-1234	11	2
84	Targeted Delivery: An Integrated Microrobotic Platform for On-Demand, Targeted Therapeutic Interventions (Adv. Mater. 6/2014). <i>Advanced Materials</i> , 2014 , 26, 951-951	24	2
83	Non-contact, 3D magnetic biomanipulation for in vivo and in vitro applications 2012 ,		2
82	Pushing the limits of photo-curable SU-8-based superparamagnetic polymer composites 2013 ,		2
81	Characterization and actuation of a magnetic photosensitive polymer cantilever 2009 ,		2
80	Automated stiffness characterization of living tobacco BY2 cells using the Cellular Force Microscope 2012 ,		2
79	Dual-chirality helical nanobelts: A novel linear-to-rotary motion converter. <i>Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS)</i> , 2008 ,		2
78	Real-time rigid-body visual tracking in a scanning electron microscope 2007 ,		2
77	Fabrication and Characterization of Self-scrolling Si/Cr Micro- and Nanostructures 2006 ,		2
76	Conductometric sensors based on InGaAs/GaAs nanocoils 2007 ,		2
75	Assimilating disparate sensory feedback within virtual environments for telerobotic systems. <i>Robotics and Autonomous Systems</i> , 2001 , 36, 1-10	3.5	2
74	Magnetically Assisted Robotic Fetal Surgery for the Treatment of Spina Bifida. <i>IEEE Transactions on Medical Robotics and Bionics</i> , 2022 , 1-1	3.1	2
73	Simultaneous measurement of turgor pressure and cell wall elasticity in growing pollen tubes. <i>Methods in Cell Biology</i> , 2020 , 160, 297-310	1.8	2
72	Microrobotic Tools for Plant Biology. <i>Advanced Micro & Nanosystems</i> , 283-306		2
71	Parallel Packaging of Micro Electro Mechanical Systems (MEMS) Using Self-alignment. <i>International Federation for Information Processing</i> , 2012 , 28-35		2
70	An Intelligent In-Shoe System for Gait Monitoring and Analysis with Optimized Sampling and Real-Time Visualization Capabilities. <i>Sensors</i> , 2021 , 21,	3.8	2
69	Constrained-Spherical Deconvolution Tractography in the Evaluation of the Corticospinal Tract in Glioma Surgery. <i>Frontiers in Surgery</i> , 2021 , 8, 646465	2.3	2
68	Perforation Forces of the intact porcine anterior lens capsule. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 62, 347-354	4.1	2

67	Magnetically Active Cardiac Patches as an Untethered, Non-Blood Contacting Ventricular Assist Device. <i>Advanced Science</i> , 2020 , 8, 2000726	13.6	2
66	Quantification of Mechanical Forces and Physiological Processes Involved in Pollen Tube Growth Using Microfluidics and Microrobotics. <i>Methods in Molecular Biology</i> , 2020 , 2160, 275-292	1.4	2
65	Bioteemplating of MetalOrganic Framework Nanocrystals for Applications in Small-Scale Robotics. <i>Advanced Functional Materials</i> , 2022 , 32, 2107421	15.6	2
64	Microrobotics: 3D Fabrication of Fully Iron Magnetic Microrobots (Small 16/2019). <i>Small</i> , 2019 , 15, 1970086	0.86	1
63	Stereo Holographic Diffraction Based Tracking of Microrobots. <i>IEEE Robotics and Automation Letters</i> , 2018 , 3, 567-572	4.2	1
62	Micro-/Nanorobots 2016 , 671-716		1
61	High-throughput analysis of the morphology and mechanics of tip growing cells using a microrobotic platform 2014 ,		1
60	Magnetic Actuation: Voltage-Induced Coercivity Reduction in Nanoporous Alloy Films: A Boost toward Energy-Efficient Magnetic Actuation (Adv. Funct. Mater. 32/2017). <i>Advanced Functional Materials</i> , 2017 , 27,	15.6	1
59	Microswimmers: Artificial Acousto-Magnetic Soft Microswimmers (Adv. Mater. Technol. 7/2017). <i>Advanced Materials Technologies</i> , 2017 , 2,	6.8	1
58	Microrobots for Active Object Manipulation. <i>Microsystems and Nanosystems</i> , 2017 , 61-72	0.4	1
57	Wireless Actuation of Micro/Nanorobots for Medical Applications. <i>Nanostructure Science and Technology</i> , 2014 , 171-189	0.9	1
56	Non-contact manipulation for automated protein crystal harvesting using a rolling microrobot 2014 ,		1
55	2014 ,		1
54	Artificial bacterial flagella functionalized with temperature-sensitive liposomes for biomedical applications 2013 ,		1
53	Viscoelastic interaction between intraocular microrobots and vitreous humor: a finite element approach. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 4937-40	0.9	1
52	Motion control for magnetic micro-scale manipulation 2013 ,		1
51	Two-axis micro-tensile tester chip for measuring plant cell mechanics 2010 ,		1
50	Rotary nanomotors based on head-to-head nanotube shuttles 2010 ,		1

49	2010,		1
48	Morphology detection for magnetically self-assembled modular robots 2009,		1
47	A microfabricated and microassembled wireless resonator. <i>Sensors and Actuators A: Physical</i> , 2009 , 154, 109-116	3.9	1
46	Robust H _∞ control for electromagnetic steering of microrobots 2012,		1
45	Nanohelices as motion converters 2008,		1
44	Optical Tracking of Multi-walled Carbon Nanotubes by Attaching Functionalized Quantum Dots 2006,		1
43	Batch fabrication of nanotube transducers 2007,		1
42	Automatic Nanorobotic Characterization of Anomally Rolled-up SiGe/Si Helical Nanobelts through Vision-based Force Measurement 2007,		1
41	A magnetically controlled wireless intraocular oxygen sensor: concept, prototype, and in vitro experiments. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007 , 2007, 4189-93		1
40	Dielectrophoretic nanoassembly of individual carbon nanotubes onto nanoelectrodes		1
39	Drosophila flight force measurements using a MEMS micro force sensor. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 2014-7		1
38	Vision-based force sensing at nanonewton scales 2001,		1
37	An Electromagnetically Controllable Microrobotic Interventional System for Targeted, Real-time Cardiovascular Intervention.. <i>Advanced Healthcare Materials</i> , 2022 , e2102529	10.1	1
36	Hybrid Nanorobotic Approaches to NEMS 2007 , 163-174		1
35	Feeling the force: how pollen tubes deal with obstacles		1
34	Measuring Cytomechanical Forces on Growing Pollen Tubes 2017 , 65-85		1
33	Wide-angle intraocular imaging and localization. <i>Lecture Notes in Computer Science</i> , 2009 , 12, 540-8	0.9	1
32	Modelling the Impact of Robotics on Infectious Spread Among Healthcare Workers. <i>Frontiers in Robotics and AI</i> , 2021 , 8, 652685	2.8	1

31	Fabrication and Locomotion of Flexible Nanoswimmers 2018 ,		1
30	Magnetic concentric tube robots: introduction and analysis. <i>International Journal of Robotics Research</i> , 027836492110711	5.7	1
29	Generating Magnetic Fields for Controlling Nanorobots in Medical Applications 2013 , 275-299		0
28	Magnetolectric reduction of chromium(VI) to chromium(III). <i>Applied Materials Today</i> , 2022 , 26, 101339	6.6	0
27	Nanorobotics 2010 , 1633-1659		0
26	Mechanical factors contributing to the Venus flytrap [®] rate-dependent response to stimuli. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021 , 20, 2287-2297	3.8	0
25	Lab-on-a-Chip and Arrays: 3D Manipulation and Imaging of Plant Cells using Acoustically Activated Microbubbles (Small Methods 3/2019). <i>Small Methods</i> , 2019 , 3, 1970006	12.8	
24	Nanorobotics. <i>Springer Handbooks</i> , 2017 , 559-584	1.3	
23	Nanorobotic Manipulation of Helical Nanostructures. <i>Advanced Micro & Nanosystems</i> , 2015 , 477-503		
22	Nanorobotic Mass Transport 2013 , 137-153		
21	Iron Nanowires: Graphite Coating of Iron Nanowires for Nanorobotic Applications: Synthesis, Characterization and Magnetic Wireless Manipulation (Adv. Funct. Mater. 7/2013). <i>Advanced Functional Materials</i> , 2013 , 23, 782-782	15.6	
20	Rolled-up helical nanobelts: from fabrication to swimming microrobots. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1272, 1		
19	Fabrication of protruding nanoelectrode pairs for electromechanical characterization of individual multiwalled carbon nanotubes. <i>Microelectronic Engineering</i> , 2011 , 88, 2397-2400	2.5	
18	Task oriented model-driven visually servoed agents 1997 , 121-129		
17	Pull-In Extension of MEMS Electrostatic Microactuators Using an Active Control Method 2005 , 273		
16	An Expectation-Based Framework of Object Schemas and Port-Based Agents for Disparate Feedback Assimilation. <i>Autonomous Robots</i> , 1999 , 7, 159-173	3	
15	Magnetic field interpolation for remote magnetic navigation in minimally invasive surgery 2022 , 397-424		
14	Magnetically Guided Catheters, Micro- and Nanorobots for Spinal Cord Stimulation. <i>Frontiers in Neurorobotics</i> , 2021 , 15, 749024	3.4	

13 Nanorobotics **2007**, 1545-1574

12 Magnetic-Field-Based Self-Assembly **2016**, 1868-1879

11 Wireless Microrobotic Oxygen Sensing for Retinal Hypoxia Monitoring. *Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering*, **2012**, 75-79 0.2

10 Wireless Electrical Power to Sub-millimeter Robots. *Lecture Notes in Computer Science*, **2012**, 301-312 0.9

9 Photochromic 3D Micro-Objects: Nano-3D-Printed Photochromic Micro-Objects (Small 26/2021). *Small*, **2021**, 17, 2170132 11

8 A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure **2020**, 18, e3000740

7 A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure **2020**, 18, e3000740

6 A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure **2020**, 18, e3000740

5 A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure **2020**, 18, e3000740

4 A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure **2020**, 18, e3000740

3 A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure **2020**, 18, e3000740

2 A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure **2020**, 18, e3000740

1 A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure **2020**, 18, e3000740