Bradley J Nelson

List of Publications by Year
in descending order

557 papers	32,761 citations	3721 89 h-index	5965 160 g-index
580 all docs	580 docs citations	580 times ranked	18514 citing authors

#	Article	IF	Citations
1	Dynamic Modeling of Magnetic Helical Microrobots. IEEE Robotics and Automation Letters, 2022, 7, 1682-1688.	3.3	29
2	A Survey on Swarm Microrobotics. IEEE Transactions on Robotics, 2022, 38, 1531-1551.	7.3	45
3	Thermoset Shape Memory Polymer Variable Stiffness 4D Robotic Catheters. Advanced Science, 2022, 9, e2103277.	5.6	42
4	Magnetic helical micro-/nanomachines: Recent progress and perspective. Matter, 2022, 5, 77-109.	5.0	52
5	Magnetoelectric reduction of chromium(VI) to chromium(III). Applied Materials Today, 2022, 26, 101339.	2.3	6
6	Magnetic field interpolation for remote magnetic navigation in minimally invasive surgery. , 2022, , 397-424.		0
7	Increasingly Intelligent Micromachines. Annual Review of Control, Robotics, and Autonomous Systems, 2022, 5, 279-310.	7.5	35
8	Magnetically Assisted Robotic Fetal Surgery for the Treatment of Spina Bifida. IEEE Transactions on Medical Robotics and Bionics, 2022, 4, 85-93.	2.1	11
9	A Variable Stiffness Magnetic Catheter Made of a Conductive Phaseâ€Change Polymer for Minimally Invasive Surgery. Advanced Functional Materials, 2022, 32, .	7.8	40
10	An Electromagnetically Controllable Microrobotic Interventional System for Targeted, Realâ€Time Cardiovascular Intervention. Advanced Healthcare Materials, 2022, 11, e2102529.	3.9	20
11	Magnetoelectric Effect in Hydrogen Harvesting: Magnetic Field as a Trigger of Catalytic Reactions. Advanced Materials, 2022, 34, e2110612.	11.1	18
12	Biotemplating of Metalâ€"Organic Framework Nanocrystals for Applications in Smallâ€Scale Robotics. Advanced Functional Materials, 2022, 32, .	7.8	21
13	Magnetic concentric tube robots: Introduction and analysis. International Journal of Robotics Research, 2022, 41, 418-440.	5.8	7
14	Magnetically Actuated Medical Robots: An in vivo Perspective. Proceedings of the IEEE, 2022, 110, 1028-1037.	16.4	36
15	A Biodegradable Magnetic Microrobot Based on Gelatin Methacrylate for Precise Delivery of Stem Cells with Mass Production Capability. Small, 2022, 18, .	5.2	29
16	Using Magnetic Fields to Navigate and Simultaneously Localize Catheters in Endoluminal Environments. IEEE Robotics and Automation Letters, 2022, 7, 7217-7223.	3.3	16
17	A Simulation Framework for Magnetic Continuum Robots. IEEE Robotics and Automation Letters, 2022, 7, 8370-8376.	3.3	14
18	Magnetic Control of a Flexible Needle in Neurosurgery. IEEE Transactions on Biomedical Engineering, 2021, 68, 616-627.	2.5	46

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19	Magnetically Active Cardiac Patches as an Untethered, Nonâ€Blood Contacting Ventricular Assist Device. Advanced Science, 2021, 8, 2000726.	5.6	10
20	Trends in Microâ€/Nanorobotics: Materials Development, Actuation, Localization, and System Integration for Biomedical Applications. Advanced Materials, 2021, 33, e2002047.	11.1	256
21	Acoustically Mediated Controlled Drug Release and Targeted Therapy with Degradable 3D Porous Magnetic Microrobots. Advanced Healthcare Materials, 2021, 10, e2001096.	3.9	59
22	A Magnetically Navigated Microcannula for Subretinal Injections. IEEE Transactions on Biomedical Engineering, 2021, 68, 119-129.	2.5	44
23	Bioinspired acousto-magnetic microswarm robots with upstream motility. Nature Machine Intelligence, 2021, 3, 116-124.	8.3	95
24	Micro-/Nanorobots. , 2021, , 1-11.		0
25	Ultrasound Doppler-guided real-time navigation of a magnetic microswarm for active endovascular delivery. Science Advances, 2021, 7, .	4.7	186
26	Helical Klinotactic Locomotion of Twoâ€Link Nanoswimmers with Dualâ€Function Drugâ€Loaded Soft Polysaccharide Hinges. Advanced Science, 2021, 8, 2004458.	5.6	16
27	Progress in robotics for combating infectious diseases. Science Robotics, 2021, 6, .	9.9	67
28	Tiny robots make big advances. Science Robotics, 2021, 6, .	9.9	12
29	An Intelligent In-Shoe System for Gait Monitoring and Analysis with Optimized Sampling and Real-Time Visualization Capabilities. Sensors, 2021, 21, 2869.	2.1	13
30	3D mechanical characterization of single cells and small organisms using acoustic manipulation and force microscopy. Nature Communications, 2021, 12, 2583.	5.8	50
31	Modelling the Impact of Robotics on Infectious Spread Among Healthcare Workers. Frontiers in Robotics and AI, 2021, 8, 652685.	2.0	3
32	Reduced Etch Lag and High Aspect Ratios by Deep Reactive Ion Etching (DRIE). Micromachines, 2021, 12, 542.	1.4	25
33	Nanoâ€3Dâ€Printed Photochromic Microâ€Objects. Small, 2021, 17, e2101337.	5.2	20
34	Photochromic 3D Microâ€Objects: Nanoâ€3Dâ€Printed Photochromic Microâ€Objects (Small 26/2021). Small, 2021, 17, 2170132.	5.2	0
35	Constrained-Spherical Deconvolution Tractography in the Evaluation of the Corticospinal Tract in Glioma Surgery. Frontiers in Surgery, 2021, 8, 646465.	0.6	6
36	A Submillimeter Continuous Variable Stiffness Catheter for Compliance Control. Advanced Science, 2021, 8, e2101290.	5.6	45

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37	Embedded Microbubbles for Acoustic Manipulation of Single Cells and Microfluidic Applications. Analytical Chemistry, 2021, 93, 9760-9770.	3.2	24
38	Modeling Electromagnetic Navigation Systems. IEEE Transactions on Robotics, 2021, 37, 1009-1021.	7.3	23
39	Mechanical factors contributing to the Venus flytrapâ€™s rate-dependent response to stimuli. Biomechanics and Modeling in Mechanobiology, 2021, 20, 2287-2297.	1.4	3
40	A Submillimeter Continuous Variable Stiffness Catheter for Compliance Control (Adv. Sci. 18/2021). Advanced Science, 2021, 8, 2170118.	5.6	6
41	Biodegradable Smallâ€Scale Swimmers for Biomedical Applications. Advanced Materials, 2021, 33, e2102049.	11.1	44
42	Kinematics Governing Mechanotransduction in the Sensory Hair of the Venus flytrap. International Journal of Molecular Sciences, 2021, 22, 280.	1.8	9
43	Magnetically Guided Catheters, Micro- and Nanorobots for Spinal Cord Stimulation. Frontiers in Neurorobotics, 2021, 15, 749024.	1.6	3
44	Growth and Labelling of Cell Wall Components of the Brown Alga Ectocarpus in Microfluidic Chips. Frontiers in Marine Science, 2021, 8, .	1.2	1
45	A decade retrospective of medical robotics research from 2010 to 2020. Science Robotics, 2021, 6, eabi8017.	9.9	158
46	Integrated Pedal System for Data Driven Rehabilitation. Sensors, 2021, 21, 8115.	2.1	0
47	Magnetic Continuum Device with Variable Stiffness for Minimally Invasive Surgery. Advanced Intelligent Systems, 2020, 2, 1900086.	3.3	92
48	Polymeric microellipsoids with programmed magnetic anisotropy for controlled rotation using low (â‰ˆ10 mT) magnetic fields. Applied Materials Today, 2020, 18, 100511.	2.3	6
49	Modeling Electromagnetic Navigation Systems for Medical Applications using Random Forests and Artificial Neural Networks. , 2020, , .		10
50	Reconfigurable Magnetic Microswarm for Thrombolysis under Ultrasound Imaging. , 2020, , .		20
51	The rise of robots in surgical environments during COVID-19. Nature Machine Intelligence, 2020, 2, 566-572.	8.3	108
52	Metalâ€“Organic Frameworks in Motion. Chemical Reviews, 2020, 120, 11175-11193.	23.0	75
53	Laser thermal therapy for epilepsy surgery: current standing and future perspectives. International Journal of Hyperthermia, 2020, 37, 77-83.	1.1	12
54	Force microscopy of the Caenorhabditis elegans embryonic eggshell. Microsystems and Nanoengineering, 2020, 6, 29.	3.4	14

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55	Mechanically interlocked 3D multi-material micromachines. Nature Communications, 2020, 11, 5957.	5.8	48
56	CANDYBOTS: A New Generation of 3Dâ€Printed Sugarâ€Based Transient Smallâ€Scale Robots. Advanced Materials, 2020, 32, e2005652.	11.1	26
57	Biodegradable Metalâ€"Organic Frameworkâ€Based Microrobots (MOFBOTs). Advanced Healthcare Materials, 2020, 9, e2001031.	3.9	64
58	Enhanced catalytic degradation of organic pollutants by multi-stimuli activated multiferroic nanoarchitectures. Nano Research, 2020, 13, 2183-2191.	5.8	38
59	Magnetic cilia carpets with programmable metachronal waves. Nature Communications, 2020, 11, 2637.	5.8	172
60	REALITI: A Robotic Endoscope Automated via Laryngeal Imaging for Tracheal Intubation. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 157-164.	2.1	19
61	Combating COVID-19â€"The role of robotics in managing public health and infectious diseases. Science Robotics, 2020, 5, .	9.9	393
62	A Needleâ€Type Microrobot for Targeted Drug Delivery by Affixing to a Microtissue. Advanced Healthcare Materials, 2020, 9, e1901697.	3.9	54
63	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. PLoS Biology, 2020, 18, e3000740.	2.6	17
64	3Dâ€Printed Soft Magnetoelectric Microswimmers for Delivery and Differentiation of Neuronâ€Like Cells. Advanced Functional Materials, 2020, 30, 1910323.	7.8	157
65	Magnetically and chemically propelled nanowire-based swimmers. , 2020, , 777-799.		7
66	Quantification of Mechanical Forces and Physiological Processes Involved in Pollen Tube Growth Using Microfluidics and Microrobotics. Methods in Molecular Biology, 2020, 2160, 275-292.	0.4	4
67	Simultaneous measurement of turgor pressure and cell wall elasticity in growing pollen tubes. Methods in Cell Biology, 2020, 160, 297-310.	0.5	2
68	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
69	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
70	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
71	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
72	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0

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73	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
74	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
75	A single touch can provide sufficient mechanical stimulation to trigger Venus flytrap closure. , 2020, 18, e3000740.		0
76	3D Printing of Thermoplasticâ€Bonded Softâ€•and Hardâ€Magnetic Composites: Magnetically Tuneable Architectures and Functional Devices. Advanced Intelligent Systems, 2019, 1, 1900069.	3.3	16
77	Mineralizationâ€Inspired Synthesis of Magnetic Zeolitic Imidazole Framework Composites. Angewandte Chemie, 2019, 131, 13684-13689.	1.6	5
78	Highâ€Resolution SPECT Imaging of Stimuliâ€Responsive Soft Microrobots. Small, 2019, 15, e1900709.	5.2	62
79	Mineralizationâ€Inspired Synthesis of Magnetic Zeolitic Imidazole Framework Composites. Angewandte Chemie - International Edition, 2019, 58, 13550-13555.	7.2	27
80	Magnetoelectric Catalysis: Magnetoelectrically Driven Catalytic Degradation of Organics (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46	11.1	2
81	Indirect 3D and 4D Printing of Soft Robotic Microstructures. Advanced Materials Technologies, 2019, 4, 1900332.	3.0	78
82	Nanomagnetic encoding of shape-morphing micromachines. Nature, 2019, 575, 164-168.	13.7	307
83	Magnetic quadrupole assemblies with arbitrary shapes and magnetizations. Science Robotics, 2019, 4, .	9.9	49
84	Motile Piezoelectric Nanoeels for Targeted Drug Delivery. Advanced Functional Materials, 2019, 29, 1808135.	7.8	66
85	Underpinning transport phenomena for the patterning of biomolecules. Chemical Society Reviews, 2019, 48, 1236-1254.	18.7	29
86	Magnetically actuated microrobots as a platform for stem cell transplantation. Science Robotics, 2019, 4, .	9.9	247
87	Microrobotics: 3D Fabrication of Fully Iron Magnetic Microrobots (Small 16/2019). Small, 2019, 15, 1970086.	5.2	2
88	MOFBOTS: Metalâ€"Organicâ€Frameworkâ€Based Biomedical Microrobots. Advanced Materials, 2019, 31, e1901592.	11.1	139
89	Magnetoelectrically Driven Catalytic Degradation of Organics. Advanced Materials, 2019, 31, e1901378.	11.1	74
90	Magnetically navigable 3D printed multifunctional microdevices for environmental applications. Additive Manufacturing, 2019, 28, 127-135.	1.7	24

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91	Synthetic and living micropropellers for convection-enhanced nanoparticle transport. Science Advances, 2019, 5, eaav4803.	4.7	109
92	Magnetically driven piezoelectric soft microswimmers for neuron-like cell delivery and neuronal differentiation. Materials Horizons, 2019, 6, 1512-1516.	6.4	88
93	3D Fabrication of Fully Iron Magnetic Microrobots. Small, 2019, 15, e1805006.	5.2	79
94	Labâ€onâ€aâ€Chip and Arrays: 3D Manipulation and Imaging of Plant Cells using Acoustically Activated Microbubbles (Small Methods 3/2019). Small Methods, 2019, 3, 1970006.	4.6	0
95	3D path planning for flexible needle steering in neurosurgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2019, 15, e1998.	1.2	30
96	3D Manipulation and Imaging of Plant Cells using Acoustically Activated Microbubbles. Small Methods, 2019, 3, 1800527.	4.6	33
97	On-the-fly catalytic degradation of organic pollutants using magneto-photoresponsive bacteria-templated microcleaners. Journal of Materials Chemistry A, 2019, 7, 24847-24856.	5.2	45
98	A Magnetically Steered Endolaser Probe for Automated Panretinal Photocoagulation. IEEE Robotics and Automation Letters, 2019, 4, xvii-xxiii.	3.3	18
99	Imaging Technologies for Biomedical Microâ€and Nanoswimmers. Advanced Materials Technologies, 2019, 4, 1800575.	3.0	83
100	Programmable Locomotion Mechanisms of Nanowires with Semihard Magnetic Properties Near a Surface Boundary. ACS Applied Materials & Interfaces, 2019, 11, 3214-3223.	4.0	23
101	Matryoshka-Inspired Micro-Origami Capsules to Enhance Loading, Encapsulation, and Transport of Drugs. Soft Robotics, 2019, 6, 150-159.	4.6	25
102	Ten robotics technologies of the year. Science Robotics, 2019, 4, .	9.9	19
103	Adaptive locomotion of artificial microswimmers. Science Advances, 2019, 5, eaau1532.	4.7	203
104	A Microrobotic System for Simultaneous Measurement of Turgor Pressure and Cell-Wall Elasticity of Individual Growing Plant Cells. IEEE Robotics and Automation Letters, 2019, 4, 641-646.	3.3	7
105	A Magnetically Controlled Soft Microrobot Steering a Guidewire in a Three-Dimensional Phantom Vascular Network. Soft Robotics, 2019, 6, 54-68.	4.6	183
106	A Capsuleâ€Type Microrobot with Pickâ€andâ€Drop Motion for Targeted Drug and Cell Delivery. Advanced Healthcare Materials, 2018, 7, e1700985.	3.9	77
107	Hydrogels: Nearâ€Infrared Lightâ€Sensitive Polyvinyl Alcohol Hydrogel Photoresist for Spatiotemporal Control of Cellâ€Instructive 3D Microenvironments (Adv. Mater. 10/2018). Advanced Materials, 2018, 30, 1870070.	11.1	3
108	Design and Evaluation of a Steerable Magnetic Sheath for Cardiac Ablations. IEEE Robotics and Automation Letters, 2018, 3, 2123-2128.	3.3	34

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109	Biocompatibility characteristics of the metal organic framework ZIF-8 for therapeutical applications. Applied Materials Today, 2018, 11, 13-21.	2.3	193
110	Stereo Holographic Diffraction Based Tracking of Microrobots. IEEE Robotics and Automation Letters, 2018, 3, 567-572.	3.3	1
111	The grand challenges of <i>Science Robotics</i>. Science Robotics, 2018, 3, .	9.9	787
112	Smallâ€Scale Machines Driven by External Power Sources. Advanced Materials, 2018, 30, e1705061.	11.1	186
113	A Robotic Diathermy System for Automated Capsulotomy. Journal of Medical Robotics Research, 2018, 03, 1850001.	1.0	6
114	Estimation-Based Control of a Magnetic Endoscope without Device Localization. Journal of Medical Robotics Research, 2018, 03, 1850002.	1.0	36
115	Mobile Magnetic Nanocatalysts for Bioorthogonal Targeted Cancer Therapy. Advanced Functional Materials, 2018, 28, 1705920.	7.8	92
116	Nearâ€Infrared Lightâ€Sensitive Polyvinyl Alcohol Hydrogel Photoresist for Spatiotemporal Control of Cellâ€Instructive 3D Microenvironments. Advanced Materials, 2018, 30, 1705564.	11.1	87
117	Recent Advances in Wearable Transdermal Delivery Systems. Advanced Materials, 2018, 30, 1704530.	11.1	151
118	Soft Micro- and Nanorobotics. Annual Review of Control, Robotics, and Autonomous Systems, 2018, 1, 53-75.	7.5	145
119	Fabrication and Locomotion of Flexible Nanoswimmers. , 2018, , .		2
120	3D Printed Enzymatically Biodegradable Soft Helical Microswimmers. Advanced Functional Materials, 2018, 28, 1804107.	7.8	222
121	Hard-magnetic cell microscaffolds from electroless coated 3D printed architectures. Materials Horizons, 2018, 5, 699-707.	6.4	36
122	Surface-Chemistry-Mediated Control of Individual Magnetic Helical Microswimmers in a Swarm. ACS Nano, 2018, 12, 6210-6217.	7.3	97
123	Templateâ€Assisted Electroforming of Fully Semiâ€Hardâ€Magnetic Helical Microactuators. Advanced Engineering Materials, 2018, 20, 1800179.	1.6	19
124	New materials for next-generation robots. Science Robotics, 2018, 3, .	9.9	14
125	4D printing and robotics. Science Robotics, 2018, 3, .	9.9	66
126	Chiral anisotropic magnetoresistance of ferromagnetic helices. Applied Physics Letters, 2018, 112, .	1.5	16

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127	Investigation of Magnetotaxis of Reconfigurable Microâ€Origami Swimmers with Competitive and Cooperative Anisotropy. Advanced Functional Materials, 2018, 28, 1802110.	7.8	40
128	Magnetic imaging of a single ferromagnetic nanowire using diamond atomic sensors. Nanotechnology, 2018, 29, 405502.	1.3	8
129	Bioinspired navigation in shape morphing micromachines for autonomous targeted drug delivery. , 2018, , .		2
130	Kinematic Analysis of Magnetic Continuum Robots Using Continuation Method and Bifurcation Analysis. IEEE Robotics and Automation Letters, 2018, 3, 3646-3653.	3.3	22
131	Controlled Propulsion of Twoâ€Dimensional Microswimmers in a Precessing Magnetic Field. Small, 2018, 14, e1800722.	5.2	42
132	Piezoelectrically Enhanced Photocatalysis with BiFeO3 Nanostructures for Efficient Water Remediation. IScience, 2018, 4, 236-246.	1.9	232
133	Feeling the force: how pollen tubes deal with obstacles. New Phytologist, 2018, 220, 187-195.	3.5	24
134	Real-Time Holographic Tracking and Control of Microrobots. IEEE Robotics and Automation Letters, 2017, 2, 143-148.	3.3	15
135	Protective coatings for intraocular wirelessly controlled microrobots for implantation: Corrosion, cell culture, and <i>in vivo</i> animal tests. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 836-845.	1.6	32
136	Optimization of Tail Geometry for the Propulsion of Soft Microrobots. IEEE Robotics and Automation Letters, 2017, 2, 727-732.	3.3	31
137	High precision, localized proton gradients and fluxes generated by a microelectrode device induce differential growth behaviors of pollen tubes. Lab on A Chip, 2017, 17, 671-680.	3.1	16
138	Magnetostriction in electroplated CoFe alloys. Electrochemistry Communications, 2017, 76, 15-19.	2.3	13
139	Model-Based Calibration for Magnetic Manipulation. IEEE Transactions on Magnetics, 2017, 53, 1-6.	1.2	50
140	Magnetic control of continuum devices. International Journal of Robotics Research, 2017, 36, 68-85.	5.8	125
141	Magnetoelectrics: Hybrid Magnetoelectric Nanowires for Nanorobotic Applications: Fabrication, Magnetoelectric Coupling, and Magnetically Assisted In Vitro Targeted Drug Delivery (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	11.1	2
142	Nanomechanics on FGF-2 and Heparin Reveal Slip Bond Characteristics with pH Dependency. ACS Biomaterials Science and Engineering, 2017, 3, 1000-1007.	2.6	6
143	Magnetically guided capsule endoscopy. Medical Physics, 2017, 44, e91-e111.	1.6	78
144	Spatiotemporally controlled electrodeposition of magnetically driven micromachines based on the inverse opal architecture. Electrochemistry Communications, 2017, 81, 97-101.	2.3	13

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145	Recent developments in magnetically driven micro- and nanorobots. Applied Materials Today, 2017, 9, 37-48.	2.3	312
146	Multiwavelength Light-Responsive Au/B-TiO₂ Janus Micromotors. ACS Nano, 2017, 11, 6146-6154.	7.3	155
147	Artificial Acoustoâ€Magnetic Soft Microswimmers. Advanced Materials Technologies, 2017, 2, 1700050.	3.0	74
148	Hybrid Magnetoelectric Nanowires for Nanorobotic Applications: Fabrication, Magnetoelectric Coupling, and Magnetically Assisted In Vitro Targeted Drug Delivery. Advanced Materials, 2017, 29, 1605458.	11.1	193
149	Robotically controlled microprey to resolve initial attack modes preceding phagocytosis. Science Robotics, 2017, 2, .	9.9	49
150	New materials for next-generation robots. Science Robotics, 2017, 2, .	9.9	17
151	Neutrophil-inspired propulsion in a combined acoustic and magnetic field. Nature Communications, 2017, 8, 770.	5.8	175
152	Colloidal polycrystalline monolayers under oscillatory shear. Physical Review E, 2017, 95, 012610.	0.8	35
153	Magnetic Actuation: Voltageâ€Induced Coercivity Reduction in Nanoporous Alloy Films: A Boost toward Energyâ€Efficient Magnetic Actuation (Adv. Funct. Mater. 32/2017). Advanced Functional Materials, 2017, 27, .	7.8	1
154	Magnetically powered microrobots: a medical revolution underway?. European Journal of Cardio-thoracic Surgery, 2017, 51, ezw432.	0.6	20
155	Voltageâ€Induced Coercivity Reduction in Nanoporous Alloy Films: A Boost toward Energyâ€Efficient Magnetic Actuation. Advanced Functional Materials, 2017, 27, 1701904.	7.8	41
156	In vivo tracking and measurement of pollen tube vesicle motion. , 2017, , .		0
157	Microswimmers: Artificial Acoustoâ€Magnetic Soft Microswimmers (Adv. Mater. Technol. 7/2017). Advanced Materials Technologies, 2017, 2, .	3.0	1
158	The tethered magnet: Force and 5-DOF pose control for cardiac ablation. , 2017, , .		32
159	Shared control of a magnetic microcatheter for vitreoretinal targeted drug delivery. , 2017, , .		16
160	Nanorobotics. Springer Handbooks, 2017, , 559-584.	0.3	0
161	Ultrasound-mediated piezoelectric differentiation of neuron-like PC12 cells on PVDF membranes. Scientific Reports, 2017, 7, 4028.	1.6	131
162	Characterization of size-dependent mechanical properties of tip-growing cells using a lab-on-chip device. Lab on A Chip, 2017, 17, 82-90.	3.1	31

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163	Microrobots for Active Object Manipulation. Microsystems and Nanosystems, 2017, , 61-72.	0.1	1
164	Dumbbell Fluidic Tweezers for Dynamical Trapping and Selective Transport of Microobjects. Advanced Functional Materials, 2017, 27, 1604571.	7.8	58
165	Measuring Cytomechanical Forces on Growing Pollen Tubes. , 2017, , 65-85.		1
166	Microfluidic-Based Droplet and Cell Manipulations Using Artificial Bacterial Flagella. Micromachines, 2016, 7, 25.	1.4	43
167	Magnetic microrobots with addressable shape control. , 2016, , .		11
168	An Atomic Force Microscope with Dual Actuation Capability for Biomolecular Experiments. Scientific Reports, 2016, 6, 27567.	1.6	8
169	Nanorobotics for NEMS Using Helical Nanostructures. , 2016, , 2659-2666.		1
170	Nanorobotic Spot Welding. , 2016, , 2632-2640.		0
171	Science for robotics and robotics for science. Science Robotics, 2016, 1, .	9.9	27
172	Hyperthermia with rotating magnetic nanowires inducing heat into tumor by fluid friction. Journal of Applied Physics, 2016, 120, .	1.1	35
173	Perforation forces of the intact porcine anterior lens capsule. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 62, 347-354.	1.5	4
174	Magnetometry of Individual Polycrystalline Ferromagnetic Nanowires. Small, 2016, 12, 6363-6369.	5.2	13
175	Highly Efficient Coaxial TiO₂â€PtPd Tubular Nanomachines for Photocatalytic Water Purification with Multiple Locomotion Strategies. Advanced Functional Materials, 2016, 26, 6995-7002.	7.8	101
176	Micro-/Nanorobots. Springer Handbooks, 2016, , 671-716.	0.3	6
177	Swimming characteristics of helical microrobots in fibrous environments. , 2016, , .		18
178	Artificial Swimmers Propelled by Acoustically Activated Flagella. Nano Letters, 2016, 16, 4968-4974.	4.5	209
179	Fabrication and Manipulation of Ciliary Microrobots with Non-reciprocal Magnetic Actuation. Scientific Reports, 2016, 6, 30713.	1.6	114
180	Dual-axis Cellular Force Microscope for mechanical characterization of living plant cells. , 2016, , .		7

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181	Probing the micromechanics of the fastest growing plant cell â€" The pollen tube. , 2016, 2016, 461-464.		6
182	Self-folding hydrogel bilayer for enhanced drug loading, encapsulation, and transport. , 2016, 2016, 2103-2106.		6
183	Cellular forces and matrix assembly coordinate fibrous tissue repair. Nature Communications, 2016, 7, 11036.	5.8	98
184	Soft micromachines with programmable motility and morphology. Nature Communications, 2016, 7, 12263.	5.8	495
185	Catalytic Locomotion of Coreâ€"Shell Nanowire Motors. ACS Nano, 2016, 10, 9983-9991.	7.3	57
186	Magnetically Driven Silverâ€Coated Nanocoils for Efficient Bacterial Contact Killing. Advanced Functional Materials, 2016, 26, 1063-1069.	7.8	118
187	Degradable Magnetic Composites for Minimally Invasive Interventions: Device Fabrication, Targeted Drug Delivery, and Cytotoxicity Tests. Advanced Materials, 2016, 28, 533-538.	11.1	190
188	Magnetic needle guidance for neurosurgery: Initial design and proof of concept. , 2016, , .		33
189	A smart multifunctional drug delivery nanoplatform for targeting cancer cells. Nanoscale, 2016, 8, 12723-12728.	2.8	56
190	Tailoring Staircase-like Hysteresis Loops in Electrodeposited Trisegmented Magnetic Nanowires: a Strategy toward Minimization of Interwire Interactions. ACS Applied Materials & Interfaces, 2016, 8, 4109-4117.	4.0	23
191	Magnetoelectric micromachines with wirelessly controlled navigation and functionality. Materials Horizons, 2016, 3, 113-118.	6.4	64
192	Electrochemically synthesized amorphous and crystalline nanowires: dissimilar nanomechanical behavior in comparison with homologous flat films. Nanoscale, 2016, 8, 1344-1351.	2.8	16
193	Model Predictive Control of a Magnetically Guided Rolling Microrobot. IEEE Robotics and Automation Letters, 2016, 1, 455-460.	3.3	24
194	Massively Parallelized Pollen Tube Guidance and Mechanical Measurements on a Lab-on-a-Chip Platform. PLoS ONE, 2016, 11, e0168138.	1.1	36
195	Assistive Device for Efficient Intravitreal Injections. Ophthalmic Surgery Lasers and Imaging Retina, 2016, 47, 752-762.	0.4	10
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