

Metin Sitti

List of Publications by Year in Descending Order

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

358 papers	22,155 citations	78 h-index	138 g-index
382 ext. papers	27,177 ext. citations	10.3 avg, IF	7.89 L-index

#	Paper	IF	Citations
358	Light-driven carbon nitride microswimmers with propulsion in biological and ionic media and responsive on-demand drug delivery.. <i>Science Robotics</i> , 2022 , 7, eabm1421	18.6	13
357	A Tissue Adhesion-Controllable and Biocompatible Small-scale Hydrogel Adhesive Robot.. <i>Advanced Materials</i> , 2022 , e2109325	24	9
356	Order and information in the patterns of spinning magnetic micro-disks at the air-water interface.. <i>Science Advances</i> , 2022 , 8, eabk0685	14.3	5
355	A Localization Method for Untethered Small-Scale Robots Using Electrical Impedance Tomography. <i>IEEE/ASME Transactions on Mechatronics</i> , 2022 , 1-11	5.5	1
354	Heat-Mitigated Design and Lorentz Force-Based Steering of an MRI-Driven Microcatheter toward Minimally Invasive Surgery.. <i>Advanced Science</i> , 2022 , e2105352	13.6	5
353	Control and Transport of Passive Particles Using Self-Organized Spinning Micro-Disks. <i>IEEE Robotics and Automation Letters</i> , 2022 , 7, 2156-2161	4.2	2
352	Soft actuators for real-world applications.. <i>Nature Reviews Materials</i> , 2022 , 7, 235-249	73.3	45
351	High-Performance Magnetic FePt (L1 0) Surface Microrollers Towards Medical Imaging-Guided Endovascular Delivery Applications (Adv. Funct. Mater. 8/2022). <i>Advanced Functional Materials</i> , 2022 , 32, 2270049	15.6	
350	Smart materials: rational design in biosystems via artificial intelligence.. <i>Trends in Biotechnology</i> , 2022 ,	15.1	3
349	Miniature coiled artificial muscle for wireless soft medical devices.. <i>Science Advances</i> , 2022 , 8, eabm5616	14.3	5
348	BirdBot achieves energy-efficient gait with minimal control using avian-inspired leg clutching.. <i>Science Robotics</i> , 2022 , 7, eabg4055	18.6	3
347	High shear rate propulsion of acoustic microrobots in complex biological fluids.. <i>Science Advances</i> , 2022 , 8, eabm5126	14.3	5
346	Creating three-dimensional magnetic functional microdevices via molding-integrated direct laser writing.. <i>Nature Communications</i> , 2022 , 13, 2016	17.4	3
345	Microrobot collectives with reconfigurable morphologies, behaviors, and functions.. <i>Nature Communications</i> , 2022 , 13, 2239	17.4	7
344	Real-time 3D optoacoustic tracking of cell-sized magnetic microrobots circulating in the mouse brain vasculature.. <i>Science Advances</i> , 2022 , 8, eabm9132	14.3	7
343	Deep Learning-based 3D Magnetic Microrobot Tracking using 2D MR Images. <i>IEEE Robotics and Automation Letters</i> , 2022 , 1-1	4.2	2
342	Bayesian Machine Learning for Efficient Minimization of Defects in ALD Passivation Layers. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 54503-54515	9.5	2

341	Shape-programmable liquid crystal elastomer structures with arbitrary three-dimensional director fields and geometries. <i>Nature Communications</i> , 2021 , 12, 5936	17.4	12
340	Permanent magnet array-driven navigation of wireless millirobots inside soft tissues. <i>Science Advances</i> , 2021 , 7, eabi8932	14.3	10
339	3D-Printed Multi-Stimuli-Responsive Mobile Micromachines. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 12759-12766	9.5	23
338	Shape anisotropy-governed locomotion of surface microrollers on vessel-like microtopographies against physiological flows. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	21
337	Opportunities and utilization of branching and step-out behavior in magnetic microswimmers with a nonlinear response. <i>Applied Physics Letters</i> , 2021 , 118, 174102	3.4	2
336	Voxelated three-dimensional miniature magnetic soft machines via multimaterial heterogeneous assembly. <i>Science Robotics</i> , 2021 , 6,	18.6	32
335	Magnetically switchable soft suction grippers. <i>Extreme Mechanics Letters</i> , 2021 , 44, 101263	3.9	11
334	Wireless MRI-Powered Reversible Orientation-Locking Capsule Robot.. <i>Advanced Science</i> , 2021 , 8, 21004636	4.3	10
333	Wirelessly Actuated Thermo- and Magneto-Responsive Soft Bimorph Materials with Programmable Shape-Morphing. <i>Advanced Materials</i> , 2021 , 33, e2100336	24	16
332	Liquid-Crystal-Elastomer-Actuated Reconfigurable Microscale Kirigami Metastructures. <i>Advanced Materials</i> , 2021 , 33, e2008605	24	11
331	Effect of body stiffness distribution on larval fish-like efficient undulatory swimming. <i>Science Advances</i> , 2021 , 7,	14.3	16
330	Mattertronics for programmable manipulation and multiplex storage of pseudo-diamagnetic holes and label-free cells. <i>Nature Communications</i> , 2021 , 12, 3024	17.4	2
329	Magnetic soft micromachines made of linked microactuator networks. <i>Science Advances</i> , 2021 , 7,	14.3	16
328	Task space adaptation via the learning of gait controllers of magnetic soft millirobots.. <i>International Journal of Robotics Research</i> , 2021 , 40, 1331-1351	5.7	4
327	Kirigami Metastructures: Liquid-Crystal-Elastomer-Actuated Reconfigurable Microscale Kirigami Metastructures (Adv. Mater. 25/2021). <i>Advanced Materials</i> , 2021 , 33, 2170195	24	
326	Soft-bodied adaptive multimodal locomotion strategies in fluid-filled confined spaces. <i>Science Advances</i> , 2021 , 7,	14.3	21
325	Stimuli-Responsive Materials: Wirelessly Actuated Thermo- and Magneto-Responsive Soft Bimorph Materials with Programmable Shape-Morphing (Adv. Mater. 30/2021). <i>Advanced Materials</i> , 2021 , 33, 2170238	24	
324	Design, Actuation, and Control of an MRI-Powered Untethered Robot for Wireless Capsule Endoscopy. <i>IEEE Robotics and Automation Letters</i> , 2021 , 6, 6000-6007	4.2	5

323	Remote Modular Electronics for Wireless Magnetic Devices. <i>Advanced Science</i> , 2021 , 8, e2101198	13.6	3
322	Adaptive Self-Sealing Suction-Based Soft Robotic Gripper. <i>Advanced Science</i> , 2021 , 8, e2100641	13.6	7
321	Physical intelligence as a new paradigm. <i>Extreme Mechanics Letters</i> , 2021 , 46, 101340	3.9	24
320	3D Microprinting of Iron Platinum Nanoparticle-Based Magnetic Mobile Microrobots. <i>Advanced Intelligent Systems</i> , 2021 , 3, 2000204	6	17
319	Interfacial Engineering for Improved Photocatalysis in a Charge Storing 2D Carbon Nitride: Melamine Functionalized Poly(heptazine imide). <i>Advanced Energy Materials</i> , 2021 , 11, 2003016	21.8	21
318	Magnetic Resonance Imaging-Compatible Optically Powered Miniature Wireless Modular Lorentz Force Actuators. <i>Advanced Science</i> , 2021 , 8, 2002948	13.6	7
317	Spider Origami: Folding Principle of Jumping Spider Leg Joints for Bioinspired Fluidic Actuators. <i>Advanced Science</i> , 2021 , 8, 2003890	13.6	9
316	Nonresonant powering of injectable nanoelectrodes enables wireless deep brain stimulation in freely moving mice. <i>Science Advances</i> , 2021 , 7,	14.3	25
315	Liquid Crystal Elastomer-Based Magnetic Composite Films for Reconfigurable Shape-Morphing Soft Miniature Machines. <i>Advanced Materials</i> , 2021 , 33, e2006191	24	31
314	Flexural wave-based soft attractor walls for trapping microparticles and cells. <i>Lab on A Chip</i> , 2021 , 21, 582-596	7.2	9
313	Liquid Crystal Structure of Supercooled Liquid Gallium and Eutectic Gallium-Indium. <i>Advanced Materials</i> , 2021 , 33, e2104807	24	1
312	Machine Learning-Based and Experimentally Validated Optimal Adhesive Fibril Designs. <i>Small</i> , 2021 , 17, e2102867	11	6
311	3D Printing of Elastomeric Bioinspired Complex Adhesive Microstructures. <i>Advanced Materials</i> , 2021 , 33, e2103826	24	8
310	Liquid Crystal Structure of Supercooled Liquid Gallium and Eutectic Gallium-Indium (Adv. Mater. 38/2021). <i>Advanced Materials</i> , 2021 , 33, 2170301	24	
309	3D printed personalized magnetic micromachines from patient blood-derived biomaterials. <i>Science Advances</i> , 2021 , 7, eabh0273	14.3	20
308	Fluid mechanics and rheology of the jumping spider body fluid. <i>Soft Matter</i> , 2021 , 17, 5532-5539	3.6	1
307	3D Microprinting of Iron Platinum Nanoparticle-Based Magnetic Mobile Microrobots. <i>Advanced Intelligent Systems</i> , 2021 , 3, 2170012	6	
306	Physical intelligence as a new paradigm.. <i>Extreme Mechanics Letters</i> , 2021 , 46, 101340	3.9	

305	Bioinspired cilia arrays with programmable nonreciprocal motion and metachronal coordination. <i>Science Advances</i> , 2020 , 6,	14.3	40
304	Multifunctional surface microrollers for targeted cargo delivery in physiological blood flow. <i>Science Robotics</i> , 2020 , 5,	18.6	116
303	Statistical reprogramming of macroscopic self-assembly with dynamic boundaries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 11306-11313	11.5	7
302	Introducing Progress in Biomedical Engineering; Issue 2 Vol 2. <i>Progress in Biomedical Engineering</i> , 2020 , 2, 020201	7.2	
301	Microscale Polarization Color Pixels from Liquid Crystal Elastomers. <i>Advanced Optical Materials</i> , 2020 , 8, 1902098	8.1	9
300	Microribbons composed of directionally self-assembled nanoflakes as highly stretchable ionic neural electrodes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 14667-14675	11.5	29
299	Elucidating the interaction dynamics between microswimmer body and immune system for medical microrobots. <i>Science Robotics</i> , 2020 , 5,	18.6	66
298	Wearable and Stretchable Strain Sensors: Materials, Sensing Mechanisms, and Applications. <i>Advanced Intelligent Systems</i> , 2020 , 2, 2000039	6	120
297	A Realistic Simulation Environment for MRI-Based Robust Control of Untethered Magnetic Robots With Intra-Operational Imaging. <i>IEEE Robotics and Automation Letters</i> , 2020 , 5, 4501-4508	4.2	6
296	Ultrasound-Guided Wireless Tubular Robotic Anchoring System. <i>IEEE Robotics and Automation Letters</i> , 2020 , 5, 4859-4866	4.2	10
295	High-Yield Production of Biohybrid Microalgae for On-Demand Cargo Delivery. <i>Advanced Science</i> , 2020 , 7, 2001256	13.6	31
294	Thermal Effects on the Crystallization Kinetics, and Interfacial Adhesion of Single-Crystal Phase-Change Gallium. <i>Advanced Materials</i> , 2020 , 32, e1907453	24	3
293	Additive manufacturing of cellulose-based materials with continuous, multidirectional stiffness gradients. <i>Science Advances</i> , 2020 , 6, eaay0929	14.3	33
292	Bioinspired underwater locomotion of light-driven liquid crystal gels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 5125-5133	11.5	118
291	Pros and Cons: Magnetic versus Optical Microrobots. <i>Advanced Materials</i> , 2020 , 32, e1906766	24	96
290	Cohesive self-organization of mobile microrobotic swarms. <i>Soft Matter</i> , 2020 , 16, 1996-2004	3.6	31
289	Controlling two-dimensional collective formation and cooperative behavior of magnetic microrobot swarms. <i>International Journal of Robotics Research</i> , 2020 , 39, 617-638	5.7	52
288	Acoustically powered surface-slipping mobile microrobots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 3469-3477	11.5	83

287	Multiwavelength-Steerable Visible-Light-Driven Magnetic CoO-TiO Microswimmers. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 24149-24155	9.5	20
286	Mechanical Coupling of Puller and Pusher Active Microswimmers Influences Motility. <i>Langmuir</i> , 2020 , 36, 5435-5443	4	21
285	Nanoerythroosome-functionalized biohybrid microswimmers. <i>APL Bioengineering</i> , 2020 , 4, 026103	6.6	17
284	Liquid-Superrepellent Bioinspired Fibrillar Adhesives. <i>Advanced Materials</i> , 2020 , 32, e2000497	24	31
283	Learning of Sub-optimal Gait Controllers for Magnetic Walking Soft Millirobots 2020 , 2020,		5
282	Multifunctional magnetic soft composites: a review. <i>Multifunctional Materials</i> , 2020 , 3, 042003	5.2	51
281	Magnetic Resonance Imaging System-Driven Medical Robotics. <i>Advanced Intelligent Systems</i> , 2020 , 2, 1900110	6	22
280	Towards 5-DoF Control of an Untethered Magnetic Millirobot via MRI Gradient Coils 2020 ,		6
279	The effect of substrate wettability and modulus on gecko and gecko-inspired synthetic adhesion in variable temperature and humidity. <i>Scientific Reports</i> , 2020 , 10, 19748	4.9	14
278	3D Microstructures of Liquid Crystal Networks with Programmed Voxellated Director Fields. <i>Advanced Materials</i> , 2020 , 32, e2002753	24	36
277	In-air fast response and high speed jumping and rolling of a light-driven hydrogel actuator. <i>Nature Communications</i> , 2020 , 11, 3988	17.4	59
276	Selection for Function: From Chemically Synthesized Prototypes to 3D-Printed Microdevices. <i>Advanced Intelligent Systems</i> , 2020 , 2, 2000078	6	2
275	Biosynthetic self-healing materials for soft machines. <i>Nature Materials</i> , 2020 , 19, 1230-1235	27	86
274	Reconfigurable multifunctional ferrofluid droplet robots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 27916-27926	11.5	49
273	Carbon nitride-based light-driven microswimmers with intrinsic photocharging ability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 24748-24756	11.5	26
272	Zwitterionic 3D-Printed Non-Immunogenic Stealth Microrobots. <i>Advanced Materials</i> , 2020 , 32, e2003013	24	47
271	Biodegradable Untethered Magnetic Hydrogel Milli-Grippers. <i>Advanced Functional Materials</i> , 2020 , 30, 2004975	15.6	39
270	Reprogrammable shape morphing of magnetic soft machines. <i>Science Advances</i> , 2020 , 6,	14.3	81

269	Magnetically Actuated Soft Capsule Endoscope for Fine-Needle Biopsy. <i>Soft Robotics</i> , 2020 , 7, 10-21	9.2	62
268	Selectively controlled magnetic microrobots with opposing helices. <i>Applied Physics Letters</i> , 2020 , 116, 134101	3.4	12
267	Welcome toProgress in Biomedical Engineering. <i>Progress in Biomedical Engineering</i> , 2019 , 1, 010201	7.2	
266	Precise Control of Lyotropic Chromonic Liquid Crystal Alignment through Surface Topography. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 36110-36117	9.5	13
265	Elevation and Azimuth Rotational Actuation of an Untethered Millirobot by MRI Gradient Coils. <i>IEEE Transactions on Robotics</i> , 2019 , 35, 1323-1337	6.5	20
264	The near and far of a pair of magnetic capillary disks. <i>Soft Matter</i> , 2019 , 15, 1497-1507	3.6	3
263	Graphene Oxide Synergistically Enhances Antibiotic Efficacy in Vancomycin-Resistant .. <i>ACS Applied Bio Materials</i> , 2019 , 2, 1148-1157	4.1	20
262	Mechanics of a pressure-controlled adhesive membrane for soft robotic gripping on curved surfaces. <i>Extreme Mechanics Letters</i> , 2019 , 30, 100485	3.9	11
261	Shape-encoded dynamic assembly of mobile micromachines. <i>Nature Materials</i> , 2019 , 18, 1244-1251	27	68
260	Multifarious Transit Gates for Programmable Delivery of Bio-functionalized Matters. <i>Small</i> , 2019 , 15, e1901105	11	7
259	Temperature Gradients Drive Bulk Flow Within Microchannel Lined by Fluid-Fluid Interfaces. <i>Small</i> , 2019 , 15, e1900472	11	11
258	Bio-inspired Composite Microfibers for Strong and Reversible Adhesion on Smooth Surfaces. <i>Integrative and Comparative Biology</i> , 2019 , 59, 227-235	2.8	11
257	3D-Printed Microrobotic Transporters with Recapitulated Stem Cell Niche for Programmable and Active Cell Delivery. <i>Advanced Functional Materials</i> , 2019 , 29, 1808992	15.6	66
256	Programmable Collective Behavior in Dynamically Self-Assembled Mobile Microrobotic Swarms. <i>Advanced Science</i> , 2019 , 6, 1801837	13.6	69
255	3D-Printed Biodegradable Microswimmer for Theranostic Cargo Delivery and Release. <i>ACS Nano</i> , 2019 , 13, 3353-3362	16.7	187
254	. <i>IEEE Transactions on Robotics</i> , 2019 , 35, 589-601	6.5	3
253	Multifunctional magnetic hairbot for untethered osteogenesis, ultrasound contrast imaging and drug delivery. <i>Biomaterials</i> , 2019 , 219, 119394	15.6	53
252	Multifunctional and biodegradable self-propelled protein motors. <i>Nature Communications</i> , 2019 , 10, 3188	17.4	48

251	Thrust and Hydrodynamic Efficiency of the Bundled Flagella. <i>Micromachines</i> , 2019 , 10,	3.3	6
250	Translational prospects of untethered medical microrobots. <i>Progress in Biomedical Engineering</i> , 2019 , 1, 012002	7.2	70
249	Multi-functional soft-bodied jellyfish-like swimming. <i>Nature Communications</i> , 2019 , 10, 2703	17.4	182
248	Learning to Navigate Endoscopic Capsule Robots. <i>IEEE Robotics and Automation Letters</i> , 2019 , 4, 3075-3082	11.2	11
247	Cutting the Cord: Progress in Untethered Soft Robotics and Actuators. <i>MRS Advances</i> , 2019 , 4, 2787-2804	4.7	6
246	Optimal controller design for 3D manipulation of buoyant magnetic microrobots via constrained linear quadratic regulation approach. <i>Journal of Micro-Bio Robotics</i> , 2019 , 15, 105-117	1.4	4
245	Monolithic shape-programmable dielectric liquid crystal elastomer actuators. <i>Science Advances</i> , 2019 , 5, eaay0855	14.3	60
244	A Simultaneous Calibration Method for Magnetic Robot Localization and Actuation Systems. <i>IEEE Transactions on Robotics</i> , 2019 , 35, 343-352	6.5	27
243	Simultaneous Six-Degree-of-Freedom Control of a Single-Body Magnetic Microrobot. <i>IEEE Robotics and Automation Letters</i> , 2019 , 4, 508-514	4.2	15
242	Microfluidics Integrated Lithography-Free Nanophotonic Biosensor for the Detection of Small Molecules. <i>Advanced Optical Materials</i> , 2019 , 7, 1801313	8.1	13
241	Review of emerging concepts in nanotoxicology: opportunities and challenges for safer nanomaterial design. <i>Toxicology Mechanisms and Methods</i> , 2019 , 29, 378-387	3.6	100
240	Microrobotics and Microorganisms: Biohybrid Autonomous Cellular Robots. <i>Annual Review of Control, Robotics, and Autonomous Systems</i> , 2019 , 2, 205-230	11.8	86
239	Mobile Microrobots for Active Therapeutic Delivery. <i>Advanced Therapeutics</i> , 2019 , 2, 1800064	4.9	105
238	Wrinkling Instability and Adhesion of a Highly Bendable Gallium Oxide Nanofilm Encapsulating a Liquid-Gallium Droplet. <i>Nano Letters</i> , 2018 , 18, 2498-2504	11.5	25
237	Sparse-then-dense alignment-based 3D map reconstruction method for endoscopic capsule robots. <i>Machine Vision and Applications</i> , 2018 , 29, 345-359	2.8	15
236	Independent Actuation of Two-Tailed Microrobots. <i>IEEE Robotics and Automation Letters</i> , 2018 , 3, 1703-1710	11.0	28
235	Swimming Back and Forth Using Planar Flagellar Propulsion at Low Reynolds Numbers. <i>Advanced Science</i> , 2018 , 5, 1700461	13.6	24
234	Redox metals homeostasis in multiple sclerosis and amyotrophic lateral sclerosis: a review. <i>Cell Death and Disease</i> , 2018 , 9, 348	9.8	60

233	Cancer cells biomineralize ionic gold into nanoparticles-microplates via secreting defense proteins with specific gold-binding peptides. <i>Acta Biomaterialia</i> , 2018 , 71, 61-71	10.8	33
232	Soft erythrocyte-based bacterial microswimmers for cargo delivery. <i>Science Robotics</i> , 2018 , 3,	18.6	165
231	Mechanical Rubbing of Blood Clots Using Helical Robots Under Ultrasound Guidance. <i>IEEE Robotics and Automation Letters</i> , 2018 , 3, 1112-1119	4.2	46
230	Light-Driven Janus Hollow Mesoporous TiO ₂ /Au Microswimmers. <i>Advanced Functional Materials</i> , 2018 , 28, 1704902	15.6	66
229	Small-scale soft-bodied robot with multimodal locomotion. <i>Nature</i> , 2018 , 554, 81-85	50.4	898
228	Analysis of Magnetic Interaction in Remotely Controlled Magnetic Devices and its Application to a Capsule Robot for Drug Delivery. <i>IEEE/ASME Transactions on Mechatronics</i> , 2018 , 23, 298-310	5.5	25
227	Recent Advances in Wearable Transdermal Delivery Systems. <i>Advanced Materials</i> , 2018 , 30, 1704530	24	105
226	Self-Folded Hydrogel Tubes for Implantable Muscular Tissue Scaffolds. <i>Macromolecular Bioscience</i> , 2018 , 18, e1700377	5.5	38
225	. <i>IEEE Transactions on Magnetics</i> , 2018 , 54, 1-13	2	6
224	Three-dimensional patterning in biomedicine: Importance and applications in neuropharmacology. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018 , 106, 1369-1382	3.5	19
223	3D Nanoprinted Plastic Kinoform X-Ray Optics. <i>Advanced Materials</i> , 2018 , 30, e1802503	24	20
222	Motility and chemotaxis of bacteria-driven microswimmers fabricated using antigen 43-mediated biotin display. <i>Scientific Reports</i> , 2018 , 8, 9801	4.9	26
221	Innate turning preference of leaf-cutting ants in the absence of external orientation cues. <i>Journal of Experimental Biology</i> , 2018 , 221,	3	6
220	Deep EndoVO: A recurrent convolutional neural network (RCNN) based visual odometry approach for endoscopic capsule robots. <i>Neurocomputing</i> , 2018 , 275, 1861-1870	5.4	63
219	Collectives of Spinning Mobile Microrobots for Navigation and Object Manipulation at the Air-Water Interface 2018 ,		8
218	2018 ,		1
217	Unsupervised Odometry and Depth Learning for Endoscopic Capsule Robots 2018 ,		13
216	Magnetic- Visual Sensor Fusion-based Dense 3D Reconstruction and Localization for Endoscopic Capsule Robots 2018 ,		6

215	Seed-mediated synthesis of plasmonic gold nanoribbons using cancer cells for hyperthermia applications. <i>Journal of Materials Chemistry B</i> , 2018 , 6, 7573-7581	7.3	25
214	Incorporation of Terbium into a Microalga Leads to Magnetotactic Swimmers. <i>Advanced Biology</i> , 2018 , 2, 1800039	3.5	20
213	Microalga-Powered Microswimmers toward Active Cargo Delivery. <i>Advanced Materials</i> , 2018 , 30, e1804130	12.4	86
212	Kinetics of orbitally shaken particles constrained to two dimensions. <i>Physical Review E</i> , 2018 , 98,	2.4	2
211	Anisotropic Gold Nanostructures: Optimization via in Silico Modeling for Hyperthermia. <i>ACS Applied Nano Materials</i> , 2018 , 1, 6205-6216	5.6	35
210	Controllable switching between planar and helical flagellar swimming of a soft robotic sperm. <i>PLoS ONE</i> , 2018 , 13, e0206456	3.7	14
209	EndoSensorFusion: Particle Filtering-Based Multi-Sensory Data Fusion with Switching State-Space Model for Endoscopic Capsule Robots 2018 ,		7
208	Endo-VMFuseNet: A Deep Visual-Magnetic Sensor Fusion Approach for Endoscopic Capsule Robots 2018 ,		3
207	Light-Triggered Drug Release from 3D-Printed Magnetic Chitosan Microswimmers. <i>ACS Nano</i> , 2018 , 12, 9617-9625	16.7	184
206	Morphological intelligence counters foot slipping in the desert locust and dynamic robots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, E8358-E8367	11.5	17
205	Self-Sensing Paper Actuators Based on Graphite-Carbon Nanotube Hybrid Films. <i>Advanced Science</i> , 2018 , 5, 1800239	13.6	96
204	Multifunctional ferrofluid-infused surfaces with reconfigurable multiscale topography. <i>Nature</i> , 2018 , 559, 77-82	50.4	146
203	Rubbing Against Blood Clots Using Helical Robots: Modeling and In Vitro Experimental Validation. <i>IEEE Robotics and Automation Letters</i> , 2017 , 2, 927-934	4.2	49
202	Tail-Assisted Mobility and Stability Enhancement in Yaw and Pitch Motions of a Water-Running Robot. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017 , 22, 1207-1217	5.5	12
201	Controllable load sharing for soft adhesive interfaces on three-dimensional surfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E4344-E4353	11.5	100
200	Mobile microrobots for bioengineering applications. <i>Lab on A Chip</i> , 2017 , 17, 1705-1724	7.2	205
199	Bioinspired Composite Microfibers for Skin Adhesion and Signal Amplification of Wearable Sensors. <i>Advanced Materials</i> , 2017 , 29, 1701353	24	144
198	Bioadhesive Bacterial Microswimmers for Targeted Drug Delivery in the Urinary and Gastrointestinal Tracts. <i>Advanced Science</i> , 2017 , 4, 1700058	13.6	51

197	Soiled adhesive pads shear clean by slipping: a robust self-cleaning mechanism in climbing beetles. <i>Journal of the Royal Society Interface</i> , 2017 , 14,	4.1	14
196	Dynamic and programmable self-assembly of micro-rafts at the air-water interface. <i>Science Advances</i> , 2017 , 3, e1602522	14.3	59
195	Propulsion and Chemotaxis in Bacteria-Driven Microswimmers. <i>Advanced Science</i> , 2017 , 4, 1700109	13.6	48
194	The use of clamping grips and friction pads by tree frogs for climbing curved surfaces. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2017 , 284,	4.4	28
193	Biohybrid Microtube Swimmers Driven by Single Captured Bacteria. <i>Small</i> , 2017 , 13, 1603679	11	104
192	3D Chemical Patterning of Micromaterials for Encoded Functionality. <i>Advanced Materials</i> , 2017 , 29, 1605072	11.7	61
191	Soft Actuators for Small-Scale Robotics. <i>Advanced Materials</i> , 2017 , 29, 1603483	24	678
190	Hydrophobic pinning with copper nanowhiskers leads to bactericidal properties. <i>PLoS ONE</i> , 2017 , 12, e0175428	3.7	20
189	Asymmetric stable deformations in inflated dielectric elastomer actuators 2017 ,		4
188	Microemulsion-Based Soft Bacteria-Driven Microswimmers for Active Cargo Delivery. <i>ACS Nano</i> , 2017 , 11, 9759-9769	16.7	107
187	An XY π flexure mechanism with optimal stiffness properties 2017 ,		4
186	Magnetotactic Bacteria Powered Biohybrids Target E. coli Biofilms. <i>ACS Nano</i> , 2017 , 11, 9968-9978	16.7	110
185	Multifunctional Bacteria-Driven Microswimmers for Targeted Active Drug Delivery. <i>ACS Nano</i> , 2017 , 11, 8910-8923	16.7	167
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181	Design and actuation of a magnetic millirobot under a constant unidirectional magnetic field 2017 ,		4
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20	Geckobot: a gecko inspired climbing robot using elastomer adhesives		55
19	Teleoperated and automatic nanomanipulation systems using atomic force microscope probes		3
18	Three-dimensional nanoscale manipulation and manufacturing using proximal probes: controlled pulling of polymer micro/nanofibers		2

17	Dynamic modes of nanoparticle motion during nanoprobe-based manipulation		16
16	Synthetic gecko foot-hair micro/nano-structures for future wall-climbing robots		26
15	High aspect ratio polymer micro/nano-structure manufacturing using nanoembossing, nanomolding and directed self-assembly		4
14	Manufacturing of two and three-dimensional micro/nanostructures by integrating optical tweezers with chemical assembly		3
13	A new endoscopic microcapsule robot using beetle inspired microfibrillar adhesives		18
12	Biologically Inspired Adhesion based Surface Climbing Robots		13
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10	Magnetic Resonance Imaging-Based Tracking and Navigation of Submillimeter-Scale Wireless Magnetic Robots. <i>Advanced Intelligent Systems</i> ,2100178	6	8
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