Salvador Pane

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Dynamic Modeling of Magnetic Helical Microrobots. IEEE Robotics and Automation Letters, 2022, 7, 1682-1688.	5.1	29
2	Thermoset Shape Memory Polymer Variable Stiffness 4D Robotic Catheters. Advanced Science, 2022, 9, e2103277.	11.2	42
3	Magnetoelectric reduction of chromium(VI) to chromium(III). Applied Materials Today, 2022, 26, 101339.	4.3	6
4	Lightweight macroporous Co-Pt electrodeposited films with semi-hard-magnetic properties. Materials and Design, 2022, 213, 110369.	7.0	1
5	An Electromagnetically Controllable Microrobotic Interventional System for Targeted, Realâ€īime Cardiovascular Intervention. Advanced Healthcare Materials, 2022, 11, e2102529.	7.6	20
6	In flow-based technologies: A new paradigm for the synthesis and processing of covalent-organic frameworks. Chemical Engineering Journal, 2022, 435, 135117.	12.7	14
7	Magnetoelectric Effect in Hydrogen Harvesting: Magnetic Field as a Trigger of Catalytic Reactions. Advanced Materials, 2022, 34, e2110612.	21.0	18
8	Chirality transfer from a 3D macro shape to the molecular level by controlling asymmetric secondary flows. Nature Communications, 2022, 13, 1766.	12.8	16
9	Biotemplating of Metal–Organic Framework Nanocrystals for Applications in Smallâ€5cale Robotics. Advanced Functional Materials, 2022, 32, .	14.9	21
10	Wet metallization of 3D printed microarchitectures: Application to the manufacturing of bioinspired microswimmers. Journal of Manufacturing Processes, 2022, 78, 11-21.	5.9	8
11	A Biodegradable Magnetic Microrobot Based on Gelatin Methacrylate for Precise Delivery of Stem Cells with Mass Production Capability. Small, 2022, 18, .	10.0	29
12	Enhanced Piezocatalytic Performance of BaTiO ₃ Nanosheets with Highly Exposed {001} Facets. Advanced Functional Materials, 2022, 32, .	14.9	49
13	Advanced technologies for the fabrication of MOF thin films. Materials Horizons, 2021, 8, 168-178.	12.2	68
14	3D integration of pH-cleavable drug-hydrogel conjugates on magnetically driven smart microtransporters. Materials and Design, 2021, 197, 109212.	7.0	14
15	Magnetic propulsion of colloidal microrollers controlled by electrically modulated friction. Soft Matter, 2021, 17, 1037-1047.	2.7	12
16	Acoustically Mediated Controlled Drug Release and Targeted Therapy with Degradable 3D Porous Magnetic Microrobots. Advanced Healthcare Materials, 2021, 10, e2001096.	7.6	59
17	Soft microrobotics. Advances in Chemical Engineering, 2021, 57, 1-44.	0.9	3
18	Real-time imaging and tracking of microrobots in tissues using ultrasound phase analysis. Applied Physics Letters, 2021, 118, .	3.3	32

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19	Helical Klinotactic Locomotion of Two‣ink Nanoswimmers with Dualâ€Function Drug‣oaded Soft Polysaccharide Hinges. Advanced Science, 2021, 8, 2004458.	11.2	16
20	Magnetically Driven Micro and Nanorobots. Chemical Reviews, 2021, 121, 4999-5041.	47.7	345
21	An Intelligent In-Shoe System for Gait Monitoring and Analysis with Optimized Sampling and Real-Time Visualization Capabilities. Sensors, 2021, 21, 2869.	3.8	13
22	Fabrication of Bioinspired Artificial Bacterial Flagella Via Two Photon Lithography and Wet Metallization. , 2021, , .		2
23	Synthesis of 2D Porous Crystalline Materials in Simulated Microgravity. Advanced Materials, 2021, 33, e2101777.	21.0	10
24	An Integrated Flexible Platform of Electromagnetic Metamaterials and Acoustofluidics on Kapton. , 2021, , .		0
25	A Submillimeter Continuous Variable Stiffness Catheter for Compliance Control. Advanced Science, 2021, 8, e2101290.	11.2	45
26	Magnetoelectric coupling in micropatterned BaTiO3/CoFe2O4 epitaxial thin film structures: Augmentation and site-dependency. Applied Physics Letters, 2021, 119, .	3.3	10
27	Piezoelectric Nanomaterials Activated by Ultrasound: The Pathway from Discovery to Future Clinical Adoption. ACS Nano, 2021, 15, 11066-11086.	14.6	102
28	Mesoscopic magnetic systems: From fundamental properties to devices. Applied Physics Letters, 2021, 119, 080401.	3.3	4
29	Corrosion mechanisms of magnetic microrobotic platforms in protein media. Applied Materials Today, 2021, 24, 101135.	4.3	6
30	A Submillimeter Continuous Variable Stiffness Catheter for Compliance Control (Adv. Sci. 18/2021). Advanced Science, 2021, 8, 2170118.	11.2	6
31	Biodegradable Smallâ€ S cale Swimmers for Biomedical Applications. Advanced Materials, 2021, 33, e2102049.	21.0	44
32	Layer-by-Layer Fabrication of Hydrogel Microsystems for Controlled Drug Delivery From Untethered Microrobots. Frontiers in Bioengineering and Biotechnology, 2021, 9, 692648.	4.1	3
33	Powering and Fabrication of Small-Scale Robotics Systems. Current Robotics Reports, 2021, 2, 427-440.	7.9	7
34	Magnetically Guided Catheters, Micro- and Nanorobots for Spinal Cord Stimulation. Frontiers in Neurorobotics, 2021, 15, 749024.	2.8	3
35	Integrated Pedal System for Data Driven Rehabilitation. Sensors, 2021, 21, 8115.	3.8	0
36	Polymeric microellipsoids with programmed magnetic anisotropy for controlled rotation using low (â‰^10 mT) magnetic fields. Applied Materials Today, 2020, 18, 100511.	4.3	6

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37	Metal–Organic Frameworks in Motion. Chemical Reviews, 2020, 120, 11175-11193.	47.7	75
38	Mechanically interlocked 3D multi-material micromachines. Nature Communications, 2020, 11, 5957.	12.8	48
39	CANDYBOTS: A New Generation of 3Dâ€Printed Sugarâ€Based Transient Smallâ€Scale Robots. Advanced Materials, 2020, 32, e2005652.	21.0	26
40	Microfluidicâ€Assisted Blade Coating of Compositional Libraries for Combinatorial Applications: The Case of Organic Photovoltaics. Advanced Energy Materials, 2020, 10, 2001308.	19.5	12
41	The order of addition and time matters: Impact of electrolyte processing on micelle-assisted electrosynthesis of mesoporous alloys. Electrochimica Acta, 2020, 358, 136940.	5.2	4

42 MOF Drug Carriers: Biodegradable Metal–Organic Frameworkâ€Based Microrobots (MOFBOTs) (Adv.) Tj ETQq0 0.0 rgBT /Qverlock 10

43	Biodegradable Metal–Organic Frameworkâ€Based Microrobots (MOFBOTs). Advanced Healthcare Materials, 2020, 9, e2001031	7.6	64
44	Enhanced catalytic degradation of organic pollutants by multi-stimuli activated multiferroic nanoarchitectures. Nano Research, 2020, 13, 2183-2191.	10.4	38
45	Magnetic cilia carpets with programmable metachronal waves. Nature Communications, 2020, 11, 2637.	12.8	172
46	A Needleâ€Type Microrobot for Targeted Drug Delivery by Affixing to a Microtissue. Advanced Healthcare Materials, 2020, 9, e1901697.	7.6	54
47	SERS Barcode Libraries: SERS Barcode Libraries: A Microfluidic Approach (Adv. Sci. 12/2020). Advanced Science, 2020, 7, 2070068.	11.2	0
48	Strain gradient mediated magnetoelectricity in Fe-Ga/P(VDF-TrFE) multiferroic bilayers integrated on silicon. Applied Materials Today, 2020, 19, 100579.	4.3	12
49	3Dâ€Printed Soft Magnetoelectric Microswimmers for Delivery and Differentiation of Neuron‣ike Cells. Advanced Functional Materials, 2020, 30, 1910323.	14.9	157
50	Biomimetic Synthesis of Sub-20 nm Covalent Organic Frameworks in Water. Journal of the American Chemical Society, 2020, 142, 3540-3547.	13.7	68
51	Magnetically and chemically propelled nanowire-based swimmers. , 2020, , 777-799.		7
52	Exploiting electrolyte confinement effects for the electrosynthesis of two-engine micromachines. Applied Materials Today, 2020, 19, 100629.	4.3	3
53	Response of remanent magnetization to deformation in geological processes using 3D-printed structures. Earth and Planetary Science Letters, 2020, 539, 116241.	4.4	1
54	SERS Barcode Libraries: A Microfluidic Approach. Advanced Science, 2020, 7, 1903172.	11.2	17

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55	Pathway selection as a tool for crystal defect engineering: A case study with a functional coordination polymer. Applied Materials Today, 2020, 20, 100632.	4.3	7
56	Nanostructured polypyrrole layers implementation on magnetically navigable 3D printed microdevices for targeted gastrointestinal drug delivery. Multifunctional Materials, 2020, 3, 045003.	3.7	7
57	3D Printing of Thermoplasticâ€Bonded Soft―and Hardâ€Magnetic Composites: Magnetically Tuneable Architectures and Functional Devices. Advanced Intelligent Systems, 2019, 1, 1900069.	6.1	16
58	e-MINDs: the COST Action on electrodeposition and corrosion of micro- and nanodevices that sprouted in 2015 and bore fruit. Transactions of the Institute of Metal Finishing, 2019, 97, 171-173.	1.3	2
59	Mineralizationâ€Inspired Synthesis of Magnetic Zeolitic Imidazole Framework Composites. Angewandte Chemie, 2019, 131, 13684-13689.	2.0	5
60	Magnetoelectric 3D scaffolds for enhanced bone cell proliferation. Applied Materials Today, 2019, 16, 290-300.	4.3	49
61	Comparative study of the sustainable preparation of FeMn thin films via electrodeposition and magnetron co-sputtering. Surface and Coatings Technology, 2019, 375, 182-196.	4.8	5
62	Highâ€Resolution SPECT Imaging of Stimuliâ€Responsive Soft Microrobots. Small, 2019, 15, e1900709.	10.0	62
63	Mineralizationâ€Inspired Synthesis of Magnetic Zeolitic Imidazole Framework Composites. Angewandte Chemie - International Edition, 2019, 58, 13550-13555.	13.8	27
64	Magnetoelectric Catalysis: Magnetoelectrically Driven Catalytic Degradation of Organics (Adv.) Tj ETQq0 0 0 rgB	T /Overloc 21.0	k 10 Tf 50 38
65	Tissue Response to Neural Implants: The Use of Model Systems Toward New Design Solutions of Implantable Microelectrodes. Frontiers in Neuroscience, 2019, 13, 689.	2.8	96
66	Highly Adherent Parylene-C Coatings With Nanostructuring for Enhanced Cell Adhesion and Growth. IEEE Transactions on Nanobioscience, 2019, 18, 230-233.	3.3	5
67	Indirect 3D and 4D Printing of Soft Robotic Microstructures. Advanced Materials Technologies, 2019, 4, 1900332.	5.8	78
68	Metal–Organic Frameworks: Inâ€Flow MOF Lithography (Adv. Mater. Technol. 6/2019). Advanced Materials Technologies, 2019, 4, 1970035.	5.8	0
69	Motile Piezoelectric Nanoeels for Targeted Drug Delivery. Advanced Functional Materials, 2019, 29, 1808135.	14.9	66
70	Underpinning transport phenomena for the patterning of biomolecules. Chemical Society Reviews, 2019, 48, 1236-1254.	38.1	29
71	Functional macroporous iron-phosphorous films by electrodeposition on colloidal crystal templates. Electrochimica Acta, 2019, 313, 211-222.	5.2	6
72	Microrobotics: 3D Fabrication of Fully Iron Magnetic Microrobots (Small 16/2019). Small, 2019, 15, 1970086.	10.0	2

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73	MOFBOTS: Metal–Organicâ€Frameworkâ€Based Biomedical Microrobots. Advanced Materials, 2019, 31, e1901592.	21.0	139
74	Magnetoelectrically Driven Catalytic Degradation of Organics. Advanced Materials, 2019, 31, e1901378.	21.0	74
75	Magnetically navigable 3D printed multifunctional microdevices for environmental applications. Additive Manufacturing, 2019, 28, 127-135.	3.0	24
76	Magnetically driven piezoelectric soft microswimmers for neuron-like cell delivery and neuronal differentiation. Materials Horizons, 2019, 6, 1512-1516.	12.2	88
77	3D Fabrication of Fully Iron Magnetic Microrobots. Small, 2019, 15, e1805006.	10.0	79
78	Inâ€Flow MOF Lithography. Advanced Materials Technologies, 2019, 4, 1800666.	5.8	10
79	On-the-fly catalytic degradation of organic pollutants using magneto-photoresponsive bacteria-templated microcleaners. Journal of Materials Chemistry A, 2019, 7, 24847-24856.	10.3	45
80	Imaging Technologies for Biomedical Micro―and Nanoswimmers. Advanced Materials Technologies, 2019, 4, 1800575.	5.8	83
81	Programmable Locomotion Mechanisms of Nanowires with Semihard Magnetic Properties Near a Surface Boundary. ACS Applied Materials & Interfaces, 2019, 11, 3214-3223.	8.0	23
82	Fabrication of sustainable hydrophobic and oleophilic pseudo-ordered macroporous Fe–Cu films with tunable composition and pore size via electrodeposition through colloidal templates. Applied Materials Today, 2018, 12, 1-8.	4.3	8
83	Biocompatibility characteristics of the metal organic framework ZIF-8 for therapeutical applications. Applied Materials Today, 2018, 11, 13-21.	4.3	193
84	Small cale Machines Driven by External Power Sources. Advanced Materials, 2018, 30, e1705061.	21.0	186
85	Mobile Magnetic Nanocatalysts for Bioorthogonal Targeted Cancer Therapy. Advanced Functional Materials, 2018, 28, 1705920.	14.9	92
86	Self-assembled materials and supramolecular chemistry within microfluidic environments: from common thermodynamic states to non-equilibrium structures. Chemical Society Reviews, 2018, 47, 3788-3803.	38.1	119
87	Soft Micro- and Nanorobotics. Annual Review of Control, Robotics, and Autonomous Systems, 2018, 1, 53-75.	11.8	145
88	Micelleâ€Assisted Electrodeposition of Mesoporous Fe–Pt Smooth Thin Films and their Electrocatalytic Activity towards the Hydrogen Evolution Reaction. ChemSusChem, 2018, 11, 367-375.	6.8	22
89	Fabrication and Locomotion of Flexible Nanoswimmers. , 2018, , .		2
90	3D Printed Enzymatically Biodegradable Soft Helical Microswimmers. Advanced Functional Materials, 2018, 28, 1804107.	14.9	222

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91	Hard-magnetic cell microscaffolds from electroless coated 3D printed architectures. Materials Horizons, 2018, 5, 699-707.	12.2	36
92	Surface-Chemistry-Mediated Control of Individual Magnetic Helical Microswimmers in a Swarm. ACS Nano, 2018, 12, 6210-6217.	14.6	97
93	Templateâ€Assisted Electroforming of Fully Semiâ€Hardâ€Magnetic Helical Microactuators. Advanced Engineering Materials, 2018, 20, 1800179.	3.5	19
94	4D printing and robotics. Science Robotics, 2018, 3, .	17.6	66
95	Chiral anisotropic magnetoresistance of ferromagnetic helices. Applied Physics Letters, 2018, 112, .	3.3	16
96	Investigation of Magnetotaxis of Reconfigurable Microâ€Origami Swimmers with Competitive and Cooperative Anisotropy. Advanced Functional Materials, 2018, 28, 1802110.	14.9	40
97	Magnetic imaging of a single ferromagnetic nanowire using diamond atomic sensors. Nanotechnology, 2018, 29, 405502.	2.6	8
98	Piezoelectrically Enhanced Photocatalysis with BiFeO3 Nanostructures for Efficient Water Remediation. IScience, 2018, 4, 236-246.	4.1	232
99	Real-Time Holographic Tracking and Control of Microrobots. IEEE Robotics and Automation Letters, 2017, 2, 143-148.	5.1	15
100	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.	3.4	32
101	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.	6.0	16
102	Magnetostriction in electroplated CoFe alloys. Electrochemistry Communications, 2017, 76, 15-19.	4.7	13
103	Magnetoelectrics: Hybrid Magnetoelectric Nanowires for Nanorobotic Applications: Fabrication, Magnetoelectric Coupling, and Magnetically Assisted In Vitro Targeted Drug Delivery (Adv. Mater.) Tj ETQq1 1 0.	78 ቋ ฿ወ4 rg	gBD/Overlock
104	Nanomechanics on FGF-2 and Heparin Reveal Slip Bond Characteristics with pH Dependency. ACS Biomaterials Science and Engineering, 2017, 3, 1000-1007.	5.2	6
105	Magnetically guided capsule endoscopy. Medical Physics, 2017, 44, e91-e111.	3.0	78
106	Cross-sectioning spatio-temporal Co-In electrodeposits: Disclosing a magnetically-patterned nanolaminated structure. Materials and Design, 2017, 114, 202-207.	7.0	2
107	Spatiotemporally controlled electrodeposition of magnetically driven micromachines based on the inverse opal architecture. Electrochemistry Communications, 2017, 81, 97-101.	4.7	13
108	Recent developments in magnetically driven micro- and nanorobots. Applied Materials Today, 2017, 9, 37-48.	4.3	312

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109	Multiwavelength Light-Responsive Au/B-TiO ₂ Janus Micromotors. ACS Nano, 2017, 11, 6146-6154.	14.6	155
110	Hybrid Magnetoelectric Nanowires for Nanorobotic Applications: Fabrication, Magnetoelectric Coupling, and Magnetically Assisted In Vitro Targeted Drug Delivery. Advanced Materials, 2017, 29, 1605458.	21.0	193
111	Robotically controlled microprey to resolve initial attack modes preceding phagocytosis. Science Robotics, 2017, 2, .	17.6	49
112	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, .	14.9	1
113	Magnetically powered microrobots: a medical revolution underway?. European Journal of Cardio-thoracic Surgery, 2017, 51, ezw432.	1.4	20
114	Voltageâ€Induced Coercivity Reduction in Nanoporous Alloy Films: A Boost toward Energyâ€Efficient Magnetic Actuation. Advanced Functional Materials, 2017, 27, 1701904.	14.9	41
115	Ultrasound-mediated piezoelectric differentiation of neuron-like PC12 cells on PVDF membranes. Scientific Reports, 2017, 7, 4028.	3.3	131
116	Magnetic microrobots with addressable shape control. , 2016, , .		11
117	An Atomic Force Microscope with Dual Actuation Capability for Biomolecular Experiments. Scientific Reports, 2016, 6, 27567.	3.3	8
118	Magnetic Nanowires: Toward Robust Segmented Nanowires: Understanding the Impact of Crystallographic Texture on the Quality of Segment Interfaces in Magnetic Metallic Nanowires (Adv.) Tj ETQq0 0	0 හුෂිT /C	ivendock 10 Tf
119	Hyperthermia with rotating magnetic nanowires inducing heat into tumor by fluid friction. Journal of Applied Physics, 2016, 120, .	2.5	35
120	Electrodeposition of sizeable and compositionally tunable rhodium-iron nanoparticles and their activity toward hydrogen evolution reaction. Electrochimica Acta, 2016, 194, 263-275.	5.2	16
121	Magnetometry of Individual Polycrystalline Ferromagnetic Nanowires. Small, 2016, 12, 6363-6369.	10.0	13
122	Dually actuated atomic force microscope with miniaturized magnetic bead-actuators for single-molecule force measurements. Nanoscale Horizons, 2016, 1, 488-495.	8.0	3
123	Highly Efficient Coaxial TiO ₂ â€PtPd Tubular Nanomachines for Photocatalytic Water Purification with Multiple Locomotion Strategies. Advanced Functional Materials, 2016, 26, 6995-7002.	14.9	101
124	Toward Robust Segmented Nanowires: Understanding the Impact of Crystallographic Texture on the Quality of Segment Interfaces in Magnetic Metallic Nanowires. Advanced Materials Interfaces, 2016, 3, 1600336.	3.7	8
125	Swimming characteristics of helical microrobots in fibrous environments. , 2016, , .		18
126	Artificial Swimmers Propelled by Acoustically Activated Flagella. Nano Letters, 2016, 16, 4968-4974.	9.1	209

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127	Self-folding hydrogel bilayer for enhanced drug loading, encapsulation, and transport. , 2016, 2016, 2103-2106.		6
128	Soft micromachines with programmable motility and morphology. Nature Communications, 2016, 7, 12263.	12.8	495
129	Spontaneous formation of spiral-like patterns with distinct periodic physical properties by confined electrodeposition of Co-In disks. Scientific Reports, 2016, 6, 30398.	3.3	9
130	Catalytic Locomotion of Core–Shell Nanowire Motors. ACS Nano, 2016, 10, 9983-9991.	14.6	57
131	Magnetically Driven Silverâ€Coated Nanocoils for Efficient Bacterial Contact Killing. Advanced Functional Materials, 2016, 26, 1063-1069.	14.9	118
132	Degradable Magnetic Composites for Minimally Invasive Interventions: Device Fabrication, Targeted Drug Delivery, and Cytotoxicity Tests. Advanced Materials, 2016, 28, 533-538.	21.0	190
133	e-MINDS: A networking COST initiative for surface finishers and corrosion scientists working in micro- and nanosystems technology. Transactions of the Institute of Metal Finishing, 2016, 94, 60-62.	1.3	3
134	A smart multifunctional drug delivery nanoplatform for targeting cancer cells. Nanoscale, 2016, 8, 12723-12728.	5.6	56
135	Single step electrosynthesis of NiMnGa alloys. Electrochimica Acta, 2016, 204, 199-205.	5.2	3
136	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.	8.0	23
137	Magnetoelectric micromachines with wirelessly controlled navigation and functionality. Materials Horizons, 2016, 3, 113-118.	12.2	64
138	Electrochemically synthesized amorphous and crystalline nanowires: dissimilar nanomechanical behavior in comparison with homologous flat films. Nanoscale, 2016, 8, 1344-1351.	5.6	16
139	Effect of Surface Modifications of Ti40Zr10Cu38Pd12 Bulk Metallic Glass and Ti-6Al-4V Alloy on Human Osteoblasts In Vitro Biocompatibility. PLoS ONE, 2016, 11, e0156644.	2.5	19
140	A magnetic force sensor on a catheter tip for minimally invasive surgery. , 2015, 2015, 7970-3.		14
141	Microrobotics: Electroforming of Implantable Tubular Magnetic Microrobots for Wireless Ophthalmologic Applications (Adv. Healthcare Mater. 2/2015). Advanced Healthcare Materials, 2015, 4, 208-208.	7.6	4
142	Electroforming of Implantable Tubular Magnetic Microrobots for Wireless Ophthalmologic Applications. Advanced Healthcare Materials, 2015, 4, 209-214.	7.6	98
143	Undulatory Locomotion of Magnetic Multilink Nanoswimmers. Nano Letters, 2015, 15, 4829-4833.	9.1	202
144	Multisegmented FeCo/Cu Nanowires: Electrosynthesis, Characterization, and Magnetic Control of Biomolecule Desorption. ACS Applied Materials & 2015, 7, 7389-7396.	8.0	54

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145	The electrochemical manipulation of apolar solvent drops in aqueous electrolytes by altering the surface polarity of polypyrrole architectures. Electrochemistry Communications, 2015, 54, 32-35.	4.7	7
146	Shape-Switching Microrobots for Medical Applications: The Influence of Shape in Drug Delivery and Locomotion. ACS Applied Materials & amp; Interfaces, 2015, 7, 6803-6811.	8.0	124
147	Magnetically driven Bi ₂ O ₃ /BiOCl-based hybrid microrobots for photocatalytic water remediation. Journal of Materials Chemistry A, 2015, 3, 23670-23676.	10.3	100
148	Mobility-Enhancing Coatings for Vitreoretinal Surgical Devices: Hydrophilic and Enzymatic Coatings Investigated by Microrheology. ACS Applied Materials & Interfaces, 2015, 7, 22018-22028.	8.0	9
149	The biocompatibility and anti-biofouling properties of magnetic core–multishell Fe@C NWs–AAO nanocomposites. Physical Chemistry Chemical Physics, 2015, 17, 13274-13279.	2.8	3
150	Miniaturized magnetic force sensor on a catheter tip. , 2015, , .		6
151	Superparamagnetic hydrogels for Two-Photon Polymerization and their application for the fabrication of swimming microrobots. , 2015, , .		6
152	Silicon-supported aluminum oxide membranes with ultrahigh aspect ratio nanopores. RSC Advances, 2015, 5, 94283-94289.	3.6	9
153	Electroforming of Magnetic Microtubes for Microrobotic Applications. IEEE Transactions on Magnetics, 2014, 50, 1-3.	2.1	13
154	Microrobots: a new era in ocular drug delivery. Expert Opinion on Drug Delivery, 2014, 11, 1815-1826.	5.0	54
155	Lithography: Hybrid Helical Magnetic Microrobots Obtained by 3D Template-Assisted Electrodeposition (Small 7/2014). Small, 2014, 10, 1234-1234.	10.0	3
156	Self-folding mobile microrobots for biomedical applications. , 2014, , .		15
157	Targeted Delivery: An Integrated Microrobotic Platform for On-Demand, Targeted Therapeutic Interventions (Adv. Mater. 6/2014). Advanced Materials, 2014, 26, 951-951.	21.0	3
158	Hybrid Helical Magnetic Microrobots Obtained by 3D Templateâ€Assisted Electrodeposition. Small, 2014, 10, 1284-1288.	10.0	124
159	Superparamagnetic Twistâ€Type Actuators with Shapeâ€Independent Magnetic Properties and Surface Functionalization for Advanced Biomedical Applications. Advanced Functional Materials, 2014, 24, 5269-5276.	14.9	92
160	An Integrated Microrobotic Platform for Onâ€Demand, Targeted Therapeutic Interventions. Advanced Materials, 2014, 26, 952-957.	21.0	259
161	Electrophoretic deposition as a new approach to produce optical sensing films adaptable to microdevices. Nanoscale, 2014, 6, 263-271.	5.6	13
162	Inkjet printed superparamagnetic polymer composite hemispheres with programmed magnetic anisotropy. Nanoscale, 2014, 6, 10495-10499.	5.6	16

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163	Self-organized spatio-temporal micropatterning in ferromagnetic Co–In films. Journal of Materials Chemistry C, 2014, 2, 8259-8269.	5.5	9
164	Polymer-Based Wireless Resonant Magnetic Microrobots. IEEE Transactions on Robotics, 2014, 30, 26-32.	10.3	52
165	Fabrication of Segmented Au/Co/Au Nanowires: Insights in the Quality of Co/Au Junctions. ACS Applied Materials & Interfaces, 2014, 6, 14583-14589.	8.0	40
166	One-pot electrosynthesis of multi-layered magnetic metallopolymer nanocomposites. Nanoscale, 2014, 6, 4683.	5.6	11
167	Recent Progress in Magnetically Actuated Microrobotics for Ophthalmic Therapies. European Ophthalmic Review, 2014, 08, 120.	0.3	13
168	Tailoring the physical properties of electrodeposited CoNiReP alloys with large Re content by direct, pulse, and reverse pulse current techniques. Electrochimica Acta, 2013, 96, 43-50.	5.2	8
169	Functional polypyrrole coatings for wirelessly controlled magnetic microrobots. , 2013, , .		4
170	Ordered arrays of ferromagnetic, compositionally graded Cu1â^'xNix alloy nanopillars prepared by template-assisted electrodeposition. Journal of Materials Chemistry C, 2013, 1, 7215.	5.5	11
171	Generating Magnetic Fields for Controlling Nanorobots in Medical Applications. , 2013, , 275-299.		4
172	Chitosan Electrodeposition for Microrobotic Drug Delivery. Advanced Healthcare Materials, 2013, 2, 1037-1044.	7.6	99
173	Redox Cycling for Passive Modification of Polypyrrole Surface Properties: Effects on Cell Adhesion and Proliferation. Advanced Healthcare Materials, 2013, 2, 591-598.	7.6	16
174	Iron Nanowires: Graphite Coating of Iron Nanowires for Nanorobotic Applications: Synthesis, Characterization and Magnetic Wireless Manipulation (Adv. Funct. Mater. 7/2013). Advanced Functional Materials, 2013, 23, 782-782.	14.9	0
175	3D hierarchically porous Cu–BiOCl nanocomposite films: one-step electrochemical synthesis, structural characterization and nanomechanical and photoluminescent properties. Nanoscale, 2013, 5, 12542.	5.6	33
176	Cobalt–nickel microcantilevers for biosensing. Journal of Intelligent Material Systems and Structures, 2013, 24, 2215-2220.	2.5	4
177	Graphite Coating of Iron Nanowires for Nanorobotic Applications: Synthesis, Characterization and Magnetic Wireless Manipulation. Advanced Functional Materials, 2013, 23, 823-831.	14.9	48
178	When nothing is constant but change: Adaptive and sensorial materials and their impact on product design. Journal of Intelligent Material Systems and Structures, 2013, 24, 2172-2182.	2.5	12
179	Mobility Experiments With Microrobots for Minimally Invasive Intraocular Surgery. , 2013, 54, 2853.		170

180 Polymer-based Wireless Resonant Magnetic microrobots. , 2012, , .

#	Article	IF	CITATIONS
181	In Vitro Oxygen Sensing Using Intraocular Microrobots. IEEE Transactions on Biomedical Engineering, 2012, 59, 3104-3109.	4.2	48
182	An in-plane cobalt–nickel microresonator sensor with magnetic actuation and readout. Sensors and Actuators A: Physical, 2012, 188, 120-126.	4.1	6
183	Helical and Tubular Lipid Microstructures that are Electroless oated with CoNiReP for Wireless Magnetic Manipulation. Small, 2012, 8, 1498-1502.	10.0	51
184	Electroplated porous polypyrrole nanostructures patterned by colloidal lithography for drug-delivery applications. Nanoscale, 2012, 4, 3083.	5.6	28
185	Porous polysulfone coatings for enhanced drug delivery. Biomedical Microdevices, 2012, 14, 603-612.	2.8	25
186	An in-plane cobalt-nickel microresonator sensor with magnetic actuation and readout. , 2011, , .		0
187	Grain Boundary Segregation and Interdiffusion Effects in Nickel–Copper Alloys: An Effective Means to Improve the Thermal Stability of Nanocrystalline Nickel. ACS Applied Materials & Interfaces, 2011, 3, 2265-2274.	8.0	63
188	A comparison between fine-grained and nanocrystalline electrodeposited Cu–Ni films. Insights on mechanical and corrosion performance. Surface and Coatings Technology, 2011, 205, 5285-5293.	4.8	56
189	Effects of the anion in glycine-containing electrolytes on the mechanical properties of electrodeposited Co–Ni films. Materials Chemistry and Physics, 2011, 130, 1380-1386.	4.0	39
190	The effect of saccharine on the localized electrochemical deposition of Cu-rich Cu–Ni microcolumns. Electrochemistry Communications, 2011, 13, 973-976.	4.7	21
191	High-performance electrodeposited Co-rich CoNiReP permanent magnets. Electrochimica Acta, 2011, 56, 8979-8988.	5.2	9
192	Nanorobotic drug delivery. Materials Today, 2011, 14, 54.	14.2	8
193	Morphology, structure and magnetic properties of cobalt–nickel films obtained from acidic electrolytes containing glycine. Electrochimica Acta, 2011, 56, 1399-1408.	5.2	93
194	Electrodeposition of cobalt–yttrium hydroxide/oxide nanocomposite films from particle-free aqueous baths containing chloride salts. Electrochimica Acta, 2011, 56, 5142-5150.	5.2	20
195	A photopatternable superparamagnetic nanocomposite: Material characterization and fabrication of microstructures. Sensors and Actuators B: Chemical, 2011, 156, 433-443.	7.8	57
196	MRI magnetic signature imaging, tracking and navigation for targeted micro/nano-capsule therapeutics. , 2011, , .		12
197	Structural and magnetic characterization of batch-fabricated nickel encapsulated multi-walled carbon nanotubes. Nanotechnology, 2011, 22, 275713.	2.6	19
198	Moving right arm in the right place: Ophiuroid-inspired omnidirectional robot driven by coupled dynamical systems. , 2011, , .		0

#	Article	IF	CITATIONS
199	Nanocrystalline Electroplated Cu–Ni: Metallic Thin Films with Enhanced Mechanical Properties and Tunable Magnetic Behavior. Advanced Functional Materials, 2010, 20, 983-991.	14.9	92
200	Oxygen sensing using microrobots. , 2010, 2010, 1958-61.		3
201	Tailoring the drug loading capacity of polypyrrole films for use in intraocular biomicrorobots. , 2010, 2010, 4359-62.		6
202	A microfabricated and microassembled wireless resonator. Sensors and Actuators A: Physical, 2009, 154, 109-116.	4.1	1
203	Characterization and actuation of a magnetic photosensitive polymer cantilever. , 2009, , .		3
204	A wireless acoustic emitter for passive localization in liquids. , 2009, , .		11
205	Manufacturing of a Hybrid Acoustic Transmitter Using an Advanced Microassembly System. IEEE Transactions on Industrial Electronics, 2009, 56, 2657-2666.	7.9	23
206	Influence of a magnetic field during the CoNi electrodeposition in the presence of magnetic nanoparticles. Journal of Electroanalytical Chemistry, 2008, 615, 117-123.	3.8	14
207	Toward targeted retinal drug delivery with wireless magnetic microrobots. , 2008, , .		41
208	Enhanced magnetism in electrodeposited-based CoNi composites containing high percentage of micron hard-magnetic particles. Electrochemistry Communications, 2007, 9, 1755-1760.	4.7	17
209	Electrodeposition of copper–magnetite magnetic composite films. Journal of Applied Electrochemistry, 2007, 37, 575-582.	2.9	15
210	First stages of barium ferrite microparticles entrapment in the electrodeposition of CoNi films. Journal of Electroanalytical Chemistry, 2007, 604, 41-47.	3.8	12
211	Modulation of the magnetic properties of CoNi coatings by electrodeposition in the presence of a redox cationic surfactant. Applied Surface Science, 2006, 253, 2964-2968.	6.1	14
212	Magnetoresistive granular Cu–Co–Ni coatings prepared by electrodeposition. Journal of Electroanalytical Chemistry, 2006, 596, 87-94.	3.8	16
213	Influence of a cationic surfactant in the properties of cobalt–nickel electrodeposits. Electrochimica Acta, 2006, 51, 5703-5709.	5.2	32
214	Magnetic composites CoNi–barium ferrite prepared by electrodeposition. Electrochemistry Communications, 2005, 7, 1225-1231.	4.7	29
215	Electrodeposition of Co–Ni and Co–Ni–Cu systems in sulphate–citrate medium. Electrochimica Acta, 2005, 51, 146-153.	5.2	106