Characterization of Polydimethylsiloxane (PDMS) Propomicro/Nanosystems

**Biomedical Microdevices** 

7, 281-293

DOI: 10.1007/s10544-005-6070-2

Citation Report

#	Article	IF	CITATIONS
2	High-speed fabrication of patterned colloidal photonic structures in centrifugal microfluidic chips. Lab on A Chip, 2006, 6, 1171.	3.1	57
3	PDMS and its Suitability for Analytical Microfluidic Devices. , 2006, 2006, 2486-9.		54
4	Fabrication of cell-containing hydrogel microstructures inside microfluidic devices that can be used as cell-based biosensors. Analytical and Bioanalytical Chemistry, 2006, 385, 1389-1397.	1.9	69
5	Computational and Functional Evaluation of a Microfluidic Blood Flow Device. ASAIO Journal, 2007, 53, 447-455.	0.9	17
6	Surface Micromachined PDMS Microchannels. , 2007, , 587.		0
7	Rapid fabrication of microchannels using microscale plasma activated templating (νPLAT) generated water molds. Lab on A Chip, 2007, 7, 641-643.	3.1	48
8	Spatially Controlled Cell Adhesion via Micropatterned Surface Modification of Poly(dimethylsiloxane). Langmuir, 2007, 23, 715-719.	1.6	79
9	Straightforward Protein Immobilization on Sylgard 184 PDMS Microarray Surface. Langmuir, 2007, 23, 4523-4527.	1.6	40
10	New materials for micro-scale sensors and actuators. Materials Science and Engineering Reports, 2007, 56, 1-129.	14.8	438
11	Microfluidic devices for culturing primary mammalian neurons at low densities. Lab on A Chip, 2007, 7, 987.	3.1	179
12	Effects of biomedical sterilization processes on performance characteristics of MEMS pressure sensors. Biomedical Microdevices, 2007, 9, 809-814.	1.4	3
13	Functionalization of poly(dimethylsiloxane) by chemisorption of copolymers: DNA microarrays for pathogen detection. Sensors and Actuators B: Chemical, 2008, 132, 258-264.	4.0	28
14	Influence of different amount of Au on the wetting behavior of PDMS membrane. Biomedical Microdevices, 2008, 10, 65-72.	1.4	37
15	In vitro blood flow in a rectangular PDMS microchannel: experimental observations using a confocal micro-PIV system. Biomedical Microdevices, 2008, 10, 153-167.	1.4	168
16	Fabrication and testing of a PDMS multi-stacked hand-operated LOC for use in portable immunosensing systems. Biomedical Microdevices, 2008, 10, 859-868.	1.4	24
17	Modeling of Flow Burst, Flow Timing in Labâ€onâ€aâ€CD Systems and Its Application in Digital Chemical Analysis. Chemical Engineering and Technology, 2008, 31, 1328-1335.	0.9	19
18	Cell-based microfluidic biochip for the electrochemical real-time monitoring of glucose and oxygen. Sensors and Actuators B: Chemical, 2008, 132, 608-613.	4.0	50
19	Microfluidic biochip for chemiluminescent detection of allergen-specific antibodies. Biosensors and Bioelectronics, 2008, 23, 1812-1818.	<b>5.</b> 3	79

#	Article	IF	CITATIONS
20	Electrochemical Identification of the Property of Peripheral Nerve Fiber Based on a Biocompatible Polymer Film via in Situ Incorporating Gold Nanoparticles. Analytical Chemistry, 2008, 80, 3769-3776.	3.2	39
21	Biocompatible DC-microelectrode array. , 2008, , .		1
22	Microstructures in 3D Biological Gels Affect Cell Proliferation. Tissue Engineering - Part A, 2008, 14, 379-390.	1.6	30
23	Thick single-layer positive photoresist mold and poly(dimethylsiloxane) (PDMS) dry etching for the fabrication of a glass–PDMS–glass microfluidic device. Journal of Micromechanics and Microengineering, 2008, 18, 115025.	1.5	27
24	One-step surface modification of poly(dimethylsiloxane) by undecylenic acid., 2008,,.		2
25	Characterization of an Elastically Stretchable Microelectrode Array and Its Application to Neural Field Potential Recordings. Journal of the Electrochemical Society, 2009, 156, P85.	1.3	52
26	Embedded vertical nanosheets of SiO[sub 2] in PDMS using an alternative nanopatterning process. Journal of Vacuum Science & Technology B, 2009, 27, 3055.	1.3	3
27	Characteristics of highly flexible PDMS membranes for longâ€term mechanostimulation of biological tissue. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 91B, 700-705.	1.6	17
28	PDMS patterning by proton beam. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2296-2298.	0.6	18
29	Fabrication and physical evaluation of a polymer-encapsulated paramagnetic probe for biomedical oximetry. Biomedical Microdevices, 2009, 11, 773-782.	1.4	40
30	Miniaturized tools and devices for bioanalytical applications: an overview. Analytical and Bioanalytical Chemistry, 2009, 395, 647-668.	1,9	25
31	Evaluation of the mechanical properties and drug release of cross-linked Eudragit films containing metronidazole. International Journal of Pharmaceutics, 2009, 376, 1-6.	2.6	26
32	Electroosmotically driven microfluidic actuators. Sensors and Actuators B: Chemical, 2009, 141, 263-269.	4.0	28
33	Deformation of PDMS membrane and microcantilever by a water droplet: Comparison between Mooney–Rivlin and linear elastic constitutive models. Journal of Colloid and Interface Science, 2009, 332, 467-476.	5.0	95
34	Achieving synaptically relevant pulses of neurotransmitter using PDMS microfluidics. Journal of Neuroscience Methods, 2009, 177, 294-302.	1.3	19
35	Influences of heating temperature on mechanical properties of polydimethylsiloxane. Sensors and Actuators A: Physical, 2009, 151, 42-45.	2.0	166
36	"Macromolecules to PDMS transfer―as a general route for PDMS biochips. Biosensors and Bioelectronics, 2009, 24, 1146-1152.	5.3	18
37	Selective Detection of Hypertoxic Organophosphates Pesticides via PDMS Composite based Acetylcholinesterase-Inhibition Biosensor. Environmental Science & Environmental Scienc	4.6	75

3

#	Article	IF	CITATIONS
38	Patterning PDMS using a combination of wet and dry etching. Journal of Micromechanics and Microengineering, 2009, 19, 047002.	1.5	76
39	Surface micromachined PDMS microfluidic devices fabricated using a sacrificial photoresist. Journal of Micromechanics and Microengineering, 2009, 19, 015013.	1.5	11
40	A low-cost, high-yield fabrication method for producing optimized biomimetic dry adhesives. Journal of Micromechanics and Microengineering, 2009, 19, 115002.	1.5	97
41	Mechanical characterization of ultra-thin films by combining AFM nanoindentation tests and peridynamic simulations. , 2009, , .		5
42	PDMS- and Silver-Ball-Based Flexible Multichannel Surface Electrode: Fabrication and Application in Nerve Conduction Study on Patients With Diabetic Polyneuropathy. IEEE Sensors Journal, 2009, 9, 625-632.	2.4	11
43	Comparison of three different scales techniques for the dynamic mechanical characterization of two polymers (PDMS and SU8). EPJ Applied Physics, 2009, 48, 11201.	0.3	25
44	Biomimetic membranes and biomolecule immobilisation strategies for nanobiotechnology applications. International Journal of Nanotechnology, 2010, 7, 753.	0.1	8
45	Investigation and development of a molding process for the production of micro-hairs. International Journal of Advanced Manufacturing Technology, 2010, 51, 935-944.	1.5	2
46	A molecular paramagnetic spin-doped biopolymeric oxygen sensor. Biosensors and Bioelectronics, 2010, 25, 2283-2289.	5.3	10
47	Increased poly(dimethylsiloxane) stiffness improves viability and morphology of mouse fibroblast cells. Biochip Journal, 2010, 4, 230-236.	2.5	93
48	Recent developments in PDMS surface modification for microfluidic devices. Electrophoresis, 2010, 31, 2-16.	1.3	692
49	Micropatterned Polymer Surfaces and Cellular Response of <i>Dictyostelium</i> Engineering Materials, 2010, 12, 405-411.	1.6	1
50	Nanoscale surface engineering of PDMS by embedding vertical nanosheets of materials. Microelectronic Engineering, 2010, 87, 1431-1434.	1.1	8
51	A paramagnetic implant containing lithium naphthalocyanine microcrystals for high-resolution biological oximetry. Journal of Magnetic Resonance, 2010, 203, 185-189.	1.2	21
52	Plasma etching of different polydimethylsiloxane elastomers, effects from process parameters and elastomer composition. Microelectronic Engineering, 2010, 87, 67-71.	1.1	11
53	Long term hydrophilic coating on poly(dimethylsiloxane) substrates for microfluidic applications. Applied Surface Science, 2010, 257, 451-457.	3.1	31
54	An Effective Liftâ€Off Method for Patterning Highâ€Density Gold Interconnects on an Elastomeric Substrate. Small, 2010, 6, 2847-2852.	5.2	44
55	Demonstration of Cancer Cell Migration Using a Novel Microfluidic Device. Journal of Nanotechnology in Engineering and Medicine, 2010, 1, .	0.8	5

#	ARTICLE	IF	CITATIONS
56	PDMS surface modification in the application of waveguide claddings for evanescent field sensing. Proceedings of SPIE, 2010, , .	0.8	0
57	Packaging for Bio-micro-electro-mechanical Systems (BioMEMS) and Microfluidic Chips. , 2010, , 505-563.		2
58	Flexible, Adhesive, and Biocompatible Bragg Mirrors Based on Polydimethylsiloxane Infiltrated Nanoparticle Multilayers. Chemistry of Materials, 2010, 22, 3909-3915.	3.2	47
59	Multilevel Self-Aligned Microcontact Printing System. Langmuir, 2010, 26, 16163-16170.	1.6	8
60	Femtosecond laser micromachining of fused silica molds. Optics Express, 2010, 18, 21826.	1.7	28
61	A novel PDMS based capacitive pressure sensor. , 2010, , .		17
62	Fabricating Super-hydrophobic Polydimethylsiloxane Surfaces by a Simple Filler-Dissolved Process. Japanese Journal of Applied Physics, 2010, 49, 127101.	0.8	3
63	Nano-Bio- Electronic, Photonic and MEMS Packaging. , 2010, , .		38
64	Simple surface modification of poly(dimethylsiloxane) for DNA hybridization. Biomicrofluidics, 2010, 4, 046504.	1.2	7
65	Microfluidic dissolved oxygen gradient generator biochip as a useful tool in bacterial biofilm studies. Lab on A Chip, 2010, 10, 2162.	3.1	105
66	A microfluidic device for continuous cancer cell culture and passage with hydrodynamic forces. Lab on A Chip, 2010, 10, 1807.	3.1	28
67	Structured metal films on silicone elastomers. Journal of Materials Chemistry, 2010, 20, 8548.	6.7	10
68	Microplasma patterning of bonded microchannels using high-precision "injected―electrodes. Lab on A Chip, 2011, 11, 541-544.	3.1	50
69	Bionic design of microjoint for minimally invasive surgical instrument. , 2011, , .		0
70	A microfluidic platform for high-sensitivity, real-time drug screening on C. elegans and parasitic nematodes. Lab on A Chip, 2011, 11, 2385.	3.1	78
71	Extreme Hardening of PDMS Thin Films Due to High Compressive Strain and Confined Thickness. Langmuir, 2011, 27, 8470-8477.	1.6	51
72	Molecular Motion of Amorphous Silicone Polymers. Journal of Physical Chemistry B, 2011, 115, 2831-2835.	1.2	8
73	Surface Dynamics of Amorphous Polymers Used for High-Voltage Insulators. Journal of Physical Chemistry B, 2011, 115, 13508-13512.	1.2	6

#	Article	IF	Citations
74	Additive Processes for Polymeric Materials. MEMS Reference Shelf, 2011, , 193-271.	0.6	12
75	Inductive Power Link for a Wireless Cortical Implant With Two-Body Packaging. IEEE Sensors Journal, 2011, 11, 2825-2833.	2.4	49
76	Paper-based piezoresistive MEMS sensors. Lab on A Chip, 2011, 11, 2189.	3.1	212
77	Rapid prototyping of poly(dimethoxysiloxane) dot arrays by dip-pen nanolithography. Chemical Science, 2011, 2, 211-215.	3.7	31
78	Thermoplastic elastomers for microfluidics: Towards a high-throughput fabrication method of multilayered microfluidic devices. Lab on A Chip, 2011, 11, 3193.	3.1	78
79	Biological Microelectromechanical Systems (BioMEMS) Devices. , 2011, , 257-276.		5
80	Selective functionalisation of PDMS-based photonic lab on a chip for biosensing. Analyst, The, 2011, 136, 3496.	1.7	30
81	Cell Lysis Techniques in Lab-on-a-Chip Technology. , 2011, , 942-965.		0
82	Mechanical properties of an artificial vascularized human skin. Proceedings of SPIE, 2011, , .	0.8	3
83	A microfluidic device with fluorimetric detection for intracellular components analysis. Biomedical Microdevices, 2011, 13, 431-440.	1.4	11
84	Does drainage hole size influence adhesion on ventricular catheters?. Child's Nervous System, 2011, 27, 1221-1232.	0.6	42
85	Bio-functionalisation of polydimethylsiloxane with hyaluronic acid and hyaluronic acid – Collagen conjugate for neural interfacing. Biomaterials, 2011, 32, 4714-4724.	5.7	60
86	Dielectric elastomer unimorph using flexible electrodes of electrolessly deposited (ELD) silver. Sensors and Actuators A: Physical, 2011, 169, 234-241.	2.0	38
87	Study on 172â€nm vacuum ultraviolet light surface modifications of polydimethylsiloxane for micro/nanofluidic applications. Surface and Interface Analysis, 2011, 43, 1271-1276.	0.8	24
88	Photocatalytic reaction using novel inorganic polymer derived packed bed microreactor with modified TiO2 microbeads. Chemical Engineering Journal, 2011, 167, 666-670.	6.6	24
89	Plasma etching of polydimethylsiloxane: Effects from process gas composition and dc self-bias voltage. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29,	0.6	6
90	Design and fabrication of insect-inspired composite wings for MAV application using MEMS technology. Journal of Micromechanics and Microengineering, 2011, 21, 125020.	1.5	36
91	Friction, adhesion and wear properties of PDMS films on silicon sidewalls. Journal of Micromechanics and Microengineering, 2011, 21, 105013.	1.5	30

#	ARTICLE	IF	Citations
92	Fabrication and characterisation of an artificial vascularised human skin. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 253-254.	0.9	O
93	Surface Modification of PDMS Based Microfluidic Systems by Tensides. Materials Science Forum, 0, 729, 361-366.	0.3	6
94	Leaf beetle attachment on wrinkles: isotropic friction on anisotropic surfaces. Journal of Experimental Biology, 2012, 215, 1975-1982.	0.8	40
95	Tunable wetting behavior of nanostructured poly(dimethylsiloxane) by plasma combination treatments. Applied Physics Letters, 2012, 101, .	1.5	19
96	Fabrication and Characterization of Stretchable PDMS Structures Doped With Au Nanoparticles. Molecular Crystals and Liquid Crystals, 2012, 558, 22-27.	0.4	6
97	Soft and flexible antennas on permittivity adjustable PDMS substrates. , 2012, , .		48
98	Investigation of low-pressure adhesion performance of mushroom shaped biomimetic dry adhesives. Journal of Adhesion Science and Technology, 2012, 26, 2641-2652.	1.4	40
99	Implantable wireless microcoils for 7Tesla Magnetic Resonance Imaging of the rat brain: Optimization of the PDMS packaging. , 2012, , .		2
100	Fabrication and Packaging of Flexible Polymeric Microantennae for in Vivo Magnetic Resonance Imaging. Polymers, 2012, 4, 656-673.	2.0	17
101	Surface Treatment of Polymers for the Fabrication of All-Polymer Microfluidic Devices., 2012,,.		0
102	Low abundances of synthetics lipids in phantoms. , 2012, , .		0
103	Entropic nanothermodynamic potential from molecular trapping within photon induced nano-voids in photon processed PDMS layers. Soft Matter, 2012, 8, 5561.	1.2	9
104	Pervaporation of butanol/water mixtures using siloxane polymer/ceramic composite membranes. Desalination and Water Treatment, 2012, 48, 17-26.	1.0	21
105	Substrate Rigidity Regulates Human T Cell Activation and Proliferation. Journal of Immunology, 2012, 189, 1330-1339.	0.4	230
106	Opportunities with Fabric Composites as Unique Flexible Substrates. ACS Applied Materials & Samp; Interfaces, 2012, 4, 6640-6645.	4.0	16
107	Improving electrochemical performance of flexible thin film electrodes with micropillar array structures. Measurement Science and Technology, 2012, 23, 125701.	1.4	25
108	Pressure and partial wetting effects on superhydrophobic friction reduction in microchannel flow. Physics of Fluids, 2012, 24, .	1.6	51
109	Effect of softness of polydimethylsiloxane on the hydrophobicity of pillar-like patterned surfaces. Soft Matter, 2012, 8, 1079-1086.	1.2	21

#	Article	IF	CITATIONS
110	l-3,4-dihydroxyphenylalanine-collagen modified PDMS surface for controlled cell culture. Journal of Materials Chemistry, 2012, 22, 10763.	6.7	20
111	Plastic-Syringe Induced Silicone Contamination in Organic Photovoltaic Fabrication: Implications for Small-Volume Additives. ACS Applied Materials & Samp; Interfaces, 2012, 4, 2831-2835.	4.0	18
112	The influence of polydimethylsiloxane curing ratio on capillary pressure in microfluidic devices. Applied Surface Science, 2012, 258, 8032-8039.	3.1	11
113	Thermo-responsive poly(N-isopropylacrylamide) grafted onto microtextured poly(dimethylsiloxane) for aligned cell sheet engineering. Colloids and Surfaces B: Biointerfaces, 2012, 99, 108-115.	2.5	41
114	A new UV-curing elastomeric substrate for rapid prototyping of microfluidic devices. Journal of Micromechanics and Microengineering, 2012, 22, 035006.	1.5	21
115	Nitric Oxide (NO)â€Induced Death of <i>Gram</i> å€Negative Bacteria from a Lightâ€Controlled NOâ€Releasing Platform. Chemistry and Biodiversity, 2012, 9, 1829-1839.	1.0	17
116	Capture, isolation and release of cancer cells with aptamer-functionalized glass bead array. Lab on A Chip, 2012, 12, 4693.	3.1	108
117	Surface treatment of polymers for the fabrication of all-polymer MEMS devices. Sensors and Actuators A: Physical, 2012, 187, 43-49.	2.0	26
118	Implanted, inductively-coupled, radiofrequency coils fabricated on flexible polymeric material: Application to in vivo rat brain MRI at 7T. Journal of Magnetic Resonance, 2012, 224, 61-70.	1,2	24
119	High yield transfer of ordered nanowire arrays into transparent flexible polymer films. Nanotechnology, 2012, 23, 495305.	1.3	21
120	Gold nanoparticles reduced is in situe in an dispersed in polymer thin films: optical and thermal properties. Nanotechnology, 2012, 23, 375703.	1.3	50
121	Flexible Substrate Antennas. International Journal of Antennas and Propagation, 2012, 2012, 1-2.	0.7	11
122	Performance of High-Permittivity Ceramic-Polymer Composite as a Substrate for UHF RFID Tag Antennas. International Journal of Antennas and Propagation, 2012, 2012, 1-8.	0.7	25
123	Elastomer Application in Microsystem and Microfluidics. , 2012, , .		2
124	Study of hydrophilicity and stability of chemically modified PDMS surface using piranha and KOH solution. Surface and Interface Analysis, 2012, 44, 62-69.	0.8	108
125	A dry and flexible electrode for continuous-EEG monitoring using silver balls based polydimethylsiloxane (PDMS). Biomedical Engineering Letters, 2012, 2, 18-23.	2.1	7
126	A highly reliable integrated PDMS interconnector with a long cast flange for microfluidic systems. Microsystem Technologies, 2012, 18, 723-730.	1.2	8
127	Screening of rat mesenchymal stem cell behaviour on polydimethylsiloxane stiffness gradients. Acta Biomaterialia, 2012, 8, 519-530.	4.1	126

#	Article	IF	CITATIONS
128	Network-wide integration of stem cell-derived neurons and mouse cortical neurons using microfabricated co-culture devices. BioSystems, 2012, 107, 1-8.	0.9	35
129	Structured PDMS Chambers for Enhanced Human Neuronal Cell Activity on MEA Platforms. Journal of Bionic Engineering, 2012, 9, 1-10.	2.7	29
130	Fabrication of metallic patterns on polydimethylsiloxane using transfer technology: application to MRI microcoils. Micro and Nano Letters, 2012, 7, 519.	0.6	7
131	Surface modification for PDMSâ€based microfluidic devices. Electrophoresis, 2012, 33, 89-104.	1.3	263
132	Visualization of droplet merging in microchannels using micro-PIV. Experiments in Fluids, 2012, 52, 235-245.	1.1	25
133	High-Performance Flexible Waveguiding Photovoltaics. Scientific Reports, 2013, 3, 2244.	1.6	33
134	<i>In situ</i> characterization of PDMS in SOI-MEMS. Journal of Micromechanics and Microengineering, 2013, 23, 045003.	1.5	18
135	Synthesis of macroporous poly(dimethylsiloxane) scaffolds for tissue engineering applications. Journal of Biomaterials Science, Polymer Edition, 2013, 24, 1041-1056.	1.9	58
136	Flexible, transparent electronics for biomedical applications. , 2013, , .		2
137	A comparison of polymer substrates for photolithographic processing of flexible bioelectronics. Biomedical Microdevices, 2013, 15, 925-939.	1.4	50
138	Selective stamp bonding of PDMS microfluidic devices to polymer substrates for biological applications. Sensors and Actuators A: Physical, 2013, 193, 186-192.	2.0	33
139	Single-step fabrication of superhydrophobic micro/nano dual-scale PDMS film replicated from ultra-low-surface-energy mold. , 2013, , .		1
140	Micropatterning Alginate Substrates for In Vitro Cardiovascular Muscle on a Chip. Advanced Functional Materials, 2013, 23, 3738-3746.	7.8	103
141	UV initiated thiol–ene chemistry: a facile and modular synthetic methodology for the construction of functional 3D networks with tunable properties. Journal of Materials Chemistry A, 2013, 1, 13732.	5.2	51
142	Electro and pressure tunable cholesteric liquid crystal devices based on ion-implanted flexible substrates. Journal of Materials Chemistry C, 2013, 1, 7798.	2.7	9
143	RFID Tags for Challenging Environments: Flexible High-Dielectric Materials and Ink-Jet Printing Technology for Compact Platform Tolerant RFID Tags. IEEE Microwave Magazine, 2013, 14, 26-35.	0.7	8
144	An organotypic uniaxial strain model using microfluidics. Lab on A Chip, 2013, 13, 432-442.	3.1	44
145	A Closed-Loop Remote Powering Link for Wireless Cortical Implants. IEEE Sensors Journal, 2013, 13, 3226-3235.	2.4	33

#	Article	IF	Citations
146	Precise determination of the Poisson ratio in soft materials with 2D digital image correlation. Soft Matter, 2013, 9, 6037.	1.2	161
147	Contact Creep Behavior of Polydimethylsiloxane and Influence of Load, Tip Size, and Crosslink Density. Tribology Letters, 2013, 49, 291-299.	1.2	6
148	Unexpected behavior of polydimethylsiloxane/poly(2-(dimethylamino)ethyl acrylate) (charged) amphiphilic block copolymers in aqueous solution. Polymer Chemistry, 2013, 4, 2140.	1.9	54
149	Molecular level studies of polymer behaviors at the water interface using sum frequency generation vibrational spectroscopy. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 311-328.	2.4	53
150	Feature development on prepatterned elastomer surfaces upon ion implantation. Microelectronic Engineering, 2013, 110, 346-349.	1.1	0
151	Adsorption state of fibronectin on poly(dimethylsiloxane) surfaces with varied stiffness can dominate adhesion density of fibroblasts. Acta Biomaterialia, 2013, 9, 5493-5501.	4.1	68
152	Measuring of the hardly measurable: adhesion properties of anti-adhesive surfaces. Applied Physics A: Materials Science and Processing, 2013, 111, 183-189.	1.1	26
153	Fabrication and Characterization of Stable Hydrophilic Microfluidic Devices Prepared via the in Situ Tertiary-Amine Catalyzed Michael Addition of Multifunctional Thiols to Multifunctional Acrylates. ACS Applied Materials & Devices amp; Interfaces, 2013, 5, 1643-1655.	4.0	29
154	Self-templating amphiphilic polysiloxanes to design nanostructured silica-based architectures. Chemical Communications, 2013, 49, 5168.	2.2	8
155	Measurement of thermal properties of magnetic nanoparticles using infrared thermal microscopy. Infrared Physics and Technology, 2013, 57, 76-80.	1.3	13
156	Fabrication of carbon nanotube thin films on flexible substrates by spray deposition and transfer printing. Carbon, 2013, 61, 72-79.	5.4	93
157	Microfluidic Chip With Integrated a-Si:H Photodiodes for Chemiluminescence-Based Bioassays. IEEE Sensors Journal, 2013, 13, 2595-2602.	2.4	38
158	Sacrificial layer technique for axial force post assay of immature cardiomyocytes. Biomedical Microdevices, 2013, 15, 171-181.	1.4	35
159	Fabrication of tunable wetting PDMS membrane by nanostructuring and plasma treatment. , 2013, , .		0
160	PDMS, A Robust Casing for Flexible W-BAN Antennas [EurAAP Corner]. IEEE Antennas and Propagation Magazine, 2013, 55, 287-297.	1.2	41
161	Elastomeric Negative Acoustic Contrast Particles for Affinity Capture Assays. Analytical Chemistry, 2013, 85, 2208-2215.	3.2	35
162	Enhanced Skin Adhesive Patch with Modulusâ€Tunable Composite Micropillars. Advanced Healthcare Materials, 2013, 2, 109-113.	3.9	139
163	Solidâ€state bonding of silicone elastomer to glass by vacuum oxygen plasma, atmospheric plasma, and vacuum ultraviolet light treatment. Surface and Interface Analysis, 2013, 45, 817-822.	0.8	11

#	Article	IF	CITATIONS
164	Impact of Sterilization Procedures on the Stability of Parylene Based Flexible Multilayer Structures. Biomedizinische Technik, 2013, 58 Suppl $1$ , .	0.9	4
165	Studies of the Dimensional Effects of SU-8 and PDMS Pillar Arrays on Hydrophobicity. , 2013, , .		0
166	Molding topologically-complex 3D polymer microstructures from femtosecond laser machined glass. Optical Materials Express, 2013, 3, 1428.	1.6	20
167	Thermal Properties of Multiwalled Carbon Nanotubes-Alumina (MWCNT-Al <sub>2</sub> O <sub>3</sub> ) Hybrid Filled Silicone Rubber Composites. Advanced Materials Research, 2013, 844, 330-333.	0.3	2
168	Electrochemical Biosensors for On-Chip Detection of Oxidative Stress from Cells. Methods in Enzymology, 2013, 526, 107-121.	0.4	14
169	Influence of Processing on the Properties of Carbon Nanotubes/Alumina Hybrid Compound Filled PDMS Composites. Advanced Materials Research, 2013, 812, 198-203.	0.3	1
170	Fabrication of Centimeter Long, Ultra-Low Aspect Ratio Nanochannel Networks in Borosilicate Glass Substrates. Journal of Nanotechnology in Engineering and Medicine, 2013, 4, .	0.8	13
171	Materials and methods for the microfabrication of microfluidic biomedical devices. , 2013, , 3-62.		9
172	Development of a patient specific artificial tracheal prosthesis: Design, mechanical behavior analysis and manufacturing., 2013, 2013, 6236-9.		7
173	Surface tension-driven autonomous tweezers using PDMS sheets., 2013,,.		0
174	Construction of an <i>in vitro</i> model system for the anatomical reentry phenomenon of cardiac tissues by using microfabrication techniques. IEEJ Transactions on Electrical and Electronic Engineering, 2013, 8, 308-309.	0.8	0
175	A novel copper/polydimethiylsiloxane nanocomposite for copperâ€containing intrauterine contraceptive devices. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101, 1428-1436.	1.6	18
176	Surface coatings for microfluidic-based biomedical devices. , 2013, , 63-99.		11
177	Circadian rhythms in neurospora crassa on a microfluidic device for real-time gas perturbations. , 2013, , .		2
178	Fabrication of a flexible penetrating microelectrode array for use on curved surfaces of neural tissues. Journal of Micromechanics and Microengineering, 2013, 23, 125010.	1.5	28
179	Crack-free and reliable lithographical patterning methods on PDMS substrate. Journal of Micromechanics and Microengineering, 2013, 23, 125035.	1.5	34
180	Amorphous silicon balanced photodiode for microfluidic applications. Proceedings of SPIE, 2013, , .	0.8	1
181	Macroporous Three-Dimensional PDMS Scaffolds for Extrahepatic Islet Transplantation. Cell Transplantation, 2013, 22, 1123-1135.	1.2	112

#	ARTICLE	IF	CITATIONS
182	Fabrication of Topologically-Complex 3D Microstructures by Femtosecond Laser Machining and Polymer Molding. MATEC Web of Conferences, 2013, 8, 05008.	0.1	0
183	Emergence of Bursting Activity in Connected Neuronal Sub-Populations. PLoS ONE, 2014, 9, e107400.	1.1	62
184	Influence of Temperature on the Frictional Properties of Water-Lubricated Surfaces. Lubricants, 2014, 2, 177-192.	1.2	9
186	Formation of thin, flexible, conducting films composed of multilayer graphene. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 1357-1361.	0.1	7
187	Design and development of a flexible and elastic UWB wearable antenna on PDMS substrate., 2014, , .		11
188	Adhesion promotion between PDMS and glass by oxygen plasma pre-treatment. Journal of Adhesion Science and Technology, 2014, 28, 1046-1054.	1.4	64
189	NUMERICAL STUDY OF DIELECTROPHORESIS FORCE IN THE ISOLATED ELECTRODE: A COMPARATIVE APPROACH. Biomedical Engineering - Applications, Basis and Communications, 2014, 26, 1450062.	0.3	0
190	Microfabrication technologies used for creating smart devices for industrial applications. , 2014, , 281-304.		1
191	Mechanical characterization of bulk Sylgard 184 for microfluidics and microengineering. Journal of Micromechanics and Microengineering, 2014, 24, 035017.	1.5	1,146
192	Fabrication of optical waveguide structures based on PDMS using photoresist fibers. , 2014, , .		1
193	An integrated passive-flow microfluidic biosensor with organic photodiodes for ultra-sensitive pathogen detection in water., 2014, 2014, 4411-4.		4
194	Monolithically Integrated Optical Microfluidic Chip by Single Step Lithography and Etching for Detection of Fluorophore Tagged Recombinant Bovine Somatotropin (rbST). Journal of the Electrochemical Society, 2014, 161, B3155-B3159.	1.3	7
195	Effect of plasma treatment on the surface properties of polydimethylsiloxane. Journal of Applied Polymer Science, 2015, 132, .	1.3	11
196	Large area micropatterning of cells on polydimethylsiloxane surfaces. Journal of Biological Engineering, 2014, 8, 24.	2.0	17
197	Effect of mechanical stress on optical properties of polydimethylsiloxane. Optical Materials, 2014, 36, 965-970.	1.7	34
198	Preparation and characterization of siloxane composite membranes for n-butanol concentration from ABE solution by pervaporation. Journal of Membrane Science, 2014, 456, 1-10.	4.1	42
199	Quantitative analysis of spherical microbubble cavity array formation in thermally cured polydimethylsiloxane for use in cell sorting applications. Biomedical Microdevices, 2014, 16, 55-67.	1.4	12
200	Wellâ€Ordered and High Density Coordinationâ€Type Bonding to Strengthen Contact of Silver Nanowires on Highly Stretchable Polydimethylsiloxane. Advanced Functional Materials, 2014, 24, 3276-3283.	7.8	64

#	Article	IF	CITATIONS
201	Stretchable Silverâ€Zinc Batteries Based on Embedded Nanowire Elastic Conductors. Advanced Energy Materials, 2014, 4, 1301396.	10.2	127
202	Hydrophobic structural color films with bright color and tunable stop-bands. Dyes and Pigments, 2014, 104, 146-150.	2.0	41
203	Clinical EPR. Academic Radiology, 2014, 21, 197-206.	1.3	74
204	The use of polyurethane as an elastomer in thermoplastic microfluidic devices and the study of its creep properties. Electrophoresis, 2014, 35, 289-297.	1.3	23
205	An overview of W-BAN antennas designed at LEMA. , 2014, , .		0
206	Transparent and Flexible Supercapacitors with Single Walled Carbon Nanotube Thin Film Electrodes. ACS Applied Materials & Diterfaces, 2014, 6, 15434-15439.	4.0	131
207	Technology for the Preparation of PDMS Optical Fibers and Some Fiber Structures. IEEE Photonics Technology Letters, 2014, 26, 1446-1449.	1.3	44
208	Design and characterization of a multiplexed capillary-driven lab-on-chip for water quality analysis. , 2014, , .		0
209	A multi-scale PDMS fabrication strategy to bridge the size mismatch between integrated circuits and microfluidics. Lab on A Chip, 2014, 14, 4552-4558.	3.1	29
210	Stimuli-Responsive Fluorescence of AIE Elastomer Based on PDMS and Tetraphenylethene. Macromolecules, 2014, 47, 6382-6388.	2.2	64
211	Droplets-based microextraction assisted SPME for GC-MS analysis of polar compounds such as clopyralid in water. Analytical Methods, 2014, 6, 6571-6576.	1.3	2
212	Origami-inspired active structures: a synthesis and review. Smart Materials and Structures, 2014, 23, 094001.	1.8	332
213	Preparation and validation of low cost microfluidic chips using a shrinking approach. Lab on A Chip, 2014, 14, 4007-4016.	3.1	13
214	Lubrication of soft and hard interfaces with thermo-responsive F127 hydrogel. Polymer, 2014, 55, 5708-5717.	1.8	7
215	Hybrid Self-Healing Matrix Using Core–Shell Nanofibers and Capsuleless Microdroplets. ACS Applied Materials & Samp; Interfaces, 2014, 6, 10461-10468.	4.0	83
216	A cost-effective two-step method for enhancing the hydrophilicity of PDMS surfaces. Biochip Journal, 2014, 8, 28-34.	2.5	11
217	Optimization of 3-D organotypic primary colonic cultures for organ-on-chip applications. Journal of Biological Engineering, 2014, 8, 9.	2.0	30
218	Microstructured polydimethylsiloxane membranes for peripheral nerve regeneration. Microelectronic Engineering, 2014, 124, 26-29.	1.1	7

#	Article	IF	CITATIONS
219	PEGylation of magnetic poly(glycidyl methacrylate) microparticles for microfluidic bioassays. Materials Science and Engineering C, 2014, 40, 308-315.	3.8	15
220	Effect of ultraviolet/ozone treatment on the surface and bulk properties of poly(dimethyl siloxane) and poly(vinylmethyl siloxane) networks. Polymer, 2014, 55, 3107-3119.	1.8	59
221	Stable Biochemically Micro-patterned Hydrogel Layers Control Specific Cell Adhesion and Allow Long Term Cyclic Tensile Strain Experiments. Macromolecular Bioscience, 2014, 14, 1547-1555.	2.1	7
222	Characterization of MEMS Materials Using Laser Micromachine. Applied Mechanics and Materials, 0, 754-755, 612-616.	0.2	0
223	Cloning SU8 silicon masters using epoxy resins to increase feature replicability and production for cell culture devices. Biomicrofluidics, 2015, 9, 036502.	1.2	12
224	Design, Surface Treatment, Cellular Plating, and Culturing of Modular Neuronal Networks Composed of Functionally Inter-connected Circuits. Journal of Visualized Experiments, 2015, , .	0.2	6
225	Impedance Spectroscopic Characterisation of Porosity in 3D Cell Culture Scaffolds with Different Channel Networks. Electroanalysis, 2015, 27, 193-199.	1.5	16
226	Surface chemistry gradients on silicone elastomers for highâ€throughput modulation of cellâ€adhesive interfaces. Journal of Biomedical Materials Research - Part A, 2015, 103, 2066-2076.	2.1	8
227	Photo-hardenable and patternable PDMS/SU-8 hybrid functional material: A smart substrate for flexible systems. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1281-1291.	2.4	9
228	Comparison of the macroscale and microscale tests for measuring elastic properties of polydimethylsiloxane. Journal of Applied Polymer Science, 2015, 132, .	1.3	27
229	Miniaturized stacked implant antenna design at ISM band with biocompatible characteristics. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2015, 34, 1270-1285.	0.5	5
230	A Simple and Reliable PDMS and SU-8 Irreversible Bonding Method and Its Application on a Microfluidic-MEA Device for Neuroscience Research. Micromachines, 2015, 6, 1923-1934.	1.4	39
231	Patient-Specific Carbon Nanocomposite Tracheal Prosthesis. International Journal of Artificial Organs, 2015, 38, 31-38.	0.7	13
232	Self-driven filter-based blood plasma separator microfluidic chip for point-of-care testing. Biofabrication, 2015, 7, 025007.	3.7	50
233	Biologically and Acoustically Compatible Chamber for Studying Ultrasound-Mediated Delivery of Therapeutic Compounds. Ultrasound in Medicine and Biology, 2015, 41, 1927-1937.	0.7	29
234	Localizing fluorophore (centroid) inside a scattering medium by depth perturbation. Journal of Biomedical Optics, 2015, 20, 017003.	1.4	2
235	Effect of wettability and surface roughness on the adhesion properties of collagen on PDMS films treated by capacitively coupled oxygen plasma. Applied Surface Science, 2015, 349, 763-773.	3.1	88
236	Floatable, Self-Cleaning, and Carbon-Black-Based Superhydrophobic Gauze for the Solar Evaporation Enhancement at the Air–Water Interface. ACS Applied Materials & Diterfaces, 2015, 7, 13645-13652.	4.0	316

#	Article	IF	CITATIONS
237	Extended PDMS stiffness range for flexible systems. Sensors and Actuators A: Physical, 2015, 230, 33-39.	2.0	129
238	Development of a catheter functionalized by a polydopamine peptide coating with antimicrobial and antibiofilm properties. Acta Biomaterialia, 2015, 15, 127-138.	4.1	168
239	Polydimethylsiloxane films doped with NdFeB powder: magnetic characterization and potential applications in biomedical engineering and microrobotics. Biomedical Microdevices, 2015, 17, 112.	1.4	21
240	Tunable frequency antenna integrated with microfluidic channel. , 2015, , .		2
241	Sandwich-format 3D printed microfluidic mixers: a flexible platform for multi-probe analysis. Journal of Micromechanics and Microengineering, 2015, 25, 124002.	1.5	16
242	Direct and Repeated Measurement of Heart and Brain Oxygenation Using In Vivo EPR Oximetry. Methods in Enzymology, 2015, 564, 529-552.	0.4	23
243	Enhanced adhesion of polyaniline thin films deposited on polydimethylsiloxane surfaces activated by Ozone treatment and aminosilanization. , $2015,  ,  .$		0
244	Investigation of thermoplastic hot embossing process using soft polydimethylsiloxane (PDMS) micromold. Journal of Mechanical Science and Technology, 2015, 29, 5063-5067.	0.7	10
245	Electrically Conducting PDMS Nanocomposite Using In Situ Reduction of Gold Nanostructures and Mechanical Stimulation of Carbon Nanotubes and Silver Nanoparticles. ECS Journal of Solid State Science and Technology, 2015, 4, S3048-S3052.	0.9	13
246	TiO2 and SiO2 nanoparticles film for cultural heritage: Conservation and consolidation of ceramic artifacts. Surface and Coatings Technology, 2015, 271, 174-180.	2.2	19
247	Controlled fabrication of hierarchically microstructured surfaces via surface wrinkling combined with template replication. Chinese Chemical Letters, 2015, 26, 15-20.	4.8	10
248	Oxidation stiffening of PDMS microposts. Extreme Mechanics Letters, 2015, 3, 17-23.	2.0	3
249	Application of free-standing InP nanowire arrays and their optical properties for resource-saving solar cells. Applied Physics Express, 2015, 8, 012301.	1.1	8
250	Metal–elastomer nanostructures for tunable SERS and easy microfluidic integration. RSC Advances, 2015, 5, 4404-4410.	1.7	40
251	3D printed molds for non-planar PDMS microfluidic channels. Sensors and Actuators A: Physical, 2015, 226, 137-142.	2.0	152
252	Fabrication and Characterization of Deformable Porous Matrices with Controlled Pore Characteristics. Transport in Porous Media, 2015, 107, 79-94.	1.2	8
253	Microfluidic photocatalytic device exploiting PDMS/TiO2 nanocomposite. Applied Surface Science, 2015, 335, 50-54.	3.1	47
254	Mechanical properties of bulk polydimethylsiloxane for microfluidics over a large range of frequencies and aging times. Journal of Micromechanics and Microengineering, 2015, 25, 035009.	1.5	47

#	Article	IF	CITATIONS
255	An oxidized liquid metal-based microfluidic platform for tunable electronic device applications. Lab on A Chip, 2015, 15, 766-775.	3.1	56
256	Fabrication of superhydrophobic thin films on various substrates using SiO <sub>2</sub> nanoparticles coated with polydimethylsiloxane: towards the development of shielding layers for gas sensors. RSC Advances, 2015, 5, 40595-40602.	1.7	24
257	Sterilization of polydimethylsiloxane surface with Chinese herb extract: a new antibiotic mechanism of chlorogenic acid. Scientific Reports, 2015, 5, 10464.	1.6	18
258	A unique in vivo approach for investigating antimicrobial materials utilizing fistulated animals. Scientific Reports, 2015, 5, 11515.	1.6	12
259	Development of a high performance high voltage insulator for power transmission lines from blends of polydimethylsiloxane/ethylene vinyl acetate containing nanosilica. RSC Advances, 2015, 5, 57608-57618.	1.7	28
260	Modulating surface stiffness of polydimethylsiloxane (PDMS) with kiloelectronvolt ion patterning. Journal of Micromechanics and Microengineering, 2015, 25, 065006.	1.5	12
261	Regenerating the cell resistance of micromolded PEG hydrogels. Lab on A Chip, 2015, 15, 2073-2089.	3.1	19
262	Passive microfluidic chamber for long-term imaging of axon guidance in response to soluble gradients. Lab on A Chip, 2015, 15, 2781-2789.	3.1	56
263	Thin-film dielectric elastomer sensors to measure the contraction force of smooth muscle cells. Proceedings of SPIE, 2015, , .	0.8	4
264	Small diameter microchannel of PDMS and complex three-dimensional microchannel network. Materials & Design, 2015, 81, 82-86.	5.1	29
265	Dual Ionic and Photo-Crosslinked Alginate Hydrogels for Micropatterned Spatial Control of Material Properties and Cell Behavior. Bioconjugate Chemistry, 2015, 26, 1339-1347.	1.8	60
266	Positive and negative bioimprinted polymeric substrates: new platforms for cell culture. Biofabrication, 2015, 7, 025002.	3.7	27
267	Viscoelastic and optical properties of four different PDMS polymers. Journal of Micromechanics and Microengineering, 2015, 25, 097002.	1.5	46
268	In vitro friction testing of contact lenses and human ocular tissues: Effect of proteoglycan 4 (PRG4). Tribology International, 2015, 89, 27-33.	3.0	46
269	Photomechanical response of composites based on PDMS and carbon soot nanoparticles under IR laser irradiation. Optical Materials Express, 2015, 5, 1792.	1.6	21
270	Ultra-stretchable and skin-mountable strain sensors using carbon nanotubes–Ecoflex nanocomposites. Nanotechnology, 2015, 26, 375501.	1.3	646
271	Full silicone interpenetrating bi-networks with different organic groups attached to the silicon atoms. Polymer, 2015, 77, 312-322.	1.8	24
272	Part-Per-Trillion Level Detection of Microcystin-LR Using a Periodic Nanostructure. IEEE Sensors Journal, 2015, 15, 1366-1371.	2.4	7

#	Article	IF	CITATIONS
273	Flexible Structures Based on a Short Pitch Cholesteric Liquid Crystals. Molecular Crystals and Liquid Crystals, 2015, 619, 35-41.	0.4	3
274	Portable polarimetric fiber stress sensor system for visco-elastic and biomimetic material analysis. Applied Physics Letters, 2015, 106, 191105.	1.5	7
275	Flexible luminescent waveguiding photovoltaics exhibiting strong scattering effects from the dye aggregation. Nano Energy, 2015, 15, 729-736.	8.2	23
276	Preparation of anti-fouling silicone elastomers by covalent immobilization of carboxybetaine. RSC Advances, 2015, 5, 88456-88463.	1.7	32
277	Photoactivated acidochromic elastomeric films for on demand acidic vapor sensing. Journal of Materials Chemistry A, 2015, 3, 22441-22447.	5.2	44
278	Microfluidic reflow pumps. Biomicrofluidics, 2015, 9, 044104.	1.2	3
279	Next generation bioelectronics: Advances in fabrication coupled with clever chemistries enable the effective integration of biomaterials and organic conductors. APL Materials, 2015, 3, 014913.	2.2	19
280	Fewer Bacteria Adhere to Softer Hydrogels. ACS Applied Materials & Interfaces, 2015, 7, 19562-19569.	4.0	104
281	Rapid, culture-independent, optical diagnostics of centrifugally captured bacteria from urine samples. Biomicrofluidics, 2015, 9, 044118.	1.2	32
282	Hierarchical line-defect patterns in wrinkled surfaces. Soft Matter, 2015, 11, 3332-3339.	1.2	46
283	Design and fabrication of a flexible MEMS-based electro-mechanical sensor array for breast cancer diagnosis. Journal of Micromechanics and Microengineering, 2015, 25, 075025.	1.5	46
284	Highly hydrophilic microfluidic device prototyping using a novel poly(dimethylsiloxane)-based polymeric mix. RSC Advances, 2015, 5, 7423-7425.	1.7	5
285	Bulk dispersion of singleâ€walled carbon nanotubes in silicones using diblock copolymers. Journal of Polymer Science Part A, 2015, 53, 265-273.	2.5	5
286	Flexible Organic Electronics in Biology: Materials and Devices. Advanced Materials, 2015, 27, 7493-7527.	11.1	353
287	Surface modification of <scp>PDMS</scp> microfluidic devices by controlled sulfuric acid treatment and the application in chip electrophoresis. Electrophoresis, 2015, 36, 449-456.	1.3	23
288	Computer aided design and experiment of a novel patient-specific carbon nanocomposite voice prosthesis. CAD Computer Aided Design, 2015, 59, 109-118.	1.4	8
289	Surface modification of SUâ€8 for enhanced cell attachment and proliferation within microfluidic chips. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 473-484.	1.6	15
291	Investigation on artificial blood vessels prepared from bacterial cellulose. Materials Science and Engineering C, 2015, 46, 111-117.	3.8	129

#	Article	IF	CITATIONS
292	Endothelial cell responses in terms of adhesion, proliferation, and morphology to stiffness of polydimethylsiloxane elastomer substrates. Journal of Biomedical Materials Research - Part A, 2015, 103, 2203-2213.	2.1	58
293	PDMS microfluidics developed for polymer based photonic biosensors. Microsystem Technologies, 2015, 21, 581-590.	1.2	14
294	Photothermal Effects and Applications of Polydimethylsiloxane Membranes with Carbon Nanoparticles. Polymers, 2016, 8, 84.	2.0	28
295	Integration of a Thin Film PDMS-Based Capacitive Sensor for Tactile Sensing in an Electronic Skin. Journal of Sensors, 2016, 2016, 1-7.	0.6	33
296	Synthesis and Characterization of Polydimethylsiloxane end-Modified Polystyrene from Poly(Styrene) Tj ETQq0 0	0 ggBT /O	verlock 10 Tf
297	A Novel Microfluidic Cell Co-culture Platform for the Study of the Molecular Mechanisms of Parkinson's Disease and Other Synucleinopathies. Frontiers in Neuroscience, 2016, 10, 511.	1.4	43
298	Structural Properties and Antifungal Activity against Candida albicans Biofilm of Different Composite Layers Based on Ag/Zn Doped Hydroxyapatite-Polydimethylsiloxanes. Polymers, 2016, 8, 131.	2.0	42
299	On-Demand Isolation and Manipulation of C. elegans by In Vitro Maskless Photopatterning. PLoS ONE, 2016, 11, e0145935.	1.1	6
300	Semi-contact-writing of polymer molds for prototyping PDMS chips with low surface roughness, sharp edges and locally varying channel heights. Journal of Micromechanics and Microengineering, 2016, 26, 045018.	1.5	7
301	Highly cytocompatible and flexible three-dimensional graphene/polydimethylsiloxane composite for culture and electrochemical detection of L929 fibroblast cells. Journal of Biomaterials Applications, 2016, 31, 230-240.	1.2	8
302	Surface Treatment of Polydimethylsiloxane (PDMS) with Atmospheric Pressure Rotating Plasma Jet. Modeling and Optimization of the Surface Treatment Conditions. Plasma Processes and Polymers, 2016, 13, 459-469.	1.6	30
303	Adhesion of MRCâ€5 and A549 cells on poly(dimethylsiloxane) surface modified by proteins. Electrophoresis, 2016, 37, 536-544.	1.3	24
304	Ultrathin Photoâ€Oxidized Siloxane Layer for Extreme Wettability: Antiâ€Fogging Layer for Spectacles. Advanced Materials Interfaces, 2016, 3, 1500725.	1.9	11
305	The moisture outgassing kinetics of a silica reinforced polydimethylsiloxane. Journal of Chemical Physics, 2016, 145, 114905.	1.2	8
306	PDMS droplet formation and characterization by hydrodynamic flow focusing technique in a PDMS square microchannel. Journal of Micromechanics and Microengineering, 2016, 26, 105013.	1.5	20
307	Simple surface engineering of polydimethylsiloxane with polydopamine for stabilized mesenchymal stem cell adhesion and multipotency. Scientific Reports, 2016, 5, 18162.	1.6	200
308	Generation of micro-sized PDMS particles by a flow focusing technique for biomicrofluidics applications. Biomicrofluidics, 2016, 10, 014122.	1.2	34
309	Surface micromachining of polydimethylsiloxane for microfluidics applications. Biomicrofluidics, 2016, 10, 054114.	1.2	13

#	Article	IF	Citations
310	Infrared dielectric function of polydimethylsiloxane and selective emission behavior. Applied Physics Letters, 2016, 109, .	1.5	67
311	Transparent biocompatible sensor patches for touch sensitive prosthetic limbs., 2016,,.		11
312	InÂVitro Development of a Mucocutaneous Junction for Lip Reconstruction. Journal of Oral and Maxillofacial Surgery, 2016, 74, 2317-2326.	0.5	12
313	Experimental and theoretical analyses of the age-dependent large-strain behavior of Sylgard 184 (10:1) silicone elastomer. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 60, 425-437.	1.5	75
314	Cationic astringents alter the tribological and rheological properties of human saliva and salivary mucin solutions. Biotribology, 2016, 6, 12-20.	0.9	37
315	From square to circular polymeric microchannels by spin coating technology: a low cost platform for endothelial cell culture. Biofabrication, 2016, 8, 025005.	3.7	29
316	Drag Reduction by Bubble-Covered Surfaces Found in PDMS Microchannel through Depressurization. Langmuir, 2016, 32, 4815-4819.	1.6	29
317	Single bubble dynamics on superheated superhydrophobic surfaces. International Journal of Heat and Mass Transfer, 2016, 99, 521-531.	2.5	25
318	Whole Teflon valves for handling droplets. Lab on A Chip, 2016, 16, 2198-2210.	3.1	16
319	Surface functionalization of biomaterials by radical polymerization. Progress in Materials Science, 2016, 83, 191-235.	16.0	120
320	Synthesis, encapsulation, and performance analysis of large deformation tri-layer polypyrrole actuator. , $2016,  ,  .$		7
321	Synthesis and characterization of flexible thermographic phosphor temperature sensors. Optical Materials, 2016, 60, 50-56.	1.7	9
322	High performance triboelectric nanogenerators with aligned carbon nanotubes. Nanoscale, 2016, 8, 18489-18494.	2.8	107
323	Janus films with stretchable and waterproof properties for wound care and drug delivery applications. RSC Advances, 2016, 6, 79900-79909.	1.7	34
324	A pumpless microfluidic device driven by surface tension for pancreatic islet analysis. Biomedical Microdevices, 2016, 18, 80.	1.4	45
325	Microfluidic synthesis of chiral salen Mn( <scp>ii</scp> ) and Co( <scp>ii</scp> ) complexes containing lysozyme. RSC Advances, 2016, 6, 81862-81868.	1.7	8
326	Brilliant Structurally Colored Films with Invariable Stop-Band and Enhanced Mechanical Robustness Inspired by the Cobbled Road. ACS Applied Materials & Enhanced, 2016, 8, 22585-22592.	4.0	24
327	Separation of azeotropic mixture acetone + hexane by using polydimethylsiloxane membrane. Separation and Purification Technology, 2016, 170, 256-263.	3.9	10

#	Article	IF	Citations
328	Physico-chemical properties of PDMS surfaces suitable as substrates for cell cultures. Applied Surface Science, 2016, 389, 247-254.	3.1	34
329	Implementing oxygen control in chip-based cell and tissue culture systems. Lab on A Chip, 2016, 16, 3394-3414.	3.1	79
330	Elaboration of magneto-thermally recyclable nanosorbents for remote removal of toluene in contaminated water using magnetic hyperthermia. Chemical Engineering Journal, 2016, 302, 725-732.	6.6	23
331	Stable hydrophilic poly(dimethylsiloxane) via glycan surface functionalization. Polymer, 2016, 106, 1-7.	1.8	14
332	Microfluidics for bacterial imaging. Methods in Microbiology, 2016, 43, 69-111.	0.4	16
333	Mechanical characterization of crosslinking effect in polydimethylsiloxane using nanoindentation. Polymer Testing, 2016, 56, 329-336.	2.3	17
334	Increased adhesion of polydimethylsiloxane (PDMS) to acrylic adhesive tape for medical use by surface treatment with an atmospheric pressure rotating plasma jet. Journal Physics D: Applied Physics, 2016, 49, 334001.	1.3	14
335	Challenges and capabilities of conductive polymeric materials for electromechanical stimulation of stem cells: A case study. , 2016, , .		0
336	PDMS microfluidic structures for LOC applications. , 2016, , .		1
337	Oil-Infused Superhydrophobic Silicone Material for Low Ice Adhesion with Long-Term Infusion Stability. ACS Applied Materials & Stability. ACS Applied Materi	4.0	134
338	A fluid collection system for dermal wounds in clinical investigations. Biomicrofluidics, 2016, 10, 024113.	1.2	1
339	PDMSâ€Based Elastomer Tuned Soft, Stretchable, and Sticky for Epidermal Electronics. Advanced Materials, 2016, 28, 5830-5836.	11.1	274
340	3D-printed microfluidic devices. Biofabrication, 2016, 8, 022001.	3.7	259
341	PDMS-coated fiber volatile organic compounds sensors. Applied Optics, 2016, 55, 3543.	2.1	42
342	Microfluidic device fabrication with serigraphy technique. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2016, 230, 1309-1316.	1.5	4
343	Sticky or Slippery Wetting: Network Formation Conditions Can Provide a One-Way Street for Water Flow on Platinum-cured Silicone. ACS Applied Materials & Samp; Interfaces, 2016, 8, 14252-14262.	4.0	30
344	Highâ€performance PDMS membranes for pervaporative removal of VOCs from water: The role of alkyl grafting. Journal of Applied Polymer Science, 2016, 133, .	1.3	12
345	Capacitive flexible pressure sensor: microfabrication process and experimental characterization. Microsystem Technologies, 2016, 22, 465-471.	1.2	10

#	Article	IF	Citations
346	Fabrication of Microfluidic Manifold by Precision Extrusion Deposition and Replica Molding for Cell-Laden Device. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	1.3	17
347	Hetero-cellular prototyping by synchronized multi-material bioprinting for rotary cell culture system. Biofabrication, 2016, 8, 015002.	3.7	24
348	Flexible and fluorophore-doped luminescent solar concentrators based on polydimethylsiloxane. Optics Letters, 2016, 41, 713.	1.7	27
349	Rapid fabrication of angle-independent structurally colored films with a superhydrophobic property. Dyes and Pigments, 2016, 130, 202-208.	2.0	35
350	Nondegradable synthetic polymers for medical devices and implants., 2016,, 33-62.		17
351	Complex shaped ZnO nano- and microstructure based polymer composites: mechanically stable and environmentally friendly coatings for potential antifouling applications. Physical Chemistry Chemical Physics, 2016, 18, 7114-7123.	1.3	60
352	A Dynamic Inflation Test for Soft Materials. Experimental Mechanics, 2016, 56, 759-769.	1.1	14
353	Assessment of PDMS Technology in a MIMO Antenna Array. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 1939-1942.	2.4	45
354	Dimensional effects of polymer pillar arrays on hydrophobicity. Surface Engineering, 2016, 32, 125-131.	1.1	16
355	Facile and cost-effective production of microscale PDMS architectures using a combined micromilling-replica moulding (νMi-REM) technique. Biomedical Microdevices, 2016, 18, 4.	1.4	36
356	Application of reference point indentation for micro-mechanical surface characterization of calcium silicate based dental materials. Biomedical Microdevices, 2016, 18, 25.	1.4	6
357	Effect of cyclic compression and curing agent concentration on the stabilization of mechanical properties of PDMS elastomer. Materials and Design, 2016, 96, 470-475.	3.3	71
358	Quasi In Situ Polymerization To Fabricate Copper Nanowire-Based Stretchable Conductor and Its Applications. ACS Applied Materials & Diterfaces, 2016, 8, 9297-9304.	4.0	44
359	Polymer (PDMS-Fe3O4) magneto-dielectric substrate for a MIMO antenna array. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	11
360	Microdroplet photobioreactor for the photoautotrophic culture of microalgal cells. Analyst, The, 2016, 141, 989-998.	1.7	30
361	Substrate stiffness does affect the fate of human keratinocytes. RSC Advances, 2016, 6, 3539-3551.	1.7	23
362	Review of polymer MEMS micromachining. Journal of Micromechanics and Microengineering, 2016, 26, 013001.	1.5	101
363	Polymeric-Based In Vitro Diagnostic Devices. , 2016, , 15-58.		1

#	Article	IF	Citations
364	In-Vitro Diagnostic Devices. , 2016, , .		3
365	Surface acoustic wave based pumping in a microchannel. Microsystem Technologies, 2017, 23, 1335-1342.	1.2	20
366	Design, fabrication and characterization of low cost printed circuit board based EWOD device for digital microfluidics applications. Microsystem Technologies, 2017, 23, 389-397.	1.2	33
367	Achieving enhanced hydrophobicity of graphene membranes by covalent modification with polydimethylsiloxane. Applied Surface Science, 2017, 404, 230-237.	3.1	32
368	Branch-line coupler using PDMS and Shieldit Super fabric conductor. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	7
369	Materials and devices for transparent stretchable electronics. Journal of Materials Chemistry C, 2017, 5, 2202-2222.	2.7	118
370	Shape-Anisotropic Nickel-PDMS Composites with Uniaxial Magnetic Anisotropy Obtained by Emulsification Under Magnetic Field. Journal of Superconductivity and Novel Magnetism, 2017, 30, 2159-2164.	0.8	3
371	Robust water repellent treatment for woven cotton fabrics with eco-friendly polymers. Chemical Engineering Journal, 2017, 319, 321-332.	6.6	81
372	Promising silicones modified with cationic biocides for the development of antimicrobial medical devices. Materials Science and Engineering C, 2017, 75, 969-979.	3.8	18
373	Effect of electrode geometry on droplet velocity in open EWOD based device for digital microfluidics applications. Journal of Electrostatics, 2017, 87, 11-18.	1.0	36
374	Recent advances in nonbiofouling PDMS surface modification strategies applicable to microfluidic technology. Technology, 2017, 05, 1-12.	1.4	120
375	Development of a permeable phantom for dynamic contrast enhanced (DCE) imaging quality assurance: material characterization and testing. Biomedical Physics and Engineering Express, 2017, 3, 025018.	0.6	3
376	Study of a Hybrid Generator Based on Triboelectric and Electromagnetic Mechanisms. IEEE Sensors Journal, 2017, 17, 3853-3860.	2.4	20
377	Continuous separation, with microfluidics, of the components of a ternary mixture: from vacuum to purge gas pervaporation. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	4
378	High-Performance Piezoresistive Electronic Skin with Bionic Hierarchical Microstructure and Microcracks. ACS Applied Materials & Samp; Interfaces, 2017, 9, 14911-14919.	4.0	134
379	Capillary driven flow in wettability altered microchannel. AICHE Journal, 2017, 63, 4616-4627.	1.8	4
380	miRNA purification with an optimized PDMS microdevice: Toward the direct purification of low abundant circulating biomarkers. Biophysical Chemistry, 2017, 229, 142-150.	1.5	16
381	Hydrophilic surface modification of PDMS for droplet microfluidics using a simple, quick, and robust method via PVA deposition. Microsystems and Nanoengineering, 2017, 3, 16091.	3.4	269

#	Article	IF	Citations
382	Separation of polystyrene nanoparticles in polydimethylsiloxane microfluidic devices with a combined titania and sodium dodecyl sulfate inner coating. Mikrochimica Acta, 2017, 184, 2227-2239.	2.5	3
383	Size-controlled synthesis, characterization, and cytotoxicity study of monodisperse poly(dimethylsiloxane) nanoparticles. Journal of Industrial and Engineering Chemistry, 2017, 53, 177-182.	2.9	14
384	Facile Preparation of the Porous PDMS Oilâ€Absorbent for Oil/Water Separation. Advanced Materials Interfaces, 2017, 4, 1600862.	1.9	141
385	Deposition of Pentacene Thin Film on Polydimethylsiloxane Elastic Dielectric Layer for Flexible Thin-Film Transistors. IEEE Electron Device Letters, 2017, 38, 1031-1034.	2.2	15
386	Recent progress in fabrication and application of polydimethylsiloxane sponges. Journal of Materials Chemistry A, 2017, 5, 16467-16497.	5.2	207
387	How Bacteria Respond to Material Stiffness during Attachment: A Role of <i>Escherichia coli</i> Flagellar Motility. ACS Applied Materials & Interfaces, 2017, 9, 22176-22184.	4.0	66
388	Dual Imprinted Polymer Thin Films via Pattern Directed Self-Organization. ACS Applied Materials & Interfaces, 2017, 9, 20928-20937.	4.0	5
389	High-resolution spatiotemporal strain mapping reveals non-uniform deformation in micropatterned elastomers. Journal of Micromechanics and Microengineering, 2017, 27, 045008.	1.5	4
390	Photosensitive polydimethylsiloxane networks for adjustable-patterned films. Polymer Chemistry, 2017, 8, 2499-2508.	1.9	20
391	A liquid crystals modulated optical tunable filter based on Fano resonance of Au nanorod trimer. Optics Communications, 2017, 389, 92-96.	1.0	15
392	Magnetically Controlled Endourethral Artificial Urinary Sphincter. Annals of Biomedical Engineering, 2017, 45, 1181-1193.	1.3	22
393	Fabrication of recyclable superhydrophobic cotton fabrics. Applied Surface Science, 2017, 400, 405-412.	3.1	49
394	On the large strain deformation behavior of silicone-based elastomers for biomedical applications. Polymer Testing, 2017, 58, 189-198.	2.3	46
395	Unveiling the wet chemical etching characteristics of polydimethylsiloxane film for soft micromachining applications. Journal of Micromechanics and Microengineering, 2017, 27, 015033.	1.5	6
396	Integration of microcoils for on-chip immunosensors based on magnetic nanoparticles capture. Sensing and Bio-Sensing Research, 2017, 13, 115-121.	2.2	10
397	Tensile strength of oxygen plasma-created surface layer of PDMS. Journal of Micromechanics and Microengineering, 2017, 27, 015015.	1.5	16
398	Hierarchical self-entangled carbon nanotube tube networks. Nature Communications, 2017, 8, 1215.	5.8	120
399	Coating of silicone with mannoside-PAMAM dendrimers to enhance formation of non-pathogenic Escherichia coli biofilms against colonization of uropathogens. Acta Biomaterialia, 2017, 64, 200-210.	4.1	19

#	Article	IF	Citations
400	Synthesis of an azo-Mn( <scp>ii</scp> ) complex with mild pH control using a microfluidic device. RSC Advances, 2017, 7, 39576-39582.	1.7	6
401	Surface Modification of Poly(dimethylsiloxane) with Polydopamine and Hyaluronic Acid To Enhance Hemocompatibility for Potential Applications in Medical Implants or Devices. ACS Applied Materials & Lamp; Interfaces, 2017, 9, 33632-33644.	4.0	85
402	Embryonic body culturing in an all-glass microfluidic device with laser-processed $4\hat{A}^{1/4}$ m thick ultra-thin glass sheet filter. Biomedical Microdevices, 2017, 19, 85.	1.4	14
403	New integrated silicon-PDMS process for compliant micro-mechanisms. Journal of Micromechanics and Microengineering, 2017, 27, 127001.	1.5	9
404	A "hairy―polymer/3D-foam hybrid for flexible high performance thermal gap filling applications in harsh environments. RSC Advances, 2017, 7, 39292-39298.	1.7	2
405	Robust and Elastic Polymer Membranes with Tunable Properties for Gas Separation. ACS Applied Materials & Samp; Interfaces, 2017, 9, 26483-26491.	4.0	32
406	Antifouling Biomimetic Liquid-Infused Stainless Steel: Application to Dairy Industrial Processing. ACS Applied Materials & Dairy Interfaces, 2017, 9, 26565-26573.	4.0	68
407	Gq-activated fibroblasts induce cardiomyocyte action potential prolongation and automaticity in a three-dimensional microtissue environment. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 313, H810-H827.	1.5	25
408	Attachable Pulse Sensors Integrated with Inorganic Optoelectronic Devices for Monitoring Heart Rates at Various Body Locations. ACS Applied Materials & Samp; Interfaces, 2017, 9, 25700-25705.	4.0	36
409	Measurement of local temperature increments induced by cultured HepG2 cells with micro-thermocouples in a thermally stabilized system. Scientific Reports, 2017, 7, 1721.	1.6	38
410	Plasma mediated protein immobilisation enhances the vascular compatibility of polyurethane with tissue matched mechanical properties. Biomedical Materials (Bristol), 2017, 12, 045002.	1.7	17
411	Real rock-microfluidic flow cell: A test bed for real-time in situ analysis of flow, transport, and reaction in a subsurface reactive transport environment. Journal of Contaminant Hydrology, 2017, 204, 28-39.	1.6	36
412	Oil–Water Separation Using Superhydrophobic PET Membranes Fabricated Via Simple Dipâ€Coating Of PDMS–SiO <sub>2</sub> Nanoparticles. Macromolecular Materials and Engineering, 2017, 302, 1700218.	1.7	37
413	PDMS membranes as sensing element in optical sensors for gas detection in water. Sensing and Bio-Sensing Research, 2017, 16, 74-78.	2.2	20
414	Polymeric strain gauges as pressure sensors for microfabricated organ-on-chips. , 2017, , .		0
415	Dynamic capacitive sensing of droplet parameters in a low-cost open EWOD system. Sensors and Actuators A: Physical, 2017, 263, 224-233.	2.0	22
416	The effect of pre-polymer/cross-linker storage on the elasticity and reliability of PDMS microfluidic devices. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	7
417	Design and fabrication of micro silica sphere cavity force sensor based on hybrid Fabry Perot interferometer., 2017,,.		2

#	Article	IF	CITATIONS
418	Influence of physico-mechanical properties of elastomeric material for different cell growth. Biomedical Materials (Bristol), 2017, 12, 065002.	1.7	25
419	Fabrication of high-transmission microporous membranes by proton beam writing-based molding technique. Nuclear Instruments & Methods in Physics Research B, 2017, 404, 224-227.	0.6	1
420	Dual-responsive hybrid thermoplastic shape memory polyurethane. Materials Chemistry Frontiers, 2017, 1, 767-779.	3.2	52
421	Tactile Sensing From Laser-Ablated Metallized PET Films. IEEE Sensors Journal, 2017, 17, 7-13.	2.4	62
422	Aluminumâ $\in$ coated elastomer thin films for the fabrication of a ferrofluidic deformable mirror. Journal of Applied Polymer Science, 2017, 134, .	1.3	6
423	Facile and cost-effective fabrication of patternable superhydrophobic surfaces via salt dissolution assisted etching. Applied Surface Science, 2017, 393, 449-456.	3.1	49
424	Dual-Band Dual-Mode Textile Antenna on PDMS Substrate for Body-Centric Communications. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 677-680.	2.4	168
425	Improved cell adhesion under shear stress in PDMS microfluidic devices. Colloids and Surfaces B: Biointerfaces, 2017, 150, 456-464.	2.5	47
426	Microfluidic Electrolyzers for Production and Separation of Hydrogen from Sea Water using Naturally Abundant Solar Energy. Energy Technology, 2017, 5, 1208-1217.	1.8	11
427	Quasiâ€static and dynamic nanoindentation of particleâ€reinforced soft composites. Journal of Applied Polymer Science, 2017, 134, .	1.3	4
428	Simple and fast polydimethylsiloxane (PDMS) patterning using a cutting plotter and vinyl adhesives to achieve etching results., 2017, 2017, 1885-1888.		2
429	Macroporous PDMS foam decorated with carbon nanotubes for conductometric pressure and strain sensors. , 2017, , .		4
430	The characterisation of surface treated silica-filled and non-filled polydimethylsiloxane films. International Journal of Surface Science and Engineering, 2017, 11, 133.	0.4	1
431	Materials, Mechanics, and Patterning Techniques for Elastomer-Based Stretchable Conductors. Micromachines, 2017, 8, 7.	1.4	46
432	Mechanical Characterization of PDMS Films for the Optimization of Polymer Based Flexible Capacitive Pressure Microsensors. Journal of Sensors, 2017, 2017, 1-9.	0.6	18
433	Structural and Antimicrobial Evaluation of Silver Doped Hydroxyapatite-Polydimethylsiloxane Thin Layers. Journal of Nanomaterials, 2017, 2017, 1-9.	1.5	10
434	Effect of manufacturing and experimental conditions on the mechanical and surface properties of silicone elastomer scaffolds used in endothelial mechanobiological studies. BioMedical Engineering OnLine, 2017, 16, 90.	1.3	20
435	Separation of bio-particles in micro fluidic device. , 2017, , .		1

#	Article	IF	CITATIONS
436	Synthetic Biomaterial for Regenerative Medicine Applications., 2017,, 901-921.		11
437	Flexible photonic crystal membranes with nanoparticle high refractive index layers. Beilstein Journal of Nanotechnology, 2017, 8, 203-209.	1.5	22
438	Application of polydopamine in biomedical microfluidic devices. Microfluidics and Nanofluidics, 2018, 22, 1.	1.0	18
440	Environmentally Friendly Super-Water-Repellent Fabrics Prepared from Water-Based Suspensions. ACS Applied Materials & Samp; Interfaces, 2018, 10, 15346-15351.	4.0	48
441	Zirconia-Polyurethane Aneurysm Clip. World Neurosurgery, 2018, 115, 14-23.	0.7	3
442	Straightforward and precise approach to replicate complex hierarchical structures from plant surfaces onto soft matterÂpolymer. Royal Society Open Science, 2018, 5, 172132.	1.1	18
443	Ammonia recovery from chicken manure digestate using polydimethylsiloxane membrane contactor. Journal of Cleaner Production, 2018, 191, 99-104.	4.6	28
444	Flexible fluidic lens with polymer membrane and multi-flow structure. Optics Communications, 2018, 421, 7-13.	1.0	5
445	A fluidic device for the controlled formation and real-time monitoring of soft membranes self-assembled at liquid interfaces. Scientific Reports, 2018, 8, 2900.	1.6	8
446	Microstructured Photoâ€Crosslinked Poly(Trimethylene Carbonate) for Use in Soft Lithography Applications: A Biodegradable Alternative for Poly(Dimethylsiloxane). ChemPhysChem, 2018, 19, 2085-2092.	1.0	2
447	Fabrication of truly 3D microfluidic channel using 3D-printed soluble mold. Biomicrofluidics, 2018, 12, 014105.	1.2	30
448	Polydimethylsiloxane thin-film coating on silica nanoparticles and its influence on the properties of SiO2–polyethylene composite materials. Polymer, 2018, 138, 24-32.	1.8	13
449	Design, development and evaluation of nanofibrous composite membranes with opposing membrane wetting properties for extractive membrane bioreactors. Journal of Membrane Science, 2018, 551, 55-65.	4.1	33
450	Micropatterned conductive polymer biosensors on flexible PDMS films. Sensors and Actuators B: Chemical, 2018, 259, 498-504.	4.0	50
451	Stability of Polyethylene Glycol and Zwitterionic Surface Modifications in PDMS Microfluidic Flow Chambers. Langmuir, 2018, 34, 492-502.	1.6	40
452	Electroless Deposition Metals on Poly(dimethylsiloxane) with Strong Adhesion As Flexible and Stretchable Conductive Materials. ACS Applied Materials & Interfaces, 2018, 10, 2075-2082.	4.0	65
453	3D Printing of PDMS Improves Its Mechanical and Cell Adhesion Properties. ACS Biomaterials Science and Engineering, 2018, 4, 682-693.	2.6	119
454	Writing Wrinkles on Poly(dimethylsiloxane) (PDMS) by Surface Oxidation with a CO <sub>2</sub> Laser Engraver. ACS Applied Materials & Samp; Interfaces, 2018, 10, 4295-4304.	4.0	32

#	ARTICLE	IF	CITATIONS
455	An oxygen plasma treated poly(dimethylsiloxane) bioscaffold coated with polydopamine for stem cell therapy. Journal of Materials Science: Materials in Medicine, 2018, 29, 54.	1.7	19
456	Custom tailoring of conductive ink/substrate properties for increased thin film deposition of poly(dimethylsiloxane) films. Journal of Materials Science: Materials in Electronics, 2018, 29, 10461-10470.	1.1	7
457	Lipid bilayer formation on organic electronic materials. Journal of Materials Chemistry C, 2018, 6, 5218-5227.	2.7	12
458	Enzyme Chemotaxis on Paper-based Devices. Analytical Sciences, 2018, 34, 115-119.	0.8	11
459	Characterization of Tensioned PDMS Membranes for Imaging Cytometry on Microraft Arrays. Analytical Chemistry, 2018, 90, 4792-4800.	3.2	15
460	Low-Temperature Variation of Acoustic Velocity in PDMS for High-Frequency Applications. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 862-869.	1.7	4
461	Polydopamineâ€collagen complex to enhance the biocompatibility of polydimethylsiloxane substrates for sustaining longâ€term culture of L929 fibroblasts and tendon stem cells. Journal of Biomedical Materials Research - Part A, 2018, 106, 408-418.	2.1	27
462	A Method to Realize Robust Flexible Electronically Tunable Antennas Using Polymer-Embedded Conductive Fabric. IEEE Transactions on Antennas and Propagation, 2018, 66, 50-58.	3.1	99
463	Multidirectional flexible force sensors based on confined, self-adjusting carbon nanotube arrays. Nanotechnology, 2018, 29, 055501.	1.3	17
464	Quantitative characterization of plasma treated PDMS microfluidic substrates by inverse gas chromatography. Sensors and Actuators B: Chemical, 2018, 258, 1184-1190.	4.0	9
465	Static response of deformable microchannels: a comparative modelling study. Journal of Physics Condensed Matter, 2018, 30, 054002.	0.7	14
466	A simple technique of constructing nano-roughened polydimethylsiloxane surface to enhance mesenchymal stem cell adhesion and proliferation. Microfluidics and Nanofluidics, 2018, 22, 1.	1.0	27
467	Particulate Titania Coating on Poly(Dimethylsiloxane) Films for Improving Osteoconductive Ability. Key Engineering Materials, 0, 782, 151-157.	0.4	0
468	PDMS-Based Microfluidic Devices for Cell Culture. Inventions, 2018, 3, 65.	1.3	85
469	Combined automated culture system for tubular structure assembly and maturation for vascular tissue engineering. Journal of Biomechanical Science and Engineering, 2018, 13, 18-00137-18-00137.	0.1	5
470	Direct Ink Writing of Graphene Oxide Reinforced PDMS Matrix Composites for Improved Mechanical Properties. , 2018, , .		3
471	Reduction of Parasitic Capacitance of A PDMS Capacitive Force Sensor. Micromachines, 2018, 9, 570.	1.4	10
472	Design of a Vacuum-Assisted Soft UV-Imprint System for Micro-Nano Structures Patterning on Nonplanar Surfaces. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
474	Influence of Transition Metal Dichalcogenide Surfaces on Cellular Morphology and Adhesion. ACS Applied Bio Materials, 2018, 1, 1448-1457.	2.3	16
475	Viable cell culture in PDMS-based microfluidic devices. Methods in Cell Biology, 2018, 148, 3-33.	0.5	29
476	Flexible stepped impedance resonance antenna for early breast cancer detection. AIP Conference Proceedings, 2018, , .	0.3	0
477	Adhesion between Hydrophobic Elastomer and Hydrogel through Hydrophilic Modification and Interfacial Segregation. ACS Applied Materials & Interfaces, 2018, 10, 43252-43261.	4.0	38
478	Polydimethylsiloxane: Optical properties from 191 to 1688 nm (0.735–6.491 eV) of the liquid material spectroscopic ellipsometry. Surface Science Spectra, 2018, 25, 026001.	bу 0.3	14
479	Preparation and Behavior of Bamboo Fiber-Reinforced Polydimethylsiloxane Composite Foams during Compression. Fibers, 2018, 6, 91.	1.8	8
480	Crystallization, glass transition, and molecular dynamics in PDMS of low molecular weights: A calorimetric and dielectric study. Polymer, 2018, 159, 169-180.	1.8	50
481	Injection-Molded Microfluidic Device for SERS Sensing Using Embedded Au-Capped Polymer Nanocones. ACS Applied Materials & Device for SERS Sensing Using Embedded Au-Capped Polymer Nanocones.	4.0	37
482	Kidney-on-a-chip: untapped opportunities. Kidney International, 2018, 94, 1073-1086.	2.6	104
483	Correlation between the thickness and properties of the ethanol treated GO–PDMS based composite materials. Journal of Materials Science: Materials in Electronics, 2018, 29, 20216-20224.	1.1	5
484	Permanent bonding process for III-V/Ge multijunction solar cell integration. AIP Conference Proceedings, 2018, , .	0.3	1
485	Surface-Treated Poly(dimethylsiloxane) as a Gate Dielectric in Solution-Processed Organic Field-Effect Transistors. ACS Omega, 2018, 3, 11278-11285.	1.6	28
486	Physical properties of elastomer composites with scintillating additives. Sensors and Actuators A: Physical, 2018, 280, 383-389.	2.0	4
487	Combined kinetic analysis of multistep processes of thermal decomposition of polydimethylsiloxane silicone. Polymer, 2018, 153, 558-564.	1.8	25
488	Development of a Graphene Oxide-Incorporated Polydimethylsiloxane Membrane with Hexagonal Micropillars. International Journal of Molecular Sciences, 2018, 19, 2517.	1.8	6
489	Robust and Compact PDMS Antennas for Search and Rescue Operations and Emergency Communications., 2018,,.		3
490	Inhibition of anaerobic probiotics on colorectal cancer cells using intestinal microfluidic systems. Science China Chemistry, 2018, 61, 1034-1042.	4.2	6
491	Improved Physico-chemical Properties of Mesoporous Carbon by Functionalization with Aminopropyl-polydimethylsiloxane (AP-PDMS). Journal of Inorganic and Organometallic Polymers and Materials, 2018, 28, 2275-2287.	1.9	6

#	Article	IF	Citations
492	Modification of Poly(dimethylsiloxane) by Mesostructured Siliceous Films for Constructing Protein-Interactive Surfaces. E-Journal of Surface Science and Nanotechnology, 2018, 16, 41-48.	0.1	5
493	Microfabrication technologies used for creating smart devices for industrial applications. , 2018, , 291-311.		7
494	Fabrication of a printed capacitive air-gap touch sensor. Japanese Journal of Applied Physics, 2018, 57, 05GC04.	0.8	6
495	Polyurethane nanofiber strain sensors via <i>in situ</i> polymerization of polypyrrole and application to monitoring joint flexion. Smart Materials and Structures, 2018, 27, 075006.	1.8	26
496	Non-Leachable Hydrophilic Additives for Amphiphilic Coatings. Polymers, 2018, 10, 445.	2.0	6
497	Droplet microfluidics for the construction of compartmentalised model membranes. Lab on A Chip, 2018, 18, 2488-2509.	3.1	89
498	Kayaking paddle blade compression load distribution sensing system based on optical fiber with a polydimethylsiloxane membrane. Applied Optics, 2018, 57, 1387.	0.9	4
499	Biomimetic antifouling PDMS surface developed via well-defined polymer brushes for cardiovascular applications. European Polymer Journal, 2018, 106, 305-317.	2.6	26
500	Stretchable, Transparent, Tough, Ultrathin, and Self-limiting Skin-like Substrate for Stretchable Electronics. ACS Applied Materials & Samp; Interfaces, 2018, 10, 27297-27307.	4.0	38
501	Cyclic-di-GMP and oprF Are Involved in the Response of Pseudomonas aeruginosa to Substrate Material Stiffness during Attachment on Polydimethylsiloxane (PDMS). Frontiers in Microbiology, 2018, 9, 110.	1.5	52
502	Hybrid electrospun fibers based on TPU-PDMS and spherical nanohydroxyapatite for bone tissue engineering. Materials Today Communications, 2018, 16, 264-273.	0.9	17
503	Emerging Anti-Fouling Methods: Towards Reusability of 3D-Printed Devices for Biomedical Applications. Micromachines, 2018, 9, 196.	1.4	16
504	Miniaturized Sample Preparation and Rapid Detection of Arsenite in Contaminated Soil Using a Smartphone. Sensors, 2018, 18, 777.	2.1	25
505	Designer poly(urea-siloxane) microspheres with controlled modulus and size: Synthesis, morphology, and nanoscale stiffness by AFM. Polymer, 2018, 150, 289-300.	1.8	11
506	Selective etching of PDMS: Etching technique for application as a positive tone resist. Applied Surface Science, 2018, 457, 662-669.	3.1	9
507	Stretchable, Implantable, Nanostructured Flow-Diverter System for Quantification of Intra-aneurysmal Hemodynamics. ACS Nano, 2018, 12, 8706-8716.	7.3	18
508	A novel application of dielectric stack actuators: a pumping micromixer. Smart Materials and Structures, 2018, 27, 074008.	1.8	26
509	Effect of confinement on the rheology of a yield-stress fluid. Journal of Non-Newtonian Fluid Mechanics, 2018, 261, 25-32.	1.0	12

#	ARTICLE	IF	CITATIONS
510	Tunability of liquid-infused silicone materials for biointerfaces. Biointerphases, 2018, 13, 06D401.	0.6	42
511	New Materials for the Aging of Wines and Beverages: Evaluation and Comparison. , 2018, , 375-407.		3
512	Superhydrophobic Fabric Resistant to an Aqueous Surfactant Solution as Well as Pure Water for the Selective Removal of Spill Oil. ACS Applied Nano Materials, 2018, 1, 5158-5168.	2.4	15
513	Go with the Flow—Microfluidics Approaches for Amyloid Research. Chemistry - an Asian Journal, 2018, 13, 3437-3447.	1.7	12
514	A detailed investigation on the terahertz absorption characteristics of polydimethylsiloxane (PDMS). Polymer, 2018, 153, 325-330.	1.8	16
515	The viscoelastic response of soft material: A theoretical and experimental study based on barreling deformation. Polymer Testing, 2018, 70, 474-480.	2.3	4
516	Subsurface investigation of the surface modification of polydimethylsiloxane by 172â€nm vacuum ultraviolet irradiation using ToFâ€SIMS and VUV spectrometry. Surface and Interface Analysis, 2018, 50, 752-756.	0.8	5
517	PDMS with designer functionalities—Properties, modifications strategies, and applications. Progress in Polymer Science, 2018, 83, 97-134.	11.8	478
518	Poisson's ratio of PDMS thin films. Polymer Testing, 2018, 69, 375-384.	2.3	70
519	Dual surface modification of PDMS-based silicone implants to suppress capsular contracture. Acta Biomaterialia, 2018, 76, 56-70.	4.1	38
520	Introduction to Active Origami Structures., 2019,, 1-53.		5
521	Degradation mechanisms of silicone rubber under different aging conditions. Polymer Degradation and Stability, 2019, 168, 108936.	2.7	65
522	Evaluation of polydimethylsiloxaneâ€based substrates for in vitro culture of human periodontal ligament cells. Journal of Biomedical Materials Research - Part A, 2019, 107, 2796-2805.	2.1	6
523	Planarization and edge bead reduction of spin-coated polydimethylsiloxane. Journal of Micromechanics and Microengineering, 2019, 29, 115005.	1.5	3
524	Compressive behavior of polydimethylsiloxane–iron oxide nanocomposite: effects of iron oxide content and surfactant. JMST Advances, 2019, 1, 213-218.	0.6	2
525	Bio-Inspired Shape-Adaptive Soft Robotic Grippers Augmented with Electroadhesion Functionality. Soft Robotics, 2019, 6, 701-712.	4.6	49
526	Fabrication of polydimethylsiloxane nanofluidic chips under AFM tip-based nanomilling process. Nanoscale Research Letters, 2019, 14, 136.	3.1	17
527	Evaluating On-Water Kayak Paddling Performance Using Optical Fiber Technology. IEEE Sensors Journal, 2019, 19, 11918-11925.	2.4	12

#	Article	IF	CITATIONS
528	Microdrop impact on soft substrates at low Weber numbers. Journal of Adhesion Science and Technology, 2019, 33, 2128-2140.	1.4	4
529	Printing of Hydrophobic Materials in Fumed Silica Nanoparticle Suspension. ACS Applied Materials & Amp; Interfaces, 2019, 11, 29207-29217.	4.0	38
530	Water-in-PDMS Emulsion Templating of Highly Interconnected Porous Architectures for 3D Cell Culture. ACS Applied Materials & Samp; Interfaces, 2019, 11, 28631-28640.	4.0	36
531	TiO <sub>2</sub> doped polydimethylsiloxane (PDMS) and <i>Luffa cylindrica</i> based photocatalytic nanosponge to absorb and desorb oil in diatom solar panels. RSC Advances, 2019, 9, 22410-22416.	1.7	18
532	Electricity-free picoinjection assisted droplet microfluidics. Sensors and Actuators B: Chemical, 2019, 298, 126766.	4.0	15
533	The comparison between force volume and peakforce quantitative nanomechanical mode of atomic force microscope in detecting cell's mechanical properties. Microscopy Research and Technique, 2019, 82, 1843-1851.	1.2	3
534	Sensitization of silicon by singlet exciton fission in tetracene. Nature, 2019, 571, 90-94.	13.7	221
535	Design, fabrication, and modeling of a low-cost droplet on demand device for lab-on-chip applications. Microelectronic Engineering, 2019, 216, 111030.	1.1	6
536	Extending the Range of Controlling Protein Adsorption via Subsurface Architecture. ACS Applied Materials & Samp; Interfaces, 2019, 11, 42760-42772.	4.0	7
537	Metal and Polymeric Strain Gauges for Si-Based, Monolithically Fabricated Organs-on-Chips. Micromachines, 2019, 10, 536.	1.4	6
538	Rapid and Robust Coating Method to Render Polydimethylsiloxane Surfaces Cell-Adhesive. ACS Applied Materials & Samp; Interfaces, 2019, 11, 41091-41099.	4.0	26
539	Biocompatible micro, soft bellow actuator rapidly manufactured using 3D-printed soluble mold. Journal of Micromechanics and Microengineering, 2019, 29, 125005.	1.5	5
540	Direct writing of silver nanowire-based ink for flexible transparent capacitive touch pad. Flexible and Printed Electronics, 2019, 4, 045001.	1.5	30
541	A New Antibacterial Agent-Releasing Polydimethylsiloxane Coating for Polymethyl Methacrylate Dental Restorations. Journal of Clinical Medicine, 2019, 8, 1831.	1.0	10
542	Wear mode control of polydimethylsiloxane (PDMS) by load and composition. Wear, 2019, 438-439, 203066.	1.5	12
543	Self-healing UI: Mechanically and Electrically Self-healing Materials for Sensing and Actuation Interfaces., 2019, , .		19
544	Highly Controlled Chemical Functionalization Process of PDMS Films. , 2019, , .		1
545	Does PDMS really interact with [18F]fluoride? Applications in microfluidic reactors for 18F-radiopharmaceuticals. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	3

#	Article	IF	CITATIONS
546	A Neuromorphic Prosthesis to Restore Communication in Neuronal Networks. IScience, 2019, 19, 402-414.	1.9	48
547	The Effect of Polydimethylsiloxane-Ethylcellulose Coating Blends on the Surface Characterization and Drug Release of Ciprofloxacin-Loaded Mesoporous Silica. Polymers, 2019, 11, 1450.	2.0	15
548	Synthesis and characterization of a novel, reactive, yellow fluorescent organosilicon dye and its polysiloxanes. Journal of Chemical Research, 2019, 43, 461-468.	0.6	1
549	Microfluidic quantification and separation of yeast based on surface adhesion. Lab on A Chip, 2019, 19, 3481-3489.	3.1	7
550	Characterization and physical properties of aluminium foam–polydimethylsiloxane nanocomposite hybrid structures. Composite Structures, 2019, 230, 111521.	3.1	22
551	Paper-based microfluidic devices for glucose assays employing a metal-organic framework (MOF). Analytica Chimica Acta, 2019, 1055, 74-80.	2.6	42
552	Using Artificial Skin Devices as Skin Replacements: Insights into Superficial Treatment. Small, 2019, 15, e1805453.	5.2	53
553	Five-fold sensitivity enhancement in a capacitive tactile sensor by reducing material and structural rigidity. Sensors and Actuators A: Physical, 2019, 293, 167-177.	2.0	18
554	Stretchable Transparent Conductors: from Micro/Macromechanics to Applications. Advanced Materials, 2019, 31, e1900756.	11.1	52
555	Highly stretchable and sensitive strain sensors based on single-walled carbon nanotube-coated nylon textile. Korean Journal of Chemical Engineering, 2019, 36, 800-806.	1.2	15
556	Moisture outgassing from siloxane elastomers containing surface-treated-silica fillers. Npj Materials Degradation, 2019, 3, .	2.6	3
557	Substrate viscosity plays an important role in bacterial adhesion under fluid flow. Journal of Colloid and Interface Science, 2019, 552, 247-257.	5.0	48
558	Biocompatible Interface-Modified Tissue Engineering Chamber Reduces Capsular Contracture and Enlarges Regenerated Adipose Tissue. ACS Biomaterials Science and Engineering, 2019, 5, 3440-3447.	2.6	5
559	Poly(dimethylsiloxane)/Cu/Ag nanocomposites: Electrical, thermal, and mechanical properties. Polymer Composites, 2019, 40, 4093-4101.	2.3	6
560	Improved flowing behaviour and gas exchange of stored red blood cells by a compound porous structure. Artificial Cells, Nanomedicine and Biotechnology, 2019, 47, 1888-1897.	1.9	3
561	Nanostructured High-Performance Thin-Film Transistors and Phototransistors Fabricated by a High-Yield and Versatile Near-Field Nanolithography Strategy. ACS Nano, 2019, 13, 6618-6630.	7.3	15
562	High-resolution, high-contrast mid-infrared imaging of fresh biological samples with ultraviolet-localized photoacoustic microscopy. Nature Photonics, 2019, 13, 609-615.	15.6	158
563	Optical response of magnetically actuated biocompatible membranes. Nanoscale, 2019, 11, 10667-10683.	2.8	5

#	Article	IF	CITATIONS
564	Effect of Chemical and Physical Modifications on the Wettability of Polydimethylsiloxane Surfaces. Journal of Chemical Education, 2019, 96, 1212-1217.	1.1	10
565	Flexible and Stretchable Photonic Sensors Based on Modulation of Light Transmission. Advanced Optical Materials, 2019, 7, 1900329.	3.6	49
566	Realizing the flexible and transparent highly-hydrophobic film through siloxane functionalized polyurethane-acrylate micro-pattern. Chemical Engineering Journal, 2019, 373, 68-77.	6.6	30
567	Evaluation of <i>in vitro</i> cytotoxicity and properties of polydimethylsiloxaneâ€based polyurethane/crystalline nanocellulose bionanocomposites. Journal of Biomedical Materials Research - Part A, 2019, 107, 1771-1778.	2.1	28
568	RAFT Dispersion Polymerization in Silicone Oil. Macromolecules, 2019, 52, 2822-2832.	2.2	41
569	Fabrication of Vascular Nanofiber Networks with Encapsulated Self-Healing Agents for Mechanical Recovery. Advanced Structured Materials, 2019, , 77-119.	0.3	1
570	Tuning Myoblast and Preosteoblast Cell Adhesion Site, Orientation, and Elongation through Electroactive Micropatterned Scaffolds. ACS Applied Bio Materials, 2019, 2, 1591-1602.	2.3	14
571	Polydimethylsiloxane Replicas Efficacy for Simulating Fresh Produce Surfaces and Application in Mechanistic Study of Colloid Retention. Journal of Food Science, 2019, 84, 524-531.	1.5	8
572	The relationship between the Young's modulus and dry etching rate of polydimethylsiloxane (PDMS). Biomedical Microdevices, 2019, 21, 26.	1.4	31
573	Artificial Organelles for Energy Regeneration. Advanced Biology, 2019, 3, e1800323.	3.0	31
574	A simple coating method of PDMS microchip with PTFE for synthesis of dexamethasone-encapsulated PLGA nanoparticles. Drug Delivery and Translational Research, 2019, 9, 707-720.	3.0	17
575	A Path Beyond Metal and Silicon:Polymer/Nanomaterial Composites for Stretchable Strain Sensors. Advanced Functional Materials, 2019, 29, 1806306.	7.8	147
576	Replication and leakage test of polydimethylsiloxane (PDMS) microfluidics channel. AIP Conference Proceedings, 2019, , .	0.3	8
577	Polydopamine and collagen coated micro-grated polydimethylsiloxane for human mesenchymal stem cell culture. Bioactive Materials, 2019, 4, 142-150.	8.6	53
578	Bacterial Adhesion on Soft Materials: Passive Physicochemical Interactions or Active Bacterial Mechanosensing?. Advanced Healthcare Materials, 2019, 8, e1801323.	3.9	45
579	The fabrication of patterned metallic master by photolithography and electroplating technique for making PDMS-stamp as a tool for drug delivery system preparation. IOP Conference Series: Materials Science and Engineering, 2019, 511, 012037.	0.3	1
580	Flexible and Highly Sensitive Strain Sensor Based on Laser-Induced Graphene Pattern Fabricated by 355 nm Pulsed Laser. Sensors, 2019, 19, 4867.	2.1	40
581	Complete inclusion of bioactive molecules and particles in polydimethylsiloxane: a straightforward process under mild conditions. Scientific Reports, 2019, 9, 17575.	1.6	3

#	Article	IF	CITATIONS
582	Engineered 3D Polymer and Hydrogel Microenvironments for Cell Culture Applications. Bioengineering, 2019, 6, 113.	1.6	60
583	Cell-Electrospinning and Its Application for Tissue Engineering. International Journal of Molecular Sciences, 2019, 20, 6208.	1.8	106
584	Inter- and intraspecific differences in leaf beetle attachment on rigid and compliant substrates. Journal of Zoology, 2019, 307, 1-8.	0.8	8
585	Reconfigurable Anticounterfeiting Coatings Enabled by Macroporous Shape Memory Polymers. ACS Applied Polymer Materials, 2019, 1, 36-46.	2.0	20
586	Embedding CuO Nanoparticles in PDMS-SiO2 Coating to Improve Antibacterial Characteristic and Corrosion Resistance. Colloids and Interface Science Communications, 2019, 28, 20-28.	2.0	71
587	Hypoxic Physiological Environments in a Gas-Regulated Microfluidic Device. Micromachines, 2019, 10, 16.	1.4	5
588	AFM Peakforce QNM mode for measurement of nanosurface mechanical properties of Pt-cured silicones. Progress in Organic Coatings, 2019, 126, 119-128.	1.9	20
589	Bio-inspired hollow PDMS sponge for enhanced oil–water separation. Journal of Hazardous Materials, 2019, 365, 494-501.	<b>6.</b> 5	101
590	The design, fabrication, and applications of flexible biosensing devices. Biosensors and Bioelectronics, 2019, 124-125, 96-114.	<b>5.</b> 3	124
591	Morphologyâ€induced physicoâ€mechanical and biological characteristics of TPU–PDMS blend scaffolds for skin tissue engineering applications. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 1634-1644.	1.6	27
592	A dry film technology for the manufacturing of 3-D multi-layered microstructures and buried channels for lab-on-chip. Microsystem Technologies, 2019, 25, 3219-3233.	1.2	7
593	Porous polydimethylsiloxane membranes loaded with low-temperature crystallized TiO2 NPs for detachable antibacterial films. Journal of Materials Science, 2019, 54, 1665-1676.	1.7	12
594	High viscosity polymeric fluid droplet formation in a flow focusing microfluidic device – Experimental and numerical study. Chemical Engineering Science, 2019, 195, 442-454.	1.9	25
595	Studying the real-time interplay between triglyceride digestion and lipophilic micronutrient bioaccessibility using droplet microfluidics. 1 lab on a chip method. Food Chemistry, 2019, 275, 523-529.	4.2	22
596	Gas chromatography using a spin-coated stationary phase and a molded elastomer micro-channel. Journal of Chromatography A, 2020, 1610, 460555.	1.8	3
597	Impact of PDMS surface treatment in cell-mechanics applications. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 103, 103538.	1.5	5
598	Label-free surface-enhanced Raman spectroscopy detection of absorption manner of lysozyme based on nanodots arrays. Applied Surface Science, 2020, 509, 145332.	3.1	15
599	A biomimetic platform for studying root-environment interaction. Plant and Soil, 2020, 447, 157-168.	1.8	7

#	Article	IF	CITATIONS
600	Patterned Surface Energy in Elastomeric Molds as a Generalized Approach to Polymer Particle Fabrication. ACS Applied Polymer Materials, 2020, 2, 846-852.	2.0	8
601	Durability of submerged hydrophobic surfaces. Soft Matter, 2020, 16, 1692-1701.	1.2	45
602	Single-molecule measurements in microwells for clinical applications. Critical Reviews in Clinical Laboratory Sciences, 2020, 57, 270-290.	2.7	23
603	Recent progress on flexible and stretchable piezoresistive strain sensors: From design to application. Progress in Materials Science, 2020, 114, 100617.	16.0	267
604	Nanofiber membranes as biomimetic and mechanically stable surface coatings. Materials Science and Engineering C, 2020, 108, 110417.	3.8	6
605	Recent innovations in artificial skin. Biomaterials Science, 2020, 8, 776-797.	2.6	38
606	A self-healing transparent polydimethylsiloxane elastomer based on imine bonds. European Polymer Journal, 2020, 123, 109382.	2.6	74
607	Properties of polydimethylsiloxane hydrophobic modified duplex microarc oxidation/diamond-like carbon coatings on AZ31B Mg alloy. Journal of Magnesium and Alloys, 2020, , .	5.5	25
608	A facile surface modification of poly(dimethylsiloxane) with amino acid conjugated self-assembled monolayers for enhanced osteoblast cell behavior. Colloids and Surfaces B: Biointerfaces, 2020, 196, 111343.	2.5	10
609	Precise Synthesis of Poly(dimethylsiloxane) Copolymers through C–H Bond-Activated Macroinitiators via Yttrium-Mediated Group Transfer Polymerization and Ring-Opening Polymerization. Macromolecules, 2020, 53, 8382-8392.	2.2	2
610	General H <sub>2</sub> O Outgassing Model Applicable to Silica-Filled Silicones. Industrial & Silicones.	1.8	4
611	Sweat detection theory and fluid driven methods: A review. Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering, 2020, 3, 126-140.	1.7	39
612	Influence of moisture and CO2 on the material behavior of thermoplastic elastomers for beer bottle closures. Polymer Testing, 2020, 92, 106875.	2.3	1
613	Slip length measurement of pdms/hydrophobic silica superhydrophobic coating for drag reduction application. Surface and Coatings Technology, 2020, 404, 126428.	2.2	45
614	Design, optimization and numerical simulation of a MicroFlow sensor in the realistic model of human aorta. Flow Measurement and Instrumentation, 2020, 74, 101791.	1.0	6
615	Semi-permeable vesicles produced by microfluidics to tune the phase behaviour of encapsulated macromolecules. Journal of Colloid and Interface Science, 2020, 580, 709-719.	5.0	12
616	Surface Modification Techniques for Endothelial Cell Seeding in PDMS Microfluidic Devices. Biosensors, 2020, 10, 182.	2.3	102
617	Polydimethylsiloxane chemistry for the fabrication of microfluidics—Perspective on its uniqueness, limitations and alternatives. Materials Today: Proceedings, 2022, 48, 88-95.	0.9	3

#	Article	IF	Citations
618	Measuring Oxidants and Oxidative Stress in Biological Systems. Biological Magnetic Resonance, 2020, , .	0.4	5
619	Network Mesh Nanostructures in Crossâ€Linked Poly(Dimethylsiloxane) Visualized by AFM. Macromolecular Chemistry and Physics, 2020, 221, 2000170.	1.1	10
620	Facile Analytical Extraction of the Hyperelastic Constants for the Two-Parameter Mooney–Rivlin Model from Experiments on Soft Polymers. Soft Robotics, 2021, 8, 365-370.	4.6	19
621	Surface Texture Detection With a New Sub-mm Resolution Flexible Tactile Capacitive Sensor Array for Multimodal Artificial Finger. Journal of Microelectromechanical Systems, 2020, 29, 629-636.	1.7	16
622	The vision of point-of-care PCR tests for the COVID-19 pandemic and beyond. TrAC - Trends in Analytical Chemistry, 2020, 130, 115984.	5.8	73
623	Fabrication and Functionalization of 3D Printed Polydimethylsiloxaneâ€Based Microfluidic Devices Obtained through Digital Light Processing. Advanced Materials Technologies, 2020, 5, 2000374.	3.0	39
624	Energy and Force Optimization of a Network of Novel Electromagnetic Soft Actuators. Energies, 2020, 13, 3572.	1.6	3
625	Self-reinforced triple-shape memory silicone rubber composites with precise designable second temporary shapes by one step fixation. Composites Part B: Engineering, 2020, 200, 108292.	5.9	13
626	Combinations of regenerative medicine and Lab-on-a-chip systems: New hope to restoring the proper function of pancreatic islets in diabetes. Biosensors and Bioelectronics, 2020, 167, 112451.	5.3	11
627	Systematic Characterization of Hydrophilized Polydimethylsiloxane. Journal of Microelectromechanical Systems, 2020, 29, 1216-1224.	1.7	10
628	Cell membrane mechanics and mechanosensory transduction. Current Topics in Membranes, 2020, 86, 83-141.	0.5	31
629	Developing a Functional Poly(dimethylsiloxane)-Based Microbial Nanoculture System Using Dimethylallylamine. ACS Applied Materials & Dimethylallylamine. ACS Applied Materials & Dimethylallylamine.	4.0	8
630	Shear viscosity of Polydimethylsiloxane melt by molecular dynamics simulation. , 2020, , .		0
631	Rapid Fabrication of Membrane-Integrated Thermoplastic Elastomer Microfluidic Devices. Micromachines, 2020, 11, 731.	1.4	9
632	In Situ Investigation of Adhesion Mechanisms on Complex Microstructured Biological Surfaces. Advanced Materials Interfaces, 2020, 7, 2000969.	1.9	6
633	3D Vascular Replicas Composed of Elastomer–Hydrogel Skin Multilayers for Simulation of Endovascular Intervention. Advanced Functional Materials, 2020, 30, 2003395.	7.8	19
634	Plasma Processing of Low Vapor Pressure Liquids to Generate Functional Surfaces. Molecules, 2020, 25, 6024.	1.7	2
635	Headâ€compliant microstrip split ring resonator for nonâ€invasive healing monitoring after craniosynostosisâ€based surgery. Healthcare Technology Letters, 2020, 7, 29-34.	1.9	3

#	Article	IF	Citations
636	Polynomial fitting techniques applied to opto-mechanical properties of PDMS Sylgard 184 for given curing parameters. Materials Research Express, 2020, 7, 045301.	0.8	11
637	A passive, biocompatible microfluidic flow sensor to assess flows in a cerebral spinal fluid shunt. Sensors and Actuators A: Physical, 2020, 312, 112110.	2.0	7
638	Experimental studies of the robustness of the conductive-mesh-polymer composite towards the development of conformal and transparent antennas. Smart Materials and Structures, 2020, 29, 085015.	1.8	13
639	Superhydrophobic and superoleophobic properties enhancement on PDMS micro-structure using simple flame treatment method. Microelectronic Engineering, 2020, 230, 111362.	1.1	21
640	Acoustic Characterization of Polydimethylsiloxane for Microscale Acoustofluidics. Physical Review Applied, 2020, 13, .	1.5	16
641	Gut-on-a-chip: Current progress and future opportunities. Biomaterials, 2020, 255, 120196.	5.7	117
642	Beeswax-inspired superhydrophobic electrospun membranes for peritendinous anti-adhesion. Materials Science and Engineering C, 2020, 116, 111166.	3.8	24
643	Ultrasensitive Strain Gauges Enabled by Grapheneâ€6tabilized Silicone Emulsions. Advanced Functional Materials, 2020, 30, 2002433.	7.8	15
644	Co-effects of C/Ag dual ion implantation on enhancing antibacterial ability and biocompatibility of silicone rubber. Biomedical Materials (Bristol), 2020, 15, 065003.	1.7	4
645	Ultrathin, Large-Area Membrane Diffusion Cell for pH-Dependent Simultaneous Dissolution and Absorption Studies. Molecular Pharmaceutics, 2020, 17, 2319-2328.	2.3	7
646	A simple emulsification technique for the production of micro-sized flexible powder of polydimethylsiloxane (PDMS). Powder Technology, 2020, 366, 610-616.	2.1	12
647	Effect of cell imprinting on viability and drug susceptibility of breast cancer cells to doxorubicin. Acta Biomaterialia, 2020, 113, 119-129.	4.1	13
648	Highâ€Performance Flexible Pressure and Temperature Sensors with Complex Leather Structure. Macromolecular Materials and Engineering, 2020, 305, 2000181.	1.7	12
649	Functionalized multiscale visual models to unravel flow and transport physics in porous structures. Water Research, 2020, 175, 115676.	5.3	22
650	Highly stretchable and sensitive strain sensors based on carbon nanotube–elastomer nanocomposites: the effect of environmental factors on strain sensing performance. Journal of Materials Chemistry C, 2020, 8, 6185-6195.	2.7	60
651	A bio-inspired functional film embedded with fluorescent elastic microspheres for pressure sensing. Applied Physics Letters, 2020, 116, .	1.5	6
652	Wireless Power Transfer Techniques for Implantable Medical Devices: A Review. Sensors, 2020, 20, 3487.	2.1	150
653	PDMS-Based Microdevices for the Capture of MicroRNA Biomarkers. Applied Sciences (Switzerland), 2020, 10, 3867.	1.3	4

#	Article	IF	Citations
654	Heat Transfer and Fluid Flow Investigations in PDMS Microchannel Heat Sinks Fabricated by Means of a Low-Cost 3D Printer. , $0$ , , .		4
655	Constructing artificial respiratory chain in polymer compartments: Insights into the interplay between <i>bo</i> <sub><i>3</i></sub> oxidase and the membrane. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15006-15017.	3.3	37
656	Stretchable and calibratable graphene sensors for accurate strain measurement. Materials Advances, 2020, 1, 235-243.	2.6	22
657	A novel abrasive water jet machining technique for rapid fabrication of three-dimensional microfluidic components. Biomicrofluidics, 2020, 14, 044103.	1.2	4
658	Design Optimization of a Novel Networked Electromagnetic Soft Actuators System Based on Branch and Bound Algorithm. IEEE Access, 2020, 8, 119324-119335.	2.6	9
659	Transparent and flexible hybrid nanogenerator with welded silver nanowire networks as the electrodes for mechanical energy harvesting and physiological signal monitoring. Smart Materials and Structures, 2020, 29, 045040.	1.8	25
660	Pentadecanal and pentadecanoic acid coatings reduce biofilm formation of <i>Staphylococcus epidermidis</i> on PDMS. Pathogens and Disease, 2020, 78, .	0.8	6
661	Microfabrication of poly(acrylamide) hydrogels with independently controlled topography and stiffness. Biofabrication, 2020, 12, 025023.	3.7	16
662	PDMS/MWCNT nanocomposite films for underwater sound absorption applications. Journal of Materials Science, 2020, 55, 5048-5063.	1.7	27
663	Polydimethylsiloxane-based nanocomposite: present research scenario and emergent future trends. Polymer-Plastics Technology and Materials, 2020, 59, 1148-1166.	0.6	27
664	Gait Segmentation Method Using a Plantar Pressure Measurement System with Custom-Made Capacitive Sensors. Sensors, 2020, 20, 656.	2.1	40
665	A Compact Wearable 2.45 GHz Antenna for WBAN Applications. , 2020, , .		11
666	Nonâ€hermetic packaging of biomedical microsystems from a materials perspective: A review. Medical Devices & Sensors, 2020, 3, e10082.	2.7	11
667	Monolithic microfluidic platform for exerting gradients of compression on cell-laden hydrogels, and application to a model of the articular cartilage. Sensors and Actuators B: Chemical, 2020, 315, 127917.	4.0	27
668	IR ns pulsed laser irradiation of Polydimethylsiloxane in vacuum. Vacuum, 2020, 177, 109361.	1.6	9
669	Pumpless, "Self-Driven―Microfluidic Channels with Controlled Blood Flow Using an Amphiphilic Silicone. ACS Applied Polymer Materials, 2020, 2, 1731-1738.	2.0	11
670	Direct ink writing of surface-modified flax elastomer composites. Composites Part B: Engineering, 2020, 194, 108061.	5.9	16
671	A Force Measurement Method Based on Flexible PDMS Grating. Applied Sciences (Switzerland), 2020, 10, 2296.	1.3	20

#	Article	IF	CITATIONS
672	Mechanically flexible viscosity sensor for <scp>realâ€time</scp> monitoring of tubular architectures for industrial applications. Engineering Reports, 2021, 3, e12315.	0.9	6
673	Evaporation mediated translation and encapsulation of an aqueous droplet atop a viscoelastic liquid film. Journal of Colloid and Interface Science, 2021, 581, 334-349.	5.0	7
674	Silicone-based bioscaffolds for cellular therapies. Materials Science and Engineering C, 2021, 119, 111615.	3.8	23
675	Review of silicone surface modification techniques and coatings for antibacterial/antimicrobial applications to improve breast implant surfaces. Acta Biomaterialia, 2021, 121, 68-88.	4.1	53
676	Trends and recent development of the microelectrode arrays (MEAs). Biosensors and Bioelectronics, 2021, 175, 112854.	5.3	21
677	Multi-layer PDMS films having antifouling property for biomedical applications. Journal of Biomaterials Science, Polymer Edition, 2021, 32, 678-693.	1.9	8
678	An antiadhesion and antibacterial platform based on parylene F coatings. Progress in Organic Coatings, 2021, 151, 106021.	1.9	7
679	Surface segregation of polydimethylsiloxane-polyether block copolymers in coatings driven by molecular architecture. Progress in Organic Coatings, 2021, 150, 105991.	1.9	4
680	Selfâ€Healable and Transparent Elastomers Based on Dual Reversible Networks. Macromolecular Materials and Engineering, 2021, 306, 2000621.	1.7	6
681	Magnetic Actuation Methods in Bio/Soft Robotics. Advanced Functional Materials, 2021, 31, 2005137.	7.8	126
682	Wearable microstrip patch antennas with different flexible substrates for health monitoring system. Materials Today: Proceedings, 2021, 45, 4002-4007.	0.9	14
683	Investigating the effect of silver nanorods embedded in polydimethylsiloxane matrix using nanoindentation and its use for flexible electronics. Journal of Applied Polymer Science, 2021, 138, 50141.	1.3	6
684	An extensive study of the adhesion and antifogging of the transparent polydimethylsiloxane/Sylgard coating system., 2021,, 83-103.		1
685	Capillary forces drive buckling, plastic deformation, and break-up of 3D printed beams. Soft Matter, 2021, 17, 3886-3894.	1.2	18
686	Mechanotransduction-on-chip: vessel-chip model of endothelial YAP mechanobiology reveals matrix stiffness impedes shear response. Lab on A Chip, 2021, 21, 1738-1751.	3.1	17
687	Point-of-need detection with smartphone., 2021,, 311-362.		1
688	Surface Biochemical Modification of Poly(dimethylsiloxane) for Specific Immune Cytokine Response. ACS Applied Bio Materials, 2021, 4, 1307-1318.	2.3	0
689	Flow focusing microfluidics or stem cell dual layers droplet microencapsulation. AIP Conference Proceedings, 2021, , .	0.3	2

#	Article	IF	CITATIONS
690	Skinâ€Inspired Piezoelectric Tactile Sensor Array with Crosstalkâ€Free Row+Column Electrodes for Spatiotemporally Distinguishing Diverse Stimuli. Advanced Science, 2021, 8, 2002817.	5.6	161
691	Structural, Mechanical, and Dielectric Properties of Polydimethylsiloxane and Silicone Elastomer for the Fabrication of Clinical-Grade Kidney Phantom. Applied Sciences (Switzerland), 2021, 11, 1172.	1.3	21
692	Conductive chitosan/polyaniline hydrogel with cell-imprinted topography as a potential substrate for neural priming of adipose derived stem cells. RSC Advances, 2021, 11, 15795-15807.	1.7	16
693	Advanced applications of green materials in bioelectronics applications. , 2021, , 631-661.		1
694	Real-Time Detection of Droplet Velocity Using Open-Source Computer Vision on EWOD Device. Lecture Notes in Mechanical Engineering, 2021, , 463-470.	0.3	0
695	Durable poly(N-isopropylacrylamide) grafted PDMS micropillared surfaces for temperature-modulated wetting. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 610, 125901.	2.3	4
696	Surface Coating with Hyaluronic Acid-Gelatin-Crosslinked Hydrogel on Gelatin-Conjugated Poly(dimethylsiloxane) for Implantable Medical Device-Induced Fibrosis. Pharmaceutics, 2021, 13, 269.	2.0	20
697	Vertical Orientation of Liquid Crystal on 4-n-Alkyloxyphenoxymethyl-Substituted Polystyrene Containing Liquid Crystal Precursor. Polymers, 2021, 13, 736.	2.0	3
698	Selfâ€sealing thermoplastic fluoroelastomer enables rapid fabrication of modular microreactors. Nano Select, 2021, 2, 1385-1402.	1.9	3
699	Surface-bound reactive oxygen species generating nanozymes for selective antibacterial action. Nature Communications, 2021, 12, 745.	5.8	202
700	Mechanism of Adhesion of Natural Polymer Coatings to Chemically Modified Siloxane Polymer. Langmuir, 2021, 37, 2974-2984.	1.6	14
701	Effect of Viscosity on the Formation of Porous Polydimethylsiloxane for Wearable Device Applications. Molecules, 2021, 26, 1471.	1.7	3
702	Yield stress behavior of colloidal gels with embedded active particles. Journal of Rheology, 2021, 65, 225-239.	1.3	10
703	High-Throughput Methods in the Discovery and Study of Biomaterials and Materiobiology. Chemical Reviews, 2021, 121, 4561-4677.	23.0	89
704	Polysaccharides and proteins-based nanogenerator for energy harvesting and sensing: A review. International Journal of Biological Macromolecules, 2021, 173, 225-243.	3.6	22
705	Pressure sensor based on porous polydimethylsiloxane with embedded gold nanoparticles. Journal of Materials Science: Materials in Electronics, 2021, 32, 8703-8715.	1.1	6
706	Three-dimensionally interconnected porous PDMS decorated with poly(dopamine) and Prussian blue for floatable, flexible, and recyclable photo-Fenton catalyst activated by solar light. Applied Surface Science, 2021, 545, 148990.	3.1	16
707	Highly interconnected porous PDMS/CNTs sandwich sponges with anti-icing/deicing microstructured surfaces. Journal of Materials Science, 2021, 56, 11723-11735.	1.7	20

#	ARTICLE	IF	CITATIONS
708	A nature-derived, flexible and three dimensional (3D) nano-composite for chronic wounds pH monitoring. Materials Letters, 2021, 288, 129335.	1.3	8
709	Integrated Active Microfluidics using Flat Panel Display Technology with Two Different Semiconductor Grade Polymers. , 2021, , .		0
710	Microfluidics for flexible electronics. Materials Today, 2021, 44, 105-135.	8.3	65
711	Enhancing islet transplantation using a biocompatible collagen-PDMS bioscaffold enriched with dexamethasone-microplates. Biofabrication, 2021, 13, 035011.	3.7	17
712	Detection of Estrogen Receptor Alpha and Assessment of Fulvestrant Activity in MCF-7 Tumor Spheroids Using Microfluidics and SERS. Analytical Chemistry, 2021, 93, 5862-5871.	3.2	25
713	Recent Advances in Indentation Techniques and Their Application to Mechanical Characterization. Materials Transactions, 2021, 62, 563-569.	0.4	5
714	A review on polymer-based materials for underwater sound absorption. Polymer Testing, 2021, 96, 107115.	2.3	60
715	Smart Contact Lenses for Biosensing Applications. Advanced Intelligent Systems, 2021, 3, 2000263.	3.3	50
716	Tunable adhesion of an elastic pillar by pressurizing inner cavity. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 0, , 135065012110182.	1.0	0
717	Materials and Fabrication Strategies for Biocompatible and Biodegradable Conductive Polymer Composites toward Bioâ€Integrated Electronic Systems. Advanced Sustainable Systems, 2022, 6, 2100075.	2.7	20
718	Plasma-enhanced protein patterning in a microfluidic compartmentalized platform for multi-organs-on-chip: a liver-tumor model. Biomedical Materials (Bristol), 2021, 16, .	1.7	7
719	From Amorphous Silicones to Si-Containing Highly Ordered Polymers: Some Romanian Contributions in the Field. Polymers, 2021, 13, 1605.	2.0	7
720	Digitized mini optofluidic element and its application to ophthalmic lenses for presbyopia correction. Optics Express, 2021, 29, 16105-16117.	1.7	0
721	Wireless, Skinâ€Interfaced Devices for Pediatric Critical Care: Application to Continuous, Noninvasive Blood Pressure Monitoring. Advanced Healthcare Materials, 2021, 10, e2100383.	3.9	33
722	Low-cost Fabrication of PDMS Microfluidic Chamber using Digital Cutter Machine. Journal of Physics: Conference Series, 2021, 1912, 012021.	0.3	0
723	Digitized optofluidic element and its application to tristate lens for presbyopia correction. Optical Engineering, 2021, 60, .	0.5	0
724	Laser Direct Writing of Highly Crystalline Graphene on Polydimethylsiloxane for Fingertip‧ized Piezoelectric Sensors. Advanced Engineering Materials, 2021, 23, 2100457.	1.6	4
725	Gut-on-a-chip: Mimicking and monitoring the human intestine. Biosensors and Bioelectronics, 2021, 181, 113156.	5.3	58

#	Article	IF	Citations
726	Metalized Soft Polymers for Electromechanical Transducers on Glass Substrates. , 2021, , .		0
727	Experimental Design and Analysis of Triboelectric Nanogenerator for energy harvesting applications. , 2021, , .		0
728	Lab-on-a-Chip Platforms as Tools for Drug Screening in Neuropathologies Associated with Bloodâ $\in$ Brain Barrier Alterations. Biomolecules, 2021, 11, 916.	1.8	21
729	Development of Nanosensors Based Intelligent Packaging Systems: Food Quality and Medicine. Nanomaterials, 2021, 11, 1515.	1.9	21
730	Constructing a biomimetic robust bi-layered hydrophilic lubrication coating on surface of silicone elastomer. Friction, 2022, 10, 1046-1060.	3.4	21
731	Inkjet-printed flexible silver electrodes on thiol-enes. Sensors and Actuators B: Chemical, 2021, 336, 129727.	4.0	8
732	Flexible electronics from intrinsically soft materials. Giant, 2021, 6, 100051.	2.5	31
733	Wearable Triboelectric Strain-Insensitive Pressure Sensors Based on Hierarchical Superposition Patterns. ACS Sensors, 2021, 6, 2411-2418.	4.0	30
734	A "Soft Casting―PDMS Process Using Multi-Functional Cover for Fabrication of Precise Microfluidic Chips. , 2021, , .		1
735	Ultrabroadband light absorbing Fe/polymer flexible metamaterial for soft opto-mechanical devices. Applied Materials Today, 2021, 23, 101052.	2.3	8
736	Photolithography-free fabrication of photoresist-mold for rapid prototyping of microfluidic PDMS devices. Chinese Chemical Letters, 2022, 33, 987-989.	4.8	7
737	Recent Advances in Flexible Organic Synaptic Transistors. Advanced Electronic Materials, 2021, 7, 2100336.	2.6	43
738	Formulation Prediction for Young's Modulus of Poly(dimethylsiloxane) by Spectroscopic Methods. Bulletin of the Korean Chemical Society, 2021, 42, 1225-1231.	1.0	7
739	The equation of glass transition of epoxy diane resin modified with the nanoparticle fillers. Polymer Bulletin, 2022, 79, 6733-6744.	1.7	6
740	PDMS Bonding Technologies for Microfluidic Applications: A Review. Biosensors, 2021, 11, 292.	2.3	90
741	Highâ€Performance Flexible Schottky DC Generator via Metal/Conducting Polymer Sliding Contacts. Advanced Functional Materials, 2021, 31, 2103132.	7.8	43
742	Deformation of an airfoil-shaped brain surrogate under shock wave loading. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 120, 104513.	1.5	4
743	Multiphoton-induced polymerization in the fabrication of optical waveguides in polydimethylsiloxane. , $2021, \ldots$		0

#	ARTICLE	IF	Citations
744	Various Characteristics of Severely Aged Flameâ€Retardant Crossâ€Linked Polyolefin. IEEJ Transactions on Electrical and Electronic Engineering, 2021, 16, 1556-1562.	0.8	12
745	A Suction-Based Peripheral Nerve Gripper Capable of Controlling the Suction Force. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1867-1876.	3.7	3
746	Design, simulation, and fabrication of an ingestible capsule with gastric balloon for obesity treatment. Biomedical Physics and Engineering Express, 2021, 7, 055024.	0.6	2
747	Thermoplasmonic effect onto Toad physiology signals by plasmonic microchip structure. Scientific Reports, 2021, 11, 17287.	1.6	1
748	PDMS-ZnO Piezoelectric Nanocomposites for Pressure Sensors. Sensors, 2021, 21, 5873.	2.1	27
749	Wearable Transcutaneous COâ,, Monitor Based on Miniaturized Nondispersive Infrared Sensor. IEEE Sensors Journal, 2021, 21, 17327-17334.	2.4	29
750	Vibrating Mesh Atomizer for Spin-Spray Deposition. Journal of Microelectromechanical Systems, 2021, 30, 582-588.	1.7	7
751	Assessment of the Physical, Mechanical, and Tribological Properties of PDMS Thin Films Based on Different Curing Conditions. Materials, 2021, 14, 4489.	1.3	12
752	Photomechanical Polymer Nanocomposites for Drug Delivery Devices. Molecules, 2021, 26, 5376.	1.7	5
<b>7</b> 53	Innovative technique for patterning Nd–Fe–B arrays and development of a microfluidic device with high trapping efficiency. Nanotechnology, 2021, 32, 495501.	1.3	0
754	Drag reduction in internal turbulent flow by fabricating superhydrophobic Al2O3/waterborne polyurethane coatings. Surface and Coatings Technology, 2021, 421, 127406.	2.2	22
755	Hydrophobic polydimethylsiloxane thin-film composite membranes for the efficient pervaporative desalination of seawater and brines. Separation and Purification Technology, 2022, 280, 119819.	3.9	7
756	Computational Simulations in Advanced Microfluidic Devices: A Review. Micromachines, 2021, 12, 1149.	1.4	15
757	Relevance of organ(s)-on-a-chip systems to the investigation of food-gut microbiota-host interactions. Critical Reviews in Microbiology, 2022, 48, 463-488.	2.7	20
758	Flexible microhyperboloids facets giant sensitive ultra-low pressure sensor. Sensors and Actuators A: Physical, 2021, 328, 112767.	2.0	20
<b>7</b> 59	3D printing of highly reactive silicones using inkjet type droplet ejection and free space droplet merging and reaction. Additive Manufacturing, 2021, 46, 102099.	1.7	4
760	Bead-free digital immunoassays on polydopamine patterned perfluorinated surfaces. Sensors and Actuators B: Chemical, 2021, 345, 130341.	4.0	5
761	Local contact formation during sliding on soft adhesive surfaces with complex microstructuring. Tribology International, 2021, 163, 107180.	3.0	7

#	ARTICLE	IF	CITATIONS
762	Solid-state photoswitching in arylazopyrazole-embedded polydimethylsiloxane composite thin films. Journal of Solid State Chemistry, 2021, 303, 122519.	1.4	2
763	Packaging for Bio-micro-electro-mechanical Systems (BioMEMS) and Microfluidic Chips. , 2021, , 253-287.		0
764	Development of novel blend poly (Ethylene Glycol) / Poly(Ethersulfone) polymeric membrane using N-Methyl-2-Pyrollidone and dimethylformamide solvents for facilitating CO2/N2 gas separation. Materials Today: Proceedings, 2021, 46, 1963-1970.	0.9	5
765	A Review: Electrode and Packaging Materials for Neurophysiology Recording Implants. Frontiers in Bioengineering and Biotechnology, 2020, 8, 622923.	2.0	31
766	Development of Polythiourethane/ZnO-Based Anti-Fouling Materials and Evaluation of the Adhesion of Staphylococcus aureus and Candida glabrata Using Single-Cell Force Spectroscopy. Nanomaterials, 2021, 11, 271.	1.9	12
767	Surface coatings for microfluidic biomedical devices. , 2021, , 79-123.		O
768	Investigation of an improved electricidal coating for inhibiting biofilm formation on urinary catheters. Journal of Materials Research and Technology, 2021, 10, 339-348.	2.6	5
769	Production of hydrogel microparticles in microfluidic devices: a review. Microfluidics and Nanofluidics, 2021, 25, 1.	1.0	20
770	Preparation of Monodisperse Submicrometer Soybean Oil Emulsions by Evaporation. Kagaku Kogaku Ronbunshu, 2021, 47, 7-10.	0.1	0
771	Bending Analysis of Polymer-Based Flexible Antennas for Wearable, General IoT Applications: A Review. Polymers, 2021, 13, 357.	2.0	54
772	A Wirelessly Controlled Smart Bandage with 3Dâ€Printed Miniaturized Needle Arrays. Advanced Functional Materials, 2020, 30, 1905544.	7.8	109
773	Bioengineered threeâ€dimensional transparent eggshell as a chicken embryo experimentation platform for biomedical research. Engineering Reports, 2020, 2, e12092.	0.9	3
774	Self-Assembly of Nanodroplets in Nanocomposite Materials in Nanodroplets Science and Technology. Lecture Notes in Nanoscale Science and Technology, 2013, , 73-97.	0.4	2
775	Development of Microfluidic Devices for the Manipulation of Neuronal Synapses. Neuromethods, 2015, , 127-137.	0.2	3
776	Magnetic PDMS Microparticles for Biomedical and Energy Applications. Lecture Notes in Computational Vision and Biomechanics, 2019, , 578-584.	0.5	2
777	Stiffness and Hepatocytes Function In Vitro. , 2020, , 645-660.		2
778	Sense and Sensibility of Oxygen in Pathophysiology Using EPR Oximetry. Biological Magnetic Resonance, 2020, , 135-187.	0.4	2
779	Development of a Microloading Platform for In Vitro Mechanotransduction Studies. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 53-59.	0.3	1

#	Article	IF	CITATIONS
780	Scanning Microdeformation Microscopy: Advances in Quantitative Micro- and Nanometrology. Nanoscience and Technology, 2013, , 227-259.	1.5	2
781	Sputtered silicon solid phase microextraction fibers with a polydimethylsiloxane stationary phase with negligible carry-over and phase bleed. Journal of Chromatography A, 2020, 1623, 461065.	1.8	13
785	Fracture and Energetic Strength Scaling of Soft, Brittle, and Weakly Nonlinear Elastomers. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	1.1	10
786	A Thesis Proposal Development Course for Engineering Graduate Students. Journal of Biomechanical Engineering, 2020, 142, .	0.6	4
787	USB capsule endoscope for retrograde imaging of the esophagus. Journal of Biomedical Optics, 2020, 25, .	1.4	4
788	Rapid prototyping method for 3D PDMS microfluidic devices using a red femtosecond laser. Advances in Mechanical Engineering, 2020, 12, 168781402098271.	0.8	8
789	Fabrication of Topologically-Complex 3D Microstructures by Femtosecond Laser Machining and Polymer Molding. , 2013, , .		1
790	Photoinitiator-free multi-photon fabrication of compact optical waveguides in polydimethylsiloxane. Optical Materials Express, 2019, 9, 128.	1.6	22
791	Bent Optical Fiber Bragg Grating Embedded in PDMS for Vertical Compression Load Sensor., 2015,,.		2
792	Microcontact Peeling as a New Method for Cell Micropatterning. PLoS ONE, 2014, 9, e102735.	1.1	12
793	In Vitro Reconstruction of Neuronal Networks Derived from Human iPS Cells Using Microfabricated Devices. PLoS ONE, 2016, 11, e0148559.	1.1	25
794	An Optimal Design of Epidermal Ridges to the Tactile Sensor for Sensitivity Enhancement during Shear Force Detection. IEEJ Transactions on Sensors and Micromachines, 2011, 131, 141-147.	0.0	6
795	Polymer microfluidic devices: an overview of fabrication methods. U Porto Journal of Engineering, 2015, 1, 67-79.	0.2	29
796	Biochips: non-conventional strategies for biosensing elements immobilization. Frontiers in Bioscience - Landmark, 2008, 13, 382.	3.0	13
797	Time Dependent Lyotropic Chromonic Textures in Microfluidic Confinements. Crystals, 2021, 11, 35.	1.0	10
798	Variation of Elastic Stiffness of Polydimethylsiloxane (PDMS) Stretchable Substrates for Wearable Packaging Applications. Journal of the Microelectronics and Packaging Society, 2014, 21, 125-131.	0.1	10
799	Solitary wave solutions of the ionic currents along microtubule dynamical equations via analytical mathematical method. Open Physics, 2021, 19, 494-503.	0.8	4
800	Kinetic features of polymerization of epoxy resin modified by siliconâ€containing additives and mineral fillers. Polymer Engineering and Science, 2022, 62, 75-82.	1.5	7

#	ARTICLE	IF	CITATIONS
801	A Review of Capillary Pressure Control Valves in Microfluidics. Biosensors, 2021, 11, 405.	2.3	18
802	Effect of varying polydimethylsiloxane chain length and content on the adhesion and thermal properties of polydimethylsiloxaneâ€grafted acrylic pressureâ€sensitive adhesives. Journal of Applied Polymer Science, 2022, 139, 51738.	1.3	5
803	New kinds of analytical solitary wave solutions for ionic currents on microtubules equation via two different techniques. Optical and Quantum Electronics, 2021, 53, 1.	1.5	50
804	Microstructures in 3D Biological Gels Affect Cell Proliferation. Tissue Engineering, 0, , 110306233438005.	4.9	0
805	Extracting the Elastic Modulus of Compliant Materials Using a Novel Plate Bulge Testing Technique. , 2008, , .		0
806	Toward the Precise Control of Cell Differentiation Processes by Using Micro and Soft Lithography. , 0, , .		0
807	Lithography and Fabrication of Frictional Tiers on Poly(Dimethylsiloxane) Using Atomic Force Microscopy. Journal of Surface Engineered Materials and Advanced Technology, 2012, 02, 233-237.	0.2	1
808	Gold nanoparticles embedded in flexible materials: new frontiers in Plasmonics. , 2012, , .		0
809	Structure- Fluisd Coupling for Micro fluidic applications. IOSR Journal of Engineering, 2012, 02, 1439-1443.	0.1	0
810	Engineering Strategies to Recapitulate the Tumor Microenvironment. , 2015, , 275-308.		0
811	Study on hydrophilic modification of PDMS. , 2017, , .		0
812	Droplet Position Estimator for Open EWOD System Using Open Source Computer Vision. Communications in Computer and Information Science, 2017, , 737-741.	0.4	0
813	On the modeling and characterization of an interlocked flexible electronic skin. Proceedings of SPIE, 2017, , .	0.8	0
814	Improved method to reduce interfacial defects in bonding polydimethylsiloxane layers of microfluidic devices for lab–on–chip applications. Superficies Y Vacio, 2017, 30, 25-29.	0.2	1
815	Fabrication and LBM-Modeling of Directional Fluid Transport on Low-Cost Electro-Osmotic Flow Device. Communications in Computer and Information Science, 2019, , 643-656.	0.4	0
816	Layers of Composite Nanomaterials as Prototype of a Tensoresistor Sensor. Springer Proceedings in Physics, 2019, , 523-535.	0.1	1
817	Polydimethylsiloxane optical microring resonator by nano-imprint lithography on MgF2 substrate. , 2019, , .		0
820	Chemical Etching Treatment of Polydimethylsiloxane for Smoothing Microchannel Surface. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2020, 33, 485-490.	0.1	2

#	Article	IF	CITATIONS
821	The effect of dynamic wetting pressure on contact angle measurements. Journal of Colloid and Interface Science, 2022, 608, 1086-1093.	5.0	6
822	History and Current Status of Droplet Microfluidics. RSC Soft Matter, 2020, , 1-14.	0.2	1
823	Sylgard 184 mixture and natural aging study via quasi-static compressive modulus. AIP Conference Proceedings, 2020, , .	0.3	2
824	PDMS-based Bragg diffraction grating glucose sensor integrable in a contact lens. , 2020, , .		0
825	Design, Fabrication, and Validation of a Petri Dish-Compatible PDMS Bioreactor for the Tensile Stimulation and Characterization of Microtissues. Micromachines, 2020, 11, 892.	1.4	1
826	Patterned Surface Energy in Elastomeric Molds as a Generalized Approach to Polymer Particle Fabrication. ACS Applied Polymer Materials, 2020, 2, .	2.0	0
827	Kinetics of epoxy resin optical characteristics during ultrasonic processing. Journal of Composite Materials, 2022, 56, 387-395.	1.2	5
828	Counterplotting the Mechanosensing-Based Fouling Mechanism of Mussels against Fouling. ACS Nano, 2021, 15, 18566-18579.	7.3	7
829	Piezoelectric Signals in Vascularized Bone Regeneration. Biomolecules, 2021, 11, 1731.	1.8	18
830	Microfluidics as a Novel Technique for Tuberculosis: From Diagnostics to Drug Discovery. Microorganisms, 2021, 9, 2330.	1.6	8
831	3D Printed Chromophoric Sensors. Chemosensors, 2021, 9, 317.	1.8	1
832	Synthesis of Porous Polydimethylsiloxane Gold Nanoparticles Composites by a Single Step Laser Ablation Process. International Journal of Molecular Sciences, 2021, 22, 12155.	1.8	6
833	Polyurethane Sponge with a Modified Specific Surface for Repeatable Oil–Water Separation. ACS Omega, 2021, 6, 33969-33975.	1.6	15
834	Investigating the pattern transfer fidelity of Norland Optical Adhesive 81 for nanogrooves by microtransfer molding. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, 062810.	0.6	2
835	Polydimethylsiloxane mechanical properties: A systematic review. AIMS Materials Science, 2021, 8, 952-973.	0.7	20
836	An Electrochemical Impedance-Based Flexible Flow Sensor With Ultra-Low Limit of Detection. IEEE Sensors Journal, 2022, 22, 1180-1187.	2.4	0
837	Flexible and Soft Materials and Devices for Neural Interface. , 2021, , 1-61.		1
838	Understanding the Extraordinary Flexibility of Polydimethylsiloxane through Single-Molecule Mechanics., 2022, 4, 329-335.		15

#	ARTICLE	IF	CITATIONS
839	Maximizing interfacial bonding strength between PDMS and PMMA substrates for manufacturing hybrid microfluidic devices withstanding extremely high flow rate and high operation pressure. Sensors and Actuators A: Physical, 2022, 334, 113330.	2.0	13
840	Performance evaluation of post-curing method for sensitivity enhancement of elastomer vibration sensors. Sensors and Actuators A: Physical, 2022, 334, 113313.	2.0	1
841	A graphene nanoplatelets-based high-performance, durable triboelectric nanogenerator for harvesting the energy of human motion. Energy Reports, 2022, 8, 1026-1033.	2.5	21
842	Intelligent Packaging Systems: Food Quality and Intelligent Medicine Box Based on Nano-sensors. Nanotechnology in the Life Sciences, 2021, , 555-587.	0.4	2
843	Improvement in Strain Sensor Stability by Adapting the Metal Contact Layer. Sensors, 2022, 22, 630.	2.1	3
844	Micro-textured silicone-based implant fabrication using electrospun fibers as a sacrificial template to suppress fibrous capsule formation. Materials Science and Engineering C, 2022, , 112687.	3.8	4
845	Ink-jet 3D printing as a strategy for developing bespoke non-eluting biofilm resistant medical devices. Biomaterials, 2022, 281, 121350.	5.7	8
846	Computing foaming flows across scales: From breaking waves to microfluidics. Science Advances, 2022, 8, eabm0590.	4.7	6
847	Surface Charge Affecting Fluid–Fluid Displacement at Pore Scale. Advanced Materials Interfaces, 2022, 9, .	1.9	5
848	Graphene nanoplatelets based polyimide/Pebax dual-layer mixed matrix hollow fiber membranes for CO2/CH4 and He/N2 separations. International Journal of Greenhouse Gas Control, 2022, 114, 103588.	2.3	16
849	Maximizing Heterogeneous Bonding Strength Between PDMS/PMMA For Manufacturing Elastomer Microvalve System with High-Density Configuration. , 2022, , .		0
850	Advanced Materials and Sensors for Microphysiological Systems: Focus on Electronic and Electrooptical Interfaces. Advanced Materials, 2022, 34, e2107876.	11.1	29
851	The Progress of Intestinal Epithelial Models from Cell Lines to Gut-On-Chip. International Journal of Molecular Sciences, 2021, 22, 13472.	1.8	27
852	Properties and Applications of PDMS for Biomedical Engineering: A Review. Journal of Functional Biomaterials, 2022, 13, 2.	1.8	216
853	Static and Dynamic Mechanical Characterization of Polydimethylsiloxane (PDMS) under Uniaxial Tensile Loading. IOP Conference Series: Materials Science and Engineering, 2022, 1225, 012041.	0.3	1
854	Vertical Alignment of Liquid Crystals on Phenylphenoxymethyl-Substituted Polystyrene—PS Derivatives Structurally Similar to LC Molecules. Polymers, 2022, 14, 934.	2.0	1
855	Easy-to-Operate Co-flow Step Emulsification Device for Droplet Digital Polymerase Chain Reaction. Analytical Chemistry, 2022, 94, 3939-3947.	3.2	19
856	Highly flexible elastomer microfluidic chip for single cell manipulation. Biomicrofluidics, 2022, 16, 024104.	1.2	1

#	Article	IF	CITATIONS
857	Water-driven photoluminescence reversibility in CsPbBr3/PDMS-PUa composite. Nano Research, 2022, 15, 6466-6476.	5.8	15
858	Strain relief by controlled cracking in highly stretchable multi-layer composites. Extreme Mechanics Letters, 2022, 54, 101724.	2.0	3
859	Enabling Tunable Waterâ€Responsive Surface Adaptation of PDMS via Metal–Ligand Coordinated Dynamic Networks. Advanced Materials Interfaces, 2022, 9, .	1.9	8
860	Polyborosiloxane-based, dynamic shear stiffening multilayer coating for the protection of composite laminates under Low Velocity Impact. Composites Science and Technology, 2022, 222, 109395.	3.8	15
861	Facile method to convert petal effect surface to lotus effect surface for superhydrophobic polydimethylsiloxane. Surfaces and Interfaces, 2022, 30, 101901.	1.5	9
862	Combination of permanent hydrosilylation and reversible Diels–Alder reactions for self-healing poly(dimethylsiloxane) materials with enhanced ageing properties. Materials Today Chemistry, 2022, 24, 100860.	1.7	7
863	Room temperature synthesis of highly transparent CuO and Cu(OH)2 nanowire films via a simple wet chemical method. Applied Surface Science, 2022, 590, 153083.	3.1	7
864	An overview of substrate stiffness guided cellular response and its applications in tissue regeneration. Bioactive Materials, 2022, 15, 82-102.	8.6	77
865	Noncovalent reversible binding-enabled facile fabrication of leak-free PDMS microfluidic devices without plasma treatment for convenient cell loading and retrieval. Bioactive Materials, 2022, 16, 346-358.	8.6	4
866	Lightâ€Responsive Bilayer Cell Culture Platform for Reversible Cell Guidance. Small Science, 2022, 2, 2100099.	5.8	5
867	Reversible Crosslinking of Polymer/Metal-Ion Complexes for a Microfluidic Switch. ACS Omega, 2021, 6, 35297-35306.	1.6	2
868	Controllable construction of <scp>crossâ€linking</scp> network for regulating on the mechanical properties of polydimethylsiloxane and polydimethylsiloxane/carbon nanotubes composites. Journal of Applied Polymer Science, 2022, 139, .	1.3	11
869	The role of adhesion on mesoscale indentation for determining moduli of hydrated materials. Mechanics of Soft Materials, 2022, 4, $1$ .	0.4	1
873	Optimization of a PDMS-Based Cell Culture Substrate for High-Density Human-Induced Pluripotent Stem Cell Adhesion and Long-Term Differentiation into Cardiomyocytes under a Xeno-Free Condition. ACS Biomaterials Science and Engineering, 2022, 8, 2040-2052.	2.6	9
874	Continuous Preparation of Homogeneous Crosslinked PDMS Microgel Particles through Photoinduced Reversible Addition-Fragmentation Chain Transfer Polymerization. ACS Applied Polymer Materials, 2022, 4, 4347-4354.	2.0	2
875	Current and emerging trends in polymeric 3D printed microfluidic devices. Additive Manufacturing, 2022, 55, 102867.	1.7	29
876	A review on PCR and POC-PCR – a boon in the diagnosis of covid 19. Current Pharmaceutical Analysis, 2022, 18, .	0.3	0
877	Fabricating self-powered microfluidic devices via 3D printing for manipulating fluid flow. STAR Protocols, 2022, 3, 101376.	0.5	3

#	Article	IF	CITATIONS
878	Merits and advances of microfluidics in the pharmaceutical field: design technologies and future prospects. Drug Delivery, 2022, 29, 1549-1570.	2.5	18
879	Low-cost micro-graphite doped polydimethylsiloxane composite film for enhancement of mechanical-to-electrical energy conversion with aluminum and its application. Journal of the Taiwan Institute of Chemical Engineers, 2022, 135, 104388.	2.7	4
880	<i>S</i> -Nitroso- <i>N</i> -acetylpenicillamine grafted silicone oil for antibacterial interface applications. Materials Advances, 2022, 3, 6270-6279.	2.6	2
881	The improvement of mechanical properties of repair and construction compositions based on epoxy resin with mineral fillers. Journal of Polymer Research, 2022, 29, .	1.2	4
882	Amplification of Acoustic Forces Using Microbubble Arrays Enables Manipulation of Centimeter-Scale Objects. Physical Review Letters, 2022, 128, .	2.9	10
883	Biomimetic Self-Adhesive Structures for Wearable Sensors. Biosensors, 2022, 12, 431.	2.3	2
884	Metal-vapor atom behavior on thermocurable polydimethylsiloxane films. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	0
885	Structurally Modified PDMS-Based Capacitive Pressure Sensor. , 2022, , .		8
886	Robust photothermal superhydrophobic coatings with dual-size micro/nano structure enhance anti-/de-icing and chemical resistance properties. Chemical Engineering Journal, 2022, 446, 137461.	6.6	30
887	Influence of laser processing conditions for the manufacture of microchannels on ultrahigh molecular weight polyethylene coated with PDMS and PAA. AIMS Materials Science, 2022, 9, 554-571.	0.7	0
888	Viscous droplet impingement on soft substrates. Soft Matter, 2022, 18, 5474-5482.	1.2	1
889	Photocured Simultaneous and Sequential PDMS/PMMA Interpenetrating Polymer Networks. Macromolecules, 2022, 55, 5826-5839.	2.2	7
890	Oxygen plasma treatment time induced hydrophilicity of polydimethylsiloxane (PDMS) thin films for liquid lenses application. Materials Today: Proceedings, 2022, 65, 2442-2445.	0.9	5
891	Initial bacterial retention on polydimethylsiloxane of various stiffnesses: The relevance of modulus (mis)match. Colloids and Surfaces B: Biointerfaces, 2022, 217, 112709.	2.5	5
892	Nitric Oxide-Releasing Silicone Oil with Tunable Payload for Antibacterial Applications. ACS Applied Bio Materials, 2022, 5, 3396-3404.	2.3	5
893	Fabrication of a Cell-Friendly Poly(dimethylsiloxane) Culture Surface via Polydopamine Coating. Micromachines, 2022, 13, 1122.	1.4	2
894	Biaxial testing system for characterization of mechanical and rupture properties of small samples. HardwareX, 2022, 12, e00333.	1.1	11
895	Tunable elastomer materials with vascular tissue-like rupture mechanics behavior. Biomedical Physics and Engineering Express, 0, , .	0.6	1

#	Article	IF	Citations
896	Functional electrospun polymeric materials for bioelectronic devices: a review. Materials Advances, 2022, 3, 6753-6772.	2.6	11
897	Microfluidic Printing-Based Method for the Multifactorial Study of Cell-Free Protein Networks. Analytical Chemistry, 2022, 94, 11038-11046.	3.2	0
898	Recent advances in flexible force sensors and their applications: a review. Flexible and Printed Electronics, 2022, 7, 033002.	1.5	6
899	Interface Engineering in Chip-Scale GaN Optical Devices for Near-Hysteresis-Free Hydraulic Pressure Sensing. ACS Applied Materials & Sensing. 14, 38351-38357.	4.0	3
900	PDMS–PEG Block Copolymer and Pretreatment for Arresting Drug Absorption in Microphysiological Devices. ACS Applied Materials & Samp; Interfaces, 2022, 14, 38541-38549.	4.0	8
901	Wetting of Superhydrophobic Polylactic Acid Micropillared Patterns. Langmuir, 2022, 38, 10052-10064.	1.6	6
902	Ice-phobic polyurethane composite coating characterized by surface micro silicone loops with crumpling edges. Progress in Organic Coatings, 2022, 172, 107058.	1.9	1
903	Electrochemical Detection of Ascorbic Acid in Finger-Actuated Microfluidic Chip. Micromachines, 2022, 13, 1479.	1.4	4
904	Analysis of droplet size control for stem cells encapsulation using lab-on-a-chip. AIP Conference Proceedings, 2022, , .	0.3	1
905	The VersaLive platform enables microfluidic mammalian cell culture for versatile applications. Communications Biology, 2022, 5, .	2.0	6
906	The resistance of repair epoxy composites modified with silicon-containing additives and mineral fillers. Polymer Bulletin, $0, \dots$	1.7	0
907	Development of a transferable coarse-grained model of polydimethylsiloxane. Soft Matter, 2022, 18, 7887-7896.	1.2	4
908	Differentiation and on axon-guidance chip culture of human pluripotent stem cell-derived peripheral cholinergic neurons for airway neurobiology studies. Frontiers in Pharmacology, 0, 13, .	1.6	5
909	A multifunctional ultra-thin acoustic membrane with self-healing properties for adaptive low-frequency noise control. Scientific Reports, 2022, 12, .	1.6	1
910	Evaporation in a single channel in the presence of particles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 656, 130432.	2.3	3
911	Surprising efficacy twist of two established cytostatics revealed by a-la-carte 3D cell spheroid preparation protocol. European Journal of Pharmaceutics and Biopharmaceutics, 2022, 180, 224-237.	2.0	0
912	Production of supramolecular aggregates by microfluidic platforms., 2023,, 169-187.		0
913	A reinforced PDMS mold for hot embossing of cyclic olefin polymer in the fabrication of microfluidic chips. Lab on A Chip, 2022, 22, 4729-4734.	3.1	8

#	Article	IF	CITATIONS
915	Escherichia coli Biofilm Formation, Motion and Protein Patterns on Hyaluronic Acid and Polydimethylsiloxane Depend on Surface Stiffness. Journal of Functional Biomaterials, 2022, 13, 237.	1.8	0
916	Advances in microfluidic strategies for single-cell research. TrAC - Trends in Analytical Chemistry, 2022, 157, 116822.	5.8	13
917	Optimizing the accuracy of viscoelastic characterization with AFM force–distance experiments in the time and frequency domains. Soft Matter, 0, , .	1.2	1
918	Aging of UV curable PDMS developed for large-scale, high viscosity stereolithography. Polymer Degradation and Stability, 2023, 207, 110227.	2.7	2
919	All-fiber SPR microfluidic chip for GDF11 detection. Biomedical Optics Express, 2022, 13, 6659.	1.5	2
920	Developing Clinical Grade Flexible Implantable Electronics. Flexible and Printed Electronics, 0, , .	1.5	1
921	Development and Characterisation of a Whole Hybrid Sol-Gel Optofluidic Platform for Biosensing Applications. Nanomaterials, 2022, 12, 4192.	1.9	3
922	Role of Polymers in Microfluidic Devices. Polymers, 2022, 14, 5132.	2.0	7
923	Advances in surface modifications of the silicone breast implant and impact on its biocompatibility and biointegration. Biomaterials Research, 2022, 26, .	3.2	6
924	Selective Topography Directed Cell Adhesion on Spider Silk Surfaces. Advanced Materials Interfaces, 0, , 2201936.	1.9	3
925	Towards tunable polymer foam fabrication: A case study to advance green materials development in limited data scenarios. AICHE Journal, 0, , .	1.8	1
926	Plasma Activation and its Nanoconfinement Effects Boost Surface Antiâ€Biofouling Performance. Advanced Materials Interfaces, 2023, 10, .	1.9	1
927	Investigation of thermo-oxidative aging of silicone-based adhesives: substantiating separability between environmental and mechanical damages. Journal of Polymer Research, 2023, 30, .	1.2	1
929	Less Is More: Oligomer Extraction and Hydrothermal Annealing Increase PDMS Adhesion Forces for Materials Studies and for Biology-Focused Microfluidic Applications. Micromachines, 2023, 14, 214.	1.4	0
930	Flexible Pressure Sensor Based on Tetrapod-Shaped ZnO-PDMS Piezoelectric Nanocomposites. IEEE Sensors Journal, 2023, 23, 3532-3540.	2.4	3
931	Fetuinâ€ <scp>A</scp> adsorption to tunable polydimethylsiloxane and subsequent macrophage response. Journal of Biomedical Materials Research - Part A, 2023, 111, 1096-1109.	2.1	2
932	Different Dielectric Material used for Flexible Antenna: A Review., 2022,,.		0
933	Ultrasonic Traveling Waves for Near-Wall Positioning of Single Microbubbles in a Flowing Channel. Ultrasound in Medicine and Biology, 2023, 49, 961-969.	0.7	1

#	Article	IF	Citations
934	Flexible and Soft Materials and Devices for Neural Interface. , 2023, , 79-139.		1
935	Effect of epoxy resin modifications with industrial fillers on wetting and water absorption. Colloid and Polymer Science, 0, , .	1.0	2
936	Superhydrophobic and Conductive Foams with Antifouling and Oil–Water Separation Properties. ACS Applied Materials & Lamp; Interfaces, 2023, 15, 7610-7626.	4.0	16
937	The Development of Low-Cost Dry Electrode using PDMS/CNT Composite., 2023,,.		O
938	Hydrophilic Modification Strategies to Enhance the Surface Biocompatibility of Poly(dimethylsiloxane)â€Based Biomaterials for Medical Applications. Advanced Materials Interfaces, 2023, 10, .	1.9	10
939	High-Fidelity sEMG Signals Recorded by an on-Skin Electrode Based on AgNWs for Hand Gesture Classification Using Machine Learning. ACS Applied Materials & Samp; Interfaces, 2023, 15, 19374-19383.	4.0	3
940	High-sensitive microfluidic contact lens sensor for intraocular pressure visualized monitoring. Sensors and Actuators A: Physical, 2023, 354, 114250.	2.0	2
941	Artificial phylloplanes resembling physicochemical characteristics of selected fresh produce and their potential use in bacterial attachment/removal studies. Food Control, 2023, 149, 109730.	2.8	1
942	On the balance of hydrophilicity and electrostatic interactions during particle filtration and backwash at microfiltration pores. Journal of Membrane Science, 2023, 680, 121640.	4.1	2
943	Pressure drop measurement in microfluidics channel by the Fabry-Perot diaphragm-based flow sensor. Flow Measurement and Instrumentation, 2023, 91, 102355.	1.0	1
945	The Use of Biomaterials in Three-Dimensional Culturing of Cancer Cells. Current Issues in Molecular Biology, 2023, 45, 1100-1112.	1.0	0
946	Acoustic responses of underwater superhydrophobic surfaces subjected to an intense pulse. Journal of Fluid Mechanics, 2023, 956, .	1.4	0
947	A Universal Approach to Highâ€Indexâ€Contrast Flexible Integrated Photonics. Advanced Optical Materials, 2023, 11, .	3.6	5
948	Lipid Deposition Profiles Influence Foreign Body Responses. Advanced Materials, 2023, 35, .	11.1	5
949	Microfluidic intestine-on-a-chip: Current progress and further perspectives of probiotic-foodborne pathogen interactions. Trends in Food Science and Technology, 2023, 134, 207-221.	7.8	2
950	Enhancing the electrical conductivity of stretchable silicone composite textiles using ethanol solvent treatment. Korean Journal of Chemical Engineering, 0, , .	1.2	0
951	PLA 3D Printing as a Straightforward and Versatile Fabrication Method for PDMS Molds. Polymers, 2023, 15, 1498.	2.0	2
952	PDMS Micropatterns Coated with PDA and RGD Induce a Regulatory Macrophage-like Phenotype. Micromachines, 2023, 14, 673.	1.4	3

#	Article	IF	CITATIONS
953	Design and simulation of PDMS based flexible sensor using COMSOL and interfacing it for controlled robotics' applications. , 2022, , .		0
954	Precise Measurement of Grasping Force for Noncollaborative Infants. Advanced Materials Technologies, 0, , .	3.0	0
955	Mechanically Tunable Flexible Photonic Device for Strain Sensing Applications. Polymers, 2023, 15, 1814.	2.0	0
956	Tumor-on-a-Chip: Microfluidic Models of Hypoxic Tumor Microenvironment. , 2023, , 297-328.		0
957	Sensitivity Analysis of a Flexible Piezoresistive Sensor for Efficient Packaging., 2023,,.		0
965	Flexible Multimode-Based Beamforming MIMO Antenna. , 2023, , .		O
983	Flexible Nanobiosensors in Biomolecular Detection and Point of Care Testing., 2023, , 175-198.		0
1021	High-Pressure Liquid Environment Thin-Pdms-Film Digital PCR. , 2024, , .		0
1023	Recent advancements in bioreceptors and materials for biosensors. , 2024, , 163-202.		0
1024	Elastomeric nanocomposite foams for electromagnetic interference shielding. , 2024, , 91-134.		O
1029	A One-Step Soft Lithography Technique for Making Microfluidic Pdms Chips with Macro-Scale Structures. , 2024, , .		0