George M Whitesides

List of Publications by Year
in descending order

398 papers	122,459 citations	384 134 h-index	111 343 g-index
431 all docs	431 docs citations	431 times ranked	79401 citing authors

#	Article	IF	Citations
1	The origins and the future of microfluidics. Nature, 2006, 442, 368-373.	13.7	7,772
2	Self-Assembled Monolayers of Thiolates on Metals as a Form of Nanotechnology. Chemical Reviews, 2005, 105, 1103-1170.	23.0	7,419
3	Self-Assembly at All Scales. Science, 2002, 295, 2418-2421.	6.0	6,431
4	Rapid Prototyping of Microfluidic Systems in Poly(dimethylsiloxane). Analytical Chemistry, 1998, 70, 4974-4984.	3.2	4,788
5	SOFT LITHOGRAPHY. Annual Review of Materials Research, 1998, 28, 153-184.	5.5	4,347
6	Soft Lithography. Angewandte Chemie - International Edition, 1998, 37, 550-575.	7.2	4,140
7	Polyvalent Interactions in Biological Systems: Implications for Design and Use of Multivalent Ligands and Inhibitors. Angewandte Chemie - International Edition, 1998, 37, 2754-2794.	7.2	3,628
8	Fabrication of microfluidic systems in poly(dimethylsiloxane). Electrophoresis, 2000, 21, 27-40.	1.3	3,078
9	Chaotic Mixer for Microchannels. Science, 2002, 295, 647-651.	6.0	2,963
10	Patterned Paper as a Platform for Inexpensive, Low-Volume, Portable Bioassays. Angewandte Chemie - International Edition, 2007, 46, 1318-1320.	7.2	2,442
11	Soft Lithography in Biology and Biochemistry. Annual Review of Biomedical Engineering, 2001, 3, 335-373.	5.7	2,380
12	Diagnostics for the Developing World: Microfluidic Paper-Based Analytical Devices. Analytical Chemistry, 2010, 82, 3-10.	3.2	2,268
13	Solvent Compatibility of Poly(dimethylsiloxane)-Based Microfluidic Devices. Analytical Chemistry, 2003, 75, 6544-6554.	3.2	2,206
14	Spontaneous formation of ordered structures in thin films of metals supported on an elastomeric polymer. Nature, 1998, 393, 146-149.	13.7	2,077
15	Formation of droplets and bubbles in a microfluidic T-junctionâ€”scaling and mechanism of break-up. Lab on A Chip, 2006, 6, 437.	3.1	1,863
16	Multigait soft robot. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20400-20403.	3.3	1,750
17	An integrated design and fabrication strategy for entirely soft, autonomous robots. Nature, 2016, 536, 451-455.	13.7	1,557
18	Features of gold having micrometer to centimeter dimensions can be formed through a combination of stamping with an elastomeric stamp and an alkanethiol â€˜â€˜inkâ€™â€™ followed by chemical etching. Applied Physics Letters, 1993, 63, 2002-2004.	3.5	1,527

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19	Beyond molecules: Self-assembly of mesoscopic and macroscopic components. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 4769-4774.	3.3	1,402
20	Understanding Wax Printing: A Simple Micropatterning Process for Paper-Based Microfluidics. Analytical Chemistry, 2009, 81, 7091-7095.	3.2	1,358
21	Eutectic Galliumâ€Indium (EGaIn): A Liquid Metal Alloy for the Formation of Stable Structures in Microchannels at Room Temperature. Advanced Functional Materials, 2008, 18, 1097-1104.	7.8	1,170
22	Pneumatic Networks for Soft Robotics that Actuate Rapidly. Advanced Functional Materials, 2014, 24, 2163-2170.	7.8	1,125
23	Ionic skin. Advanced Materials, 2014, 26, 7608-7614.	11.1	992
24	Soft Robotics for Chemists. Angewandte Chemie - International Edition, 2011, 50, 1890-1895.	7.2	912
25	A Resilient, Untethered Soft Robot. Soft Robotics, 2014, 1, 213-223.	4.6	885
26	Generation of Solution and Surface Gradients Using Microfluidic Systems. Langmuir, 2000, 16, 8311-8316.	1.6	875
27	Polymer microstructures formed by moulding in capillaries. Nature, 1995, 376, 581-584.	13.7	857
28	Electrochemical sensing in paper-based microfluidic devices. Lab on A Chip, 2010, 10, 477-483.	3.1	837
29	Control of crystal nucleation by patterned self-assembled monolayers. Nature, 1999, 398, 495-498.	13.7	812
30	A 3D-printed, functionally graded soft robot powered by combustion. Science, 2015, 349, 161-165.	6.0	802
31	Generation of Gradients Having Complex Shapes Using Microfluidic Networks. Analytical Chemistry, 2001, 73, 1240-1246.	3.2	767
32	Effect of Surface Wettability on the Adsorption of Proteins and Detergents. Journal of the American Chemical Society, 1998, 120, 3464-3473.	6.6	759
33	The 'right' size in nanobiotechnology. Nature Biotechnology, 2003, 21, 1161-1165.	9.4	750
34	Zwitterionic SAMs that Resist Nonspecific Adsorption of Protein from Aqueous Buffer. Langmuir, 2001, 17, 2841-2850.	1.6	713
35	Generation of Monodisperse Particles by Using Microfluidics: Control over Size, Shape, and Composition. Angewandte Chemie - International Edition, 2005, 44, 724-728.	7.2	700
36	Micropatterned Surfaces for Control of Cell Shape, Position, and Function. Biotechnology Progress, 1998, 14, 356-363.	1.3	638

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37	Self-Assembly of Mesoscale Objects into Ordered Two-Dimensional Arrays. Science, 1997, 276, 233-235.	6.0	610
38	The controlled formation of ordered, sinusoidal structures by plasma oxidation of an elastomeric polymer. Applied Physics Letters, 1999, 75, 2557-2559.	1.5	603
39	Nanoscience, Nanotechnology, and Chemistry. Small, 2005, 1, 172-179.	5.2	599
40	Electron Transport through Thin Organic Films in Metalâ^'Insulatorâ^'Metal Junctions Based on Self-Assembled Monolayers. Journal of the American Chemical Society, 2001, 123, 5075-5085.	6.6	597
41	Monolayer films prepared by the spontaneous self-assembly of symmetrical and unsymmetrical dialkyl sulfides from solution onto gold substrates: structure, properties, and reactivity of constituent functional groups. Langmuir, 1988, 4, 365-385.	1.6	570
42	Formation of monodisperse bubbles in a microfluidic flow-focusing device. Applied Physics Letters, 2004, 85, 2649-2651.	1.5	563
43	Soft Robotics. Angewandte Chemie - International Edition, 2018, 57, 4258-4273.	7.2	534
44	Eutectic Galliumâ€“Indium (EGaIn): A Moldable Liquid Metal for Electrical Characterization of Selfâ€Assembled Monolayers. Angewandte Chemie - International Edition, 2008, 47, 142-144.	7.2	533
45	Molecular Self-Assembly of Aliphatic Thiols on Gold Colloids. Langmuir, 1996, 12, 3763-3772.	1.6	511
46	Elastomeric Origami: Programmable Paperâ€Elastomer Composites as Pneumatic Actuators. Advanced Functional Materials, 2012, 22, 1376-1384.	7.8	504
47	Subcellular positioning of small molecules. Nature, 2001, 411, 1016-1016.	13.7	496
48	Mirrorless Lasing from Mesostructured Waveguides Patterned by Soft Lithography. Science, 2000, 287, 465-467.	6.0	494
49	Dynamic self-assembly of magnetized, millimetre-sized objects rotating at a liquidâ€“air interface. Nature, 2000, 405, 1033-1036.	13.7	481
50	Mechanism for Flow-Rate Controlled Breakup in Confined Geometries: A Route to Monodisperse Emulsions. Physical Review Letters, 2005, 94, 164501.	2.9	480
51	Experimental and theoretical scaling laws for transverse diffusive broadening in two-phase laminar flows in microchannels. Applied Physics Letters, 2000, 76, 2376-2378.	1.5	478
52	Forming Electrical Networks in Three Dimensions by Self-Assembly. Science, 2000, 289, 1170-1172.	6.0	464
53	Integration of paper-based microfluidic devices with commercial electrochemical readers. Lab on A Chip, 2010, 10, 3163.	3.1	452
54	Micromolding in Capillaries:Â Applications in Materials Science. Journal of the American Chemical Society, 1996, 118, 5722-5731.	6.6	447

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55	Enzymes as Catalysts in Synthetic Organic Chemistry [New Synthetic Methods (53)]. Angewandte Chemie International Edition in English, 1985, 24, 617-638.	4.4	439
56	Submicrometer Patterning of Charge in Thin-Film Electrets. Science, 2001, 291, 1763-1766.	6.0	402
57	Geometric control of switching between growth, apoptosis, and differentiation during angiogenesis using micropatterned substrates. In Vitro Cellular and Developmental Biology - Animal, 1999, 35, 441-448.	0.7	392
58	Ordering of Spontaneously Formed Buckles on Planar Surfaces. Langmuir, 2000, 16, 3497-3501.	1.6	392
59	Modeling Organic Surfaces with Self-Assembled Monolayers. Angewandte Chemie International Edition in English, 1989, 28, 506-512.	4.4	350
60	Fabrication and Wetting Properties of Metallic Half-Shells with Submicron Diameters. Nano Letters, 2002, 2, 891-894.	4.5	350
61	Paperâ€Based Electrical Respiration Sensor. Angewandte Chemie - International Edition, 2016, 55, 5727-5732.	7.2	350
62	Combined microfluidic-micromagnetic separation of living cells in continuous flow. Biomedical Microdevices, 2006, 8, 299-308.	1.4	348
63	Soft Lithography. , 1998, 37, 550.		343
64	Surface Plasmon Resonance Permits in Situ Measurement of Protein Adsorption on Self-Assembled Monolayers of Alkanethiolates on Gold. Langmuir, 1995, 11, 4383-4385.	1.6	338
65	Towards a soft pneumatic glove for hand rehabilitation. , 2013, , .		336
66	The pressure drop along rectangular microchannels containing bubbles. Lab on A Chip, 2007, 7, 1479.	3.1	334
67	Using Mixed Self-Assembled Monolayers Presenting RGD and (EG)3OH Groups To Characterize Long-Term Attachment of Bovine Capillary Endothelial Cells to Surfaces. Journal of the American Chemical Society, 1998, 120, 6548-6555.	6.6	325
68	UNCONVENTIONAL NANOFABRICATION. Annual Review of Materials Research, 2004, 34, 339-372.	4.3	325
69	Comparison of Organic Monolayers on Polycrystalline Gold Spontaneously Assembled from Solutions Containing Dialkyl Disulfides or Alkanethiols. Langmuir, 1994, 10, 1825-1831.	1.6	322
70	A soft, bistable valve for autonomous control of soft actuators. Science Robotics, 2018, 3, .	9.9	316
71	Microfabrication through Electrostatic Self-Assembly. Langmuir, 1997, 13, 5349-5355.	1.6	314
72	A three-dimensional actuated origami-inspired transformable metamaterial with multiple degrees of freedom. Nature Communications, 2016, 7, 10929.	5.8	312

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73	Emulsification in a microfluidic flow-focusing device: effect of the viscosities of the liquids. Microfluidics and Nanofluidics, 2008, 5, 585-594.	1.0	299
74	Using an elastomeric phase mask for sub-100 nm photolithography in the optical near field. Applied Physics Letters, 1997, 70, 2658-2660.	1.5	285
75	Fabricating Large Arrays of Microwells with Arbitrary Dimensions and Filling Them Using Discontinuous Dewetting. Analytical Chemistry, 1998, 70, 2280-2287.	3.2	285
76	Alkanethiol self-assembled monolayers as the dielectric of capacitors with nanoscale thickness. Applied Physics Letters, 1998, 72, 1781-1783.	1.5	282
77	Design and Self-Assembly of Open, Regular, 3D Mesostructures. Science, 1999, 284, 948-951.	6.0	282
78	Designing a polyvalent inhibitor of anthrax toxin. Nature Biotechnology, 2001, 19, 958-961.	9.4	272
79	Microcontact Printing of Palladium Colloids:Â Micron-Scale Patterning by Electroless Deposition of Copper. Langmuir, 1996, 12, 1375-1380.	1.6	271
80	Three-dimensional self-assembly of millimetre-scale components. Nature, 1997, 386, 162-164.	13.7	264
81	â€œPaper Machineâ€•for Molecular Diagnostics. Analytical Chemistry, 2015, 87, 7595-7601.	3.2	260
82	Open-Source Potentiostat for Wireless Electrochemical Detection with Smartphones. Analytical Chemistry, 2018, 90, 6240-6246.	3.2	260
83	Molecular Rectification in Metalâ^'SAMâ^'Metal Oxideâ^'Metal Junctions. Journal of the American Chemical Society, 2009, 131, 17814-17827.	6.6	257
84	Universal mobile electrochemical detector designed for use in resource-limited applications. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11984-11989.	3.3	248
85	Buckling of Elastomeric Beams Enables Actuation of Soft Machines. Advanced Materials, 2015, 27, 6323-6327.	11.1	244
86	Autocatalytic, bistable, oscillatory networks of biologically relevant organic reactions. Nature, 2016, 537, 656-660.	13.7	243
87	Contact Angles for Liquid Drops at a Model Heterogeneous Surface Consisting of Alternating and Parallel Hydrophobic/Hydrophilic Strips. Langmuir, 1996, 12, 1913-1922.	1.6	240
88	Patterning Ligands on Reactive SAMs by Microcontact Printing. Langmuir, 1999, 15, 2055-2060.	1.6	233
89	Molecular Rectification in a Metalâ^'Insulatorâ^'Metal Junction Based on Self-Assembled Monolayers. Journal of the American Chemical Society, 2002, 124, 11730-11736.	6.6	232
90	Defining the Value of Injection Current and Effective Electrical Contact Area for EGaIn-Based Molecular Tunneling Junctions. Journal of the American Chemical Society, 2013, 135, 18131-18144.	6.6	229

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91	Using Explosions to Power a Soft Robot. Angewandte Chemie - International Edition, 2013, 52, 2892-2896.	7.2	227
92	Buckling Pneumatic Linear Actuators Inspired by Muscle. Advanced Materials Technologies, 2016, 1, 1600055.	3.0	226
93	Thread as a Matrix for Biomedical Assays. ACS Applied Materials & Interfaces, 2010, 2, 1722-1728.	4.0	224
94	Integrating Electronics and Microfluidics on Paper. Advanced Materials, 2016, 28, 5054-5063.	11.1	216
95	Influence of Defects on the Electrical Characteristics of Mercury-Drop Junctions:Â Self-Assembled Monolayers ofn-Alkanethiolates on Rough and Smooth Silver. Journal of the American Chemical Society, 2007, 129, 4336-4349.	6.6	215
96	Pneumatic Energy Sources for Autonomous and Wearable Soft Robotics. Soft Robotics, 2014, 1, 263-274.	4.6	215
97	Coding/Decoding and Reversibility of Droplet Trains in Microfluidic Networks. Science, 2007, 315, 828-832.	6.0	214
98	Charge Transport and Rectification in Arrays of SAM-Based Tunneling Junctions. Nano Letters, 2010, 10, 3611-3619.	4.5	213
99	Mesoscale Self-Assembly of Hexagonal Plates Using Lateral Capillary Forces:â€‰ Synthesis Using the â€œCapillary Bondâ€• Journal of the American Chemical Society, 1999, 121, 5373-5391.	6.6	212
100	Si/SiO₂-Templated Formation of Ultraflat Metal Surfaces on Glass, Polymer, and Solder Supports:â€‰ Their Use as Substrates for Self-Assembled Monolayers. Langmuir, 2007, 23, 9686-9694.	1.6	210
101	Extending Microcontact Printing as a Microlithographic Technique. Langmuir, 1997, 13, 2059-2067.	1.6	206
102	Mechanism of Rectification in Tunneling Junctions Based on Molecules with Asymmetric Potential Drops. Journal of the American Chemical Society, 2010, 132, 18386-18401.	6.6	205
103	A Hybrid Combining Hard and Soft Robots. Soft Robotics, 2014, 1, 70-74.	4.6	198
104	Electrical Resistance of Ag^{TS}â€“S(CH₂)_{nâ^'1}CH₃//Ga₂O₃/EGaIn Tunneling Junctions. Journal of Physical Chemistry C, 2012, 116, 10848-10860.	4.5	197
105	Soft Actuators and Robots that Are Resistant to Mechanical Damage. Advanced Functional Materials, 2014, 24, 3003-3010.	7.8	197
106	Cofactor Regeneration for Enzyme-Catalysed Synthesis. Biotechnology and Genetic Engineering Reviews, 1988, 6, 221-270.	2.4	187
107	Oddâ^'Even Effects in Charge Transport across Self-Assembled Monolayers. Journal of the American Chemical Society, 2011, 133, 2962-2975.	6.6	187
108	Controlling local disorder in self-assembled monolayers by patterning the topography of their metallic supports. Nature, 1998, 394, 868-871.	13.7	186

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109	Separation of Nanoparticles in Aqueous Multiphase Systems through Centrifugation. Nano Letters, 2012, 12, 4060-4064.	4.5	186
110	Controlling Mammalian Cell Spreading and Cytoskeletal Arrangement with Conveniently Fabricated Continuous Wavy Features on Poly(dimethylsiloxane). Langmuir, 2002, 18, 3273-3280.	1.6	185
111	Water-Soluble Sacrificial Layers for Surface Micromachining. Small, 2005, 1, 730-736.	5.2	183
112	Measuring Densities of Solids and Liquids Using Magnetic Levitation: Fundamentals. Journal of the American Chemical Society, 2009, 131, 10049-10058.	6.6	181
113	Don't Forget Long-Term Fundamental Research in Energy. Science, 2007, 315, 796-798.	6.0	180
114	Reinventing Chemistry. Angewandte Chemie - International Edition, 2015, 54, 3196-3209.	7.2	179
115	Affinity capillary electrophoresis: A physical-organic tool for studying interactions in biomolecular recognition. Electrophoresis, 1998, 19, 367-382.	1.3	178
116	Self-Assembled Monolayers on Gold Generated from Alkanethiols with the Structure RNHCOCH2SH. Langmuir, 1995, 11, 4371-4382.	1.6	177
117	Formation of Patterned Microstructures of Conducting Polymers by Soft Lithography, and Applications in Microelectronic Device Fabrication. Advanced Materials, 1999, 11, 1038-1041.	11.1	176
118	Self-Assembly of 10-Î¼m-Sized Objects into Ordered Three-Dimensional Arrays. Journal of the American Chemical Society, 2001, 123, 7677-7682.	6.6	174
119	Paper-based electroanalytical devices for accessible diagnostic testing. MRS Bulletin, 2013, 38, 309-314.	1.7	173
120	Digital logic for soft devices. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7750-7759.	3.3	170
121	Omniphobic â€œR^F Paperâ€•Produced by Silanization of Paper with Fluoroalkyltrichlorosilanes. Advanced Functional Materials, 2014, 24, 60-70.	7.8	169
122	Manipulation of magnetic microbeads in suspension using micromagnetic systems fabricated with soft lithography. Applied Physics Letters, 2001, 78, 1775-1777.	1.5	163
123	Microcontact Printing of Alkanethiols on Silver and Its Application in Microfabrication. Journal of the Electrochemical Society, 1996, 143, 1070-1079.	1.3	161
124	A magnetic trap for living cells suspended in a paramagnetic buffer. Applied Physics Letters, 2004, 85, 2411-2413.	1.5	155
125	Fabrication of magnetic microfiltration systems using soft lithography. Applied Physics Letters, 2002, 80, 461-463.	1.5	149
126	Microcontact Printing of Alkanethiols on Copper and Its Application in Microfabrication. Chemistry of Materials, 1996, 8, 601-603.	3.2	145

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127	Micromolding of Polymers in Capillaries:Â Applications in Microfabrication. Chemistry of Materials, 1996, 8, 1558-1567.	3.2	142
128	Surface-Initiated Ring-Opening Metathesis Polymerization on Si/SiO2. Macromolecules, 2000, 33, 2793-2795.	2.2	141
129	From the Bench to the Field in Lowâ€Cost Diagnostics: Two Case Studies. Angewandte Chemie - International Edition, 2015, 54, 5836-5853.	7.2	141
130	Paper-Based Potentiometric Ion Sensing. Analytical Chemistry, 2014, 86, 9548-9553.	3.2	140
131	Fabrication of Low-Cost Paper-Based Microfluidic Devices by Embossing or Cut-and-Stack Methods. Chemistry of Materials, 2014, 26, 4230-4237.	3.2	140
132	A Paper-Based â€œPop-upâ€•Electrochemical Device for Analysis of Beta-Hydroxybutyrate. Analytical Chemistry, 2016, 88, 6326-6333.	3.2	140
133	Xâ€ray grazing incidence diffraction from alkylsiloxane monolayers on silicon wafers. Journal of Chemical Physics, 1991, 95, 2854-2861.	1.2	139
134	Viscoelastic properties of oxide-coated liquid metals. Journal of Rheology, 2009, 53, 1305-1326.	1.3	139
135	Formation and Reaction of Interchain Carboxylic Anhydride Groups on Self-Assembled Monolayers on Gold. Langmuir, 1997, 13, 6704-6712.	1.6	136
136	Electrically Activated Paper Actuators. Advanced Functional Materials, 2016, 26, 2446-2453.	7.8	135
137	Non-Photolithographic Methods for Fabrication of Elastomeric Stamps for Use in Microcontact Printing. Langmuir, 1996, 12, 4033-4038.	1.6	134
138	Fabrication of glassy carbon microstructures by pyrolysis of microfabricated polymeric precursors. Advanced Materials, 1997, 9, 477-480.	11.1	134
139	Self-Assembled Monolayers of Alkanethiolates Presenting Tri(propylene sulfoxide) Groups Resist the Adsorption of Protein. Journal of the American Chemical Society, 1996, 118, 5136-5137.	6.6	133
140	Using Surface Plasmon Resonance Spectroscopy To Measure the Association of Detergents with Self-Assembled Monolayers of Hexadecanethiolate on Gold. Langmuir, 1997, 13, 2749-2755.	1.6	132
141	A paper-based invasion assay: Assessing chemotaxis of cancer cells in gradients of oxygen. Biomaterials, 2015, 52, 262-271.	5.7	132
142	Using Magnetic Levitation for Three Dimensional Selfâ€Assembly. Advanced Materials, 2011, 23, 4134-4140.	11.1	131
143	Title is missing!. Biomedical Microdevices, 2002, 4, 117-121.	1.4	130
144	The Molecular Origin of Enthalpy/Entropy Compensation in Biomolecular Recognition. Annual Review of Biophysics, 2018, 47, 223-250.	4.5	130

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145	Mixing with bubbles: a practical technology for use with portable microfluidic devices. Lab on A Chip, 2006, 6, 207-212.	3.1	129
146	Magnetic Assembly of Soft Robots with Hard Components. Advanced Functional Materials, 2014, 24, 2180-2187.	7.8	129
147	Microscope Projection Photolithography for Rapid Prototyping of Masters with Micron-Scale Features for Use in Soft Lithography. Langmuir, 2001, 17, 6005-6012.	1.6	128
148	A soft ring oscillator. Science Robotics, 2019, 4, .	9.9	128
149	Prototyping of Masks, Masters, and Stamps/Molds for Soft Lithography Using an Office Printer and Photographic Reduction. Analytical Chemistry, 2000, 72, 3176-3180.	3.2	127
150	Fabrication of Glass Microstructures by Micro-Molding of Sol-Gel Precursors. Advanced Materials, 1998, 10, 571-574.	11.1	126
151	Microfluidic Arrays of Fluidâ"Fluid Diffusional Contacts as Detection Elements and Combinatorial Tools. Analytical Chemistry, 2001, 73, 5207-5213.	3.2	126
152	Imbibition and Flow of Wetting Liquids in Noncircular Capillaries. Journal of Physical Chemistry B, 1997, 101, 855-863.	1.2	125
153	An untethered jumping soft robot. , 2014, , .		124
154	Fabrication of Arrays of Microlenses with Controlled Profiles Using Gray-Scale Microlens Projection Photolithography. Langmuir, 2002, 18, 9312-9318.	1.6	122
155	Quantifying distortions in soft lithography. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 88.	1.6	121
156	Designing ligands to bind proteins. Quarterly Reviews of Biophysics, 2005, 38, 385-395.	2.4	119
157	Magnetic Levitation in the Analysis of Foods and Water. Journal of Agricultural and Food Chemistry, 2010, 58, 6565-6569.	2.4	118
158	Engineering the Solid State with 2-Benzimidazolones. Journal of the American Chemical Society, 1996, 118, 4018-4029.	6.6	116
159	Formation of Bubbles and Droplets in Parallel, Coupled Flowâ€Focusing Geometries. Small, 2008, 4, 1795-1805.	5.2	116
160	Is it the shape of the cavity, or the shape of the water in the cavity?. European Physical Journal: Special Topics, 2014, 223, 853-891.	1.2	116
161	An outlook on microfluidics: the promise and the challenge. Lab on A Chip, 2022, 22, 530-536.	3.1	115
162	Fabrication of arrays of two-dimensional micropatterns using microspheres as lenses for projection photolithography. Applied Physics Letters, 2001, 78, 2273-2275.	1.5	113

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163	Aqueous Multiphase Systems of Polymers and Surfactants Provide Self-Assembling Step-Gradients in Density. Journal of the American Chemical Society, 2012, 134, 9094-9097.	6.6	113
164	The Rate of Charge Tunneling Is Insensitive to Polar Terminal Groups in Self-Assembled Monolayers in Ag^{TS}S(CH₂)_nM(CH₂)_mT//Ga₂O₃</su Junctions. Journal of the American Chemical Society, 2014, 136, 16-19.	2.6	111
165	Nonlinear Dynamics of a Flow-Focusing Bubble Generator: An Inverted Dripping Faucet. Physical Review Letters, 2005, 94, 234502.	2.9	110
166	Sliding-strip microfluidic device enables ELISA on paper. Biosensors and Bioelectronics, 2018, 99, 77-84.	5.3	110
167	Design, Synthesis, and Characterization of a High-Affinity Trivalent System Derived from Vancomycin andl-Lys-d-Ala-d-Ala. Journal of the American Chemical Society, 2000, 122, 2698-2710.	6.6	109
168	Statistical Tools for Analyzing Measurements of Charge Transport. Journal of Physical Chemistry C, 2012, 116, 6714-6733.	1.5	109
169	Molecular engineering of Surfaces Using Self-Assembled Monolayers. Science Progress, 2005, 88, 17-48.	1.0	108
170	The Rate of Charge Tunneling through Selfâ€Assembled Monolayers Is Insensitive to Many Functional Group Substitutions. Angewandte Chemie - International Edition, 2012, 51, 4658-4661.	7.2	108
171	Broadly Available Imaging Devices Enable High-Quality Low-Cost Photometry. Analytical Chemistry, 2015, 87, 9170-9178.	3.2	108
172	Density-based separation in multiphase systems provides a simple method to identify sickle cell disease. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14864-14869.	3.3	107
173	Rectification in Tunneling Junctions: 2,2â€²-Bipyridyl-Terminated n-Alkanethiolates. Journal of the American Chemical Society, 2014, 136, 17155-17162.	6.6	105
174	Self-Assembly of Microscale Objects at a Liquid/Liquid Interface through Lateral Capillary Forces. Langmuir, 2001, 17, 1757-1765.	1.6	104
175	Using Self-Assembled Monolayers That Present Oligo(ethylene glycol) Groups To Control the Interactions of Proteins with Surfaces. ACS Symposium Series, 1997, , 361-373.	0.5	103
176	Using Two-Stage Chemical Amplification To Determine the Density of Defects in Self-Assembled Monolayers of Alkanethiolates on Gold. Langmuir, 1996, 12, 3257-3264.	1.6	100
177	Using Elastomeric Membranes as Dry Resists and for Dry Lift-Off. Langmuir, 1999, 15, 2973-2984.	1.6	99
178	A Soft Tube-Climbing Robot. Soft Robotics, 2018, 5, 133-137.	4.6	97
179	Oddâ€“Even Effects in Charge Transport across n-Alkanethiolate-Based SAMs. Journal of the American Chemical Society, 2014, 136, 16919-16925.	6.6	96
180	Dynamic, self-assembled aggregates of magnetized, millimeter-sized objects rotating at the liquid-air interface:â€ƒMacroscopic, two-dimensional classical artificial atoms and molecules. Physical Review E, 2001, 64, 011603.	0.8	95

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181	The Art of Building Small. Scientific American, 2001, 285, 38-47.	1.0	93
182	Microbial and Enzymatic Biofuel Cells. ACS Symposium Series, 1994, , 271-290.	0.5	91
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