Wilhelm T S Huck

List of Publications by Year
in descending order

218 papers	28,567 citations	4120 87 h-index	5364 164 g-index
236 all docs	236 docs citations	236 times ranked	30226 citing authors

#	Article	IF	Citations
1	Emerging applications of stimuli-responsive polymer materials. Nature Materials, 2010, 9, 101-113.	13.3	5,007
2	Extracellular-matrix tethering regulates stem-cell fate. Nature Materials, 2012, 11, 642-649.	13.3	1,346
3	Polymer brushes via surface-initiated polymerizations. Chemical Society Reviews, 2004, 33, 14.	18.7	1,274
4	Microdroplets in Microfluidics: An Evolving Platform for Discoveries in Chemistry and Biology. Angewandte Chemie - International Edition, 2010, 49, 5846-5868.	7.2	903
5	Role of the extracellular matrix in regulating stem cell fate. Nature Reviews Molecular Cell Biology, 2013, 14, 467-473.	16.1	732
6	The controlled formation of ordered, sinusoidal structures by plasma oxidation of an elastomeric polymer. Applied Physics Letters, 1999, 75, 2557-2559.	1.5	603
7	Surface-Initiated Polymerizations in Aqueous Media:â€‰ Effect of Initiator Density. Langmuir, 2002, 18, 1265-1269.	1.6	447
8	Actin and serum response factor transduce physical cues from the microenvironment to regulate epidermal stem cell fate decisions. Nature Cell Biology, 2010, 12, 711-718.	4.6	414
9	Ordering of Spontaneously Formed Buckles on Planar Surfaces. Langmuir, 2000, 16, 3497-3501.	1.6	392
10	25th Anniversary Article: Designer Hydrogels for Cell Cultures: A Materials Selection Guide. Advanced Materials, 2014, 26, 125-148.	11.1	368
11	The nanotechnology of life-inspired systems. Nature Nanotechnology, 2016, 11, 585-592.	15.6	348
12	Patterning Electro-osmotic Flow with Patterned Surface Charge. Physical Review Letters, 2000, 84, 3314-3317.	2.9	317
13	Enhanced transcription rates in membrane-free protocells formed by coacervation of cell lysate. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11692-11697.	3.3	282
14	Surface grafted polymer brushes as ideal building blocks for â€œsmartâ€•surfaces. Physical Chemistry Chemical Physics, 2006, 8, 3815-3823.	1.3	272
15	Formation of Nanopatterned Polymer Blends in Photovoltaic Devices. Nano Letters, 2010, 10, 1302-1307.	4.5	248
16	Antibacterial and Antifouling Polymer Brushes Incorporating Antimicrobial Peptide. Bioconjugate Chemistry, 2009, 20, 71-77.	1.8	232
17	UCST Wetting Transitions of Polyzwitterionic Brushes Driven by Self-Association. Angewandte Chemie - International Edition, 2006, 45, 1770-1774.	7.2	223
18	Rational design of functional and tunable oscillating enzymatic networks. Nature Chemistry, 2015, 7, 160-165.	6.6	219

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19	Microfluidic Assembly of Monodisperse Vesosomes as Artificial Cell Models. Journal of the American Chemical Society, 2017, 139, 587-590.	6.6	217
20	Nanocontact Printing:Â A Route to Sub-50-nm-Scale Chemical and Biological Patterning. Langmuir, 2003, 19, 1963-1965.	1.6	207
21	Monodisperse Uni- and Multicompartment Liposomes. Journal of the American Chemical Society, 2016, 138, 7584-7591.	6.6	207
22	Probing cellular heterogeneity in cytokine-secreting immune cells using droplet-based microfluidics. Lab on A Chip, 2013, 13, 4740.	3.1	204
23	Hydrophilic PDMS microchannels for high-throughput formation of oil-in-water microdroplets and water-in-oil-in-water double emulsions. Lab on A Chip, 2010, 10, 1814.	3.1	203
24	Development of Quantitative Cell-Based Enzyme Assays in Microdroplets. Analytical Chemistry, 2008, 80, 3890-3896.	3.2	191
25	Conjugated Zwitterionic Polyelectrolyte as the Charge Injection Layer for High-Performance Polymer Light-Emitting Diodes. Journal of the American Chemical Society, 2011, 133, 683-685.	6.6	189
26	Ultrarapid Generation of Femtoliter Microfluidic Droplets for Single-Molecule-Counting Immunoassays. ACS Nano, 2013, 7, 5955-5964.	7.3	188
27	Microfluidic Formation of Monodisperse Coacervate Organelles in Liposomes. Angewandte Chemie - International Edition, 2017, 56, 9736-9740.	7.2	187
28	On the Role of Single Regiodefects and Polydispersity in Regioregular Poly(3-hexylthiophene): Defect Distribution, Synthesis of Defect-Free Chains, and a Simple Model for the Determination of Crystallinity. Journal of the American Chemical Society, 2012, 134, 4790-4805.	6.6	185
29	Polyelectrolyte-Bridged Metal/Cotton Hierarchical Structures for Highly Durable Conductive Yarns. ACS Applied Materials & Interfaces, 2010, 2, 529-535.	4.0	184
30	Polymer Brushes Showing Nonâ€Fouling in Blood Plasma Challenge the Currently Accepted Design of Protein Resistant Surfaces. Macromolecular Rapid Communications, 2011, 32, 952-957.	2.0	184
31	Controlling the Retention of Small Molecules in Emulsion Microdroplets for Use in Cell-Based Assays. Analytical Chemistry, 2009, 81, 3008-3016.	3.2	182
32	Surface-induced droplet fusion in microfluidic devices. Lab on A Chip, 2007, 7, 984.	3.1	179
33	Thermo-Responsive Polymer Brushes with Tunable Collapse Temperatures in the Physiological Range. Macromolecules, 2007, 40, 4403-4405.	2.2	178
34	Multicomponent Polymer Brushes. Journal of the American Chemical Society, 2006, 128, 16253-16258.	6.6	177
35	Electrochemically Mediated Atom Transfer Radical Polymerization on Nonconducting Substrates: Controlled Brush Growth through Catalyst Diffusion. Journal of the American Chemical Society, 2013, 135, 1708-1710.	6.6	176
36	Switching the Properties of Polyelectrolyte Brushes via â€œHydrophobic Collapseâ€• Macromolecules, 2005, 38, 10192-10199.	2.2	175

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37	Uniaxial Alignment of Liquid-Crystalline Conjugated Polymers by Nanoconfinement. Nano Letters, 2007, 7, 987-992.	4.5	173
38	An Integrated Device for Monitoring Timeâ€Dependent in vitro Expression From Single Genes in Picolitre Droplets. ChemBioChem, 2008, 9, 439-446.	1.3	172
39	Singleâ€Cell Analysis Using Droplet Microfluidics. Advanced Biology, 2020, 4, e1900188.	3.0	169
40	Highly Reversible and Multi-Stage Cantilever Actuation Driven by Polyelectrolyte Brushes. Journal of the American Chemical Society, 2006, 128, 5326-5327.	6.6	164
41	Coupling Microdroplet Microreactors with Mass Spectrometry: Reading the Contents of Single Droplets Online. Angewandte Chemie - International Edition, 2009, 48, 3665-3668.	7.2	162
42	Dissipative adaptation in driven self-assembly leading to self-dividing fibrils. Nature Nanotechnology, 2018, 13, 849-855.	15.6	160
43	Reactions on Monolayers: Organic Synthesis in Two Dimensions. European Journal of Organic Chemistry, 2003, 2003, 17-29.	1.2	154
44	Simultaneous Determination of Gene Expression and Enzymatic Activity in Individual Bacterial Cells in Microdroplet Compartments. Journal of the American Chemical Society, 2009, 131, 15251-15256.	6.6	151
45	Locking and Unlocking of Polyelectrolyte Brushes: Toward the Fabrication of Chemically Controlled Nanoactuators. Angewandte Chemie - International Edition, 2005, 44, 4578-4581.	7.2	150
46	Synthesis and Characterization of Poly(3-Sulfopropylmethacrylate) Brushes for Potential Antibacterial Applications. Langmuir, 2007, 23, 3314-3321.	1.6	150
47	Electrochemically Induced Surfaceâ€Initiated Atomâ€Transfer Radical Polymerization. Angewandte Chemie - International Edition, 2012, 51, 5092-5095.	7.2	147
48	Self-Organization of Nanocrystals in Polymer Brushes. Application in Heterojunction Photovoltaic Diodes. Nano Letters, 2005, 5, 1653-1657.	4.5	146
49	Effect of Polymer Brush Architecture on Antibiofouling Properties. Biomacromolecules, 2011, 12, 4169-4172.	2.6	145
50	3D microniches reveal the importance of cell size and shape. Nature Communications, 2017, 8, 1962.	5.8	145
51	From Microdroplets to Microfluidics: Selective Emulsion Separation in Microfluidic Devices. Angewandte Chemie - International Edition, 2008, 47, 2042-2045.	7.2	144
52	Temperature-Responsive Glycopolymer Brushes Synthesized via RAFT Polymerization Using the Z-group Approach. Macromolecular Rapid Communications, 2006, 27, 1121-1126.	2.0	142
53	A double droplet trap system for studying mass transport across a droplet-droplet interface. Lab on A Chip, 2010, 10, 1281.	3.1	138
54	Noncovalent Synthesis of Nanostructures: Combining Coordination Chemistry and Hydrogen Bonding. Angewandte Chemie International Edition in English, 1997, 36, 1006-1008.	4.4	136

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55	Responsive polymers for nanoscale actuation. Materials Today, 2008, 11, 24-32.	8.3	133
56	A Compartmentalized Out-of-Equilibrium Enzymatic Reaction Network for Sustained Autonomous Movement. ACS Central Science, 2016, 2, 843-849.	5.3	133
57	Ordered Block-Copolymer Assembly Using Nanoimprint Lithography. Nano Letters, 2004, 4, 1633-1636.	4.5	131
58	Shape-memory nanoparticles from inherently non-spherical polymer colloids. Nature Materials, 2005, 4, 486-490.	13.3	131
59	Chain-Growth Polymerization of Unusual Anion-Radical Monomers Based on Naphthalene Diimide: A New Route to Well-Defined n-Type Conjugated Copolymers. Journal of the American Chemical Society, 2011, 133, 19966-19970.	6.6	128
60	Large Self-Assembled Organopalladium Spheres. Journal of the American Chemical Society, 1995, 117, 8293-8294.	6.6	127
61	Controlled Assembly of Nanosized Metallodendrimers. Angewandte Chemie International Edition in English, 1996, 35, 1213-1215.	4.4	127
62	Efficient Conjugatedâ€Polymer Optoelectronic Devices Fabricated by Thinâ€Film Transferâ€Printing Technique. Advanced Functional Materials, 2008, 18, 1012-1019.	7.8	125
63	Formation of Spherical and Nonâ€Spherical Eutectic Galliumâ€Indium Liquidâ€Metal Microdroplets in Microfluidic Channels at Room Temperature. Advanced Functional Materials, 2012, 22, 2624-2631.	7.8	125
64	Controlled growth and subsequent chemical modification of poly(glycidyl methacrylate) brushes on silicon wafers. Journal of Materials Chemistry, 2004, 14, 730.	6.7	123
65	Programmable chemical reaction networks: emulating regulatory functions in living cells using a bottom-up approach. Chemical Society Reviews, 2015, 44, 7465-7483.	18.7	123
66	Macromolecular crowding creates heterogeneous environments of gene expression in picolitre droplets. Nature Nanotechnology, 2016, 11, 191-197.	15.6	123
67	Patterning Thin Films of Poly(ethylene imine) on a Reactive SAM Using Microcontact Printing. Langmuir, 1999, 15, 1208-1214.	1.6	122
68	Synthesis of oligo(ethylene glycol) methacrylate polymer brushes. European Polymer Journal, 2005, 41, 1757-1765.	2.6	122
69	Chain-Growth Suzuki Polymerization of n-Type Fluorene Copolymers. Macromolecules, 2011, 44, 9057-9061.	2.2	122
70	Fabrication of Microgel Particles with Complex Shape via Selective Polymerization of Aqueous Twoâ€Phase Systems. Small, 2012, 8, 2356-2360.	5.2	121
71	Collagen Gels with Different Fibrillar Microarchitectures Elicit Different Cellular Responses. ACS Applied Materials & Interfaces, 2017, 9, 19630-19637.	4.0	120
72	Bioadhesion at micro-patterned stimuli-responsive polymer brushes. Journal of Materials Chemistry, 2005, 15, 2089.	6.7	118

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73	â€œStick and slideâ€•ferrofluidic droplets on superhydrophobic surfaces. Applied Physics Letters, 2006, 89, 081911.	1.5	118
74	Thickness-Dependent Properties of Polyzwitterionic Brushes. Macromolecules, 2008, 41, 6317-6321.	2.2	116
75	Single-cell analysis reveals that stochasticity and paracrine signaling control interferon-alpha production by plasmacytoid dendritic cells. Nature Communications, 2018, 9, 3317.	5.8	116
76	Convergent and Divergent Noncovalent Synthesis of Metallodendrimers. Journal of the American Chemical Society, 1998, 120, 6240-6246.	6.6	109
77	Polyelectrolyte Brush Amplified Electroactuation of Microcantilevers. Nano Letters, 2008, 8, 725-730.	4.5	109
78	A Method for Detecting Circulating Tumor Cells Based on the Measurement of Singleâ€Cell Metabolism in Dropletâ€Based Microfluidics. Angewandte Chemie - International Edition, 2016, 55, 8581-8584.	7.2	109
79	Three-Dimensional Mesoscale Self-Assembly. Journal of the American Chemical Society, 1998, 120, 8267-8268.	6.6	106
80	Creating Nanoscale Patterns of Dendrimers on Silicon Surfaces with Dip-Pen Nanolithography. Nano Letters, 2002, 2, 713-716.	4.5	106
81	Hyperbranched Polyglycidol on Si/SiO2Surfaces via Surface-Initiated Polymerization. Macromolecules, 2003, 36, 5088-5093.	2.2	104
82	Convenient Route To Initiate Kumada Catalyst-Transfer Polycondensation Using Ni(dppe)Cl₂ or Ni(dppp)Cl₂ and Sterically Hindered Grignard Compounds. Macromolecules, 2010, 43, 10157-10161.	2.2	103
83	Biofunctionalized Protein Resistant Oligo(ethylene glycol)-Derived Polymer Brushes as Selective Immobilization and Sensing Platforms. Biomacromolecules, 2009, 10, 2885-2894.	2.6	100
84	Exploiting the superior protein resistance of polymer brushes to control single cell adhesion and polarisation at the micron scale. Biomaterials, 2010, 31, 5030-5041.	5.7	99
85	Controlling nanoscale morphology in polymer photovoltaic devices. Nano Today, 2010, 5, 231-242.	6.2	97
86	Enhancement of Charge-Transport Characteristics in Polymeric Films Using Polymer Brushes. Nano Letters, 2006, 6, 573-578.	4.5	92
87	One drop at a time: toward droplet microfluidics as a versatile tool for single-cell analysis. NPG Asia Materials, 2014, 6, e133-e133.	3.8	92
88	On the flow topology inside droplets moving in rectangular microchannels. Lab on A Chip, 2014, 14, 3611-3620.	3.1	91
89	A short peptide synthon for liquidâ€“liquid phase separation. Nature Chemistry, 2021, 13, 1046-1054.	6.6	91
90	Synthesis, Purification, and Characterization of Well-Defined All-Conjugated Diblock Copolymers PF8TBT-b-P3HT. Macromolecules, 2012, 45, 4142-4151.	2.2	88

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91	Probing the Responsive Behavior of Polyelectrolyte Brushes Using Electrochemical Impedance Spectroscopy. Analytical Chemistry, 2007, 79, 176-182.	3.2	87
92	Microfluidic platform for combinatorial synthesis in picolitre droplets. Lab on A Chip, 2012, 12, 1320.	3.1	87
93	Effect of Nanoconfinement on the Collapse Transition of Responsive Polymer Brushes. Nano Letters, 2008, 8, 3819-3824.	4.5	85
94	Intelligent Microfluidics: The Convergence of Machine Learning and Microfluidics in Materials Science and Biomedicine. Matter, 2020, 3, 1893-1922.	5.0	85
95	Quantitative tracking of the growth of individual algal cells in microdroplet compartments. Integrative Biology (United Kingdom), 2011, 3, 1043.	0.6	84
96	Recent Advances in Engineering the Stem Cell Microniche in 3D. Advanced Science, 2018, 5, 1800448.	5.6	83
97	AFM study of cationically charged polymer brushes: switching between soft and hard matter. Soft Matter, 2005, 1, 66.	1.2	80
98	Polymer Brushes: Routes toward Mechanosensitive Surfaces. Accounts of Chemical Research, 2010, 43, 466-474.	7.6	79
99	Formation of Wellâ€Ordered Heterojunctions in Polymer:PCBM Photovoltaic Devices. Advanced Functional Materials, 2011, 21, 139-146.	7.8	78
100	Controlled Folding of 2D Auâ€“Polymer Brush Composites into 3D Microstructures. Advanced Functional Materials, 2011, 21, 652-657.	7.8	76
101	Monodisperse collagenâ€“gelatin beads as potential platforms for 3D cell culturing. Journal of Materials Chemistry B, 2013, 1, 5128.	2.9	75
102	Biocompatible fluorinated polyglycerols for droplet microfluidics as an alternative to PEG-based copolymer surfactants. Lab on A Chip, 2016, 16, 65-69.	3.1	74
103	Combined quantification of intracellular (phospho-)proteins and transcriptomics from fixed single cells. Scientific Reports, 2019, 9, 1469.	1.6	73
104	Patterned Polymer Multilayers as Etch Resists. Langmuir, 1999, 15, 6862-6867.	1.6	72
105	Sensitive, High Throughput Detection of Proteins in Individual, Surfactant-Stabilized Picoliter Droplets Using Nanoelectrospray Ionization Mass Spectrometry. Analytical Chemistry, 2013, 85, 3812-3816.	3.2	72
106	Macromolecularly Crowded Protocells from Reversibly Shrinking Monodisperse Liposomes. Journal of the American Chemical Society, 2018, 140, 7399-7402.	6.6	72
107	The electrochemical detection of droplets in microfluidic devices. Lab on A Chip, 2008, 8, 1937.	3.1	70
108	Direct Measurement of Normal and Shear Forces between Surface-Grown Polyelectrolyte Layers. Journal of Physical Chemistry B, 2009, 113, 3947-3956.	1.2	67

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109	Controlled Polymerâ€Brush Growth from Microliter Volumes using Sacrificialâ€Anode Atomâ€Transfer Radical Polymerization. Angewandte Chemie - International Edition, 2013, 52, 9125-9129.	7.2	66
110	Cellular Volume and Matrix Stiffness Direct Stem Cell Behavior in a 3D Microniche. ACS Applied Materials & Interfaces, 2019, 11, 1754-1759.	4.0	66
111	Suzukiâ€“Miyaura coupling reactions in aqueous microdroplets with catalytically active fluorous interfaces. Chemical Communications, 2009, , 6225.	2.2	65
112	Simultaneous measurement of reactions in microdroplets filled by concentration gradients. Lab on A Chip, 2009, 9, 1707.	3.1	65
113	Following Polymer Brush Growth Using the Quartz Crystal Microbalance Technique. Macromolecular Rapid Communications, 2005, 26, 1117-1121.	2.0	64
114	Investigation of â€œOn Waterâ€•Conditions Using a Biphasic Fluidic Platform. Angewandte Chemie - International Edition, 2012, 51, 7981-7984.	7.2	63
115	High-Resolution Contact Printing with Dendrimers. Nano Letters, 2002, 2, 347-349.	4.5	62
116	Mechanically Induced Generation of Counterions Inside Surface-Grafted Charged Macromolecular Films: Towards Enhanced Mechanotransduction in Artificial Systems. Angewandte Chemie - International Edition, 2006, 45, 7440-7443.	7.2	57
117	Associative Interactions in Crowded Solutions of Biopolymers Counteract Depletion Effects. Journal of the American Chemical Society, 2015, 137, 13041-13048.	6.6	55
118	Polymer brush resist for responsive wettability. Soft Matter, 2009, 5, 2738.	1.2	54
119	Preprogramming Complex Hydrogel Responses using Enzymatic Reaction Networks. Angewandte Chemie - International Edition, 2017, 56, 1794-1798.	7.2	54
120	Monitoring a Reaction at Submillisecond Resolution in Picoliter Volumes. Analytical Chemistry, 2011, 83, 1462-1468.	3.2	53
121	Cell-free microcompartmentalised transcriptionâ€“translation for the prototyping of synthetic communication networks. Current Opinion in Biotechnology, 2019, 58, 72-80.	3.3	53
122	Fluorinated Silane Self-Assembled Monolayers as Resists for Patterning Indium Tin Oxide. Langmuir, 2003, 19, 5273-5278.	1.6	52
123	Microfluidic Formation of Monodisperse Coacervate Organelles in Liposomes. Angewandte Chemie, 2017, 129, 9868-9872.	1.6	51
124	The Effect of [CuI]/[CuII] Ratio on the Kinetics and Conformation of Polyelectrolyte Brushes by Atom Transfer Radical Polymerization. Macromolecular Rapid Communications, 2006, 27, 1632-1636.	2.0	48
125	Self-Assembly Meets Nanofabrication: Recent Developments in Microcontact Printing and Dip-Pen Nanolithography. Angewandte Chemie - International Edition, 2007, 46, 2754-2757.	7.2	46
126	Donorâ€“acceptor interface modification by zwitterionic conjugated polyelectrolytes in polymer photovoltaics. Energy and Environmental Science, 2013, 6, 1589.	15.6	46

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127	Threshold Sensing through a Synthetic Enzymatic Reactionâ€“Diffusion Network. Angewandte Chemie - International Edition, 2014, 53, 8066-8069.	7.2	46
128	Decoupling geometrical and chemical cues directing epidermal stem cell fate on polymer brush-based cell micro-patterns. Integrative Biology (United Kingdom), 2013, 5, 899-910.	0.6	45
129	Alterations in Red Blood Cell Deformability during Storage: A Microfluidic Approach. BioMed Research International, 2014, 2014, 1-9.	0.9	45
130	Effects of nanoconfinement on the morphology and reactivity of organic materials. Chemical Communications, 2005, , 4143.	2.2	44
131	Mimicking normal tissue architecture and perturbation in cancer with engineered micro-epidermis. Biomaterials, 2012, 33, 5221-5229.	5.7	44
132	Robustness, Entrainment, and Hybridization in Dissipative Molecular Networks, and the Origin of Life. Journal of the American Chemical Society, 2019, 141, 8289-8295.	6.6	44
133	Exploring Actuation and Mechanotransduction Properties of Polymer Brushes. Macromolecular Rapid Communications, 2008, 29, 539-546.	2.0	43
134	Monodisperse Water-in-Oil-in-Water (W/O/W) Double Emulsion Droplets as Uniform Compartments for High-Throughput Analysis via Flow Cytometry. Micromachines, 2013, 4, 402-413.	1.4	43
135	Biocompatible macro-initiators controlling radical retention in microfluidic on-chip photo-polymerization of water-in-oil emulsions. Chemical Communications, 2014, 50, 112-114.	2.2	43
136	Microfluidic-Assisted Fabrication of Clay Microgels for Cell-Free Protein Synthesis. ACS Applied Materials & Interfaces, 2018, 10, 29308-29313.	4.0	41
137	Microdroplet fabrication of silverâ€“agarose nanocomposite beads for SERS optical accumulation. Soft Matter, 2011, 7, 1321-1325.	1.2	39
138	Transcription and Translation in Cytomimetic Protocells Perform Most Efficiently at Distinct Macromolecular Crowding Conditions. ACS Synthetic Biology, 2020, 9, 2797-2807.	1.9	39
139	Wavelength tuning the photonic band gap in chiral nematic liquid crystals using electrically commanded surfaces. Applied Physics Letters, 2007, 91, .	1.5	38
140	Energy expenditure during cell spreading influences the cellular response to matrix stiffness. Biomaterials, 2021, 267, 120494.	5.7	38
141	The switching properties of chiral nematic liquid crystals using electrically commanded surfaces. Soft Matter, 2009, 5, 354-362.	1.2	37
142	Rational design and dynamics of self-propelled colloidal bead chains: from rotators to flagella. Scientific Reports, 2017, 7, 16758.	1.6	37
143	Assembly of Polyelectrolytes on CNTs by Van der Waals Interactions and Fabrication of LBL Polyelectrolyte/CNT Composites. Macromolecular Chemistry and Physics, 2007, 208, 603-608.	1.1	36
144	Bottomâ€Up Construction of an Adaptive Enzymatic Reaction Network. Angewandte Chemie - International Edition, 2018, 57, 14065-14069.	7.2	36

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145	Formation of Hierarchically Structured Thin Films. Advanced Functional Materials, 2009, 19, 2236-2243.	7.8	35
146	Controlling the contents of microdroplets by exploiting the permeability of PDMS. Lab on A Chip, 2011, 11, 1132.	3.1	35
147	Photochemical Control over Oscillations in Chemical Reaction Networks. Journal of the American Chemical Society, 2017, 139, 15296-15299.	6.6	35
148	Self-organization of the bacterial cell-division protein FtsZ in confined environments. Soft Matter, 2013, 9, 10493.	1.2	34
149	Surface modification of PDMS via self-organization of vinyl-terminated small molecules. Soft Matter, 2009, 5, 2286.	1.2	33
150	Interface limited charge extraction and recombination in organic photovoltaics. Energy and Environmental Science, 2014, 7, 2227.	15.6	33
151	Fabrication of 3D Tubular Hydrogel Materials through On-Site Surface Free Radical Polymerization. Chemistry of Materials, 2018, 30, 6756-6768.	3.2	32
152	Influence of Molecular Structure on the Properties of Out-of-Equilibrium Oscillating Enzymatic Reaction Networks. Journal of the American Chemical Society, 2015, 137, 12415-12420.	6.6	31
153	Quantitative Singleâ€Cell mRNA Analysis in Hydrogel Beads. Angewandte Chemie - International Edition, 2016, 55, 6698-6701.	7.2	30
154	Synthesis of raspberry-like particles using polyelectrolyte multilayer-coated particles. Journal of Materials Chemistry, 2007, 17, 4943.	6.7	29
155	Vesicle budding from polymersomes templated by microfluidically prepared double emulsions. Materials Horizons, 2014, 1, 96-101.	6.4	29
156	An electro-coalescence chip for effective emulsion breaking in droplet microfluidics. Lab on A Chip, 2014, 14, 2398-2402.	3.1	29
157	Sigma Factor-Mediated Tuning of Bacterial Cell-Free Synthetic Genetic Oscillators. ACS Synthetic Biology, 2018, 7, 2879-2887.	1.9	29
158	Synthesis and characterization of low bandgap conjugated donorâ€“acceptor polymers for polymer:PCBM solar cells. Journal of Materials Chemistry, 2010, 20, 9231.	6.7	28
159	Direct Correlation between Local Pressure and Fluorescence Output in Mechanoresponsive Polyelectrolyte Brushes. Angewandte Chemie - International Edition, 2011, 50, 9629-9632.	7.2	28
160	Deformation of double emulsions under conditions of flow cytometry hydrodynamic focusing. Lab on A Chip, 2015, 15, 4291-4301.	3.1	27
161	Photoswitchable Molecular Communication between Programmable DNAâ€Based Artificial Membraneless Organelles. Angewandte Chemie - International Edition, 2022, 61, .	7.2	27
162	Peptideâ€Based Coacervateâ€Core Vesicles with Semipermeable Membranes. Advanced Materials, 2022, 34, .	11.1	27

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163	The microenvironment of double emulsions in rectangular microchannels. Lab on A Chip, 2015, 15, 2327-2334.	3.1	26
164	Branched DNA Architectures Produced by PCRâ€Based Assembly as Gene Compartments for Cellâ€Free Geneâ€Expression Reactions. ChemBioChem, 2019, 20, 2597-2603.	1.3	26
165	Formation of Hybrid 2D Polymerâ^'Metal Microobjects. Langmuir, 2007, 23, 1569-1576.	1.6	25
166	Synthesis and Characterization of Surface-Initiated Helical Polyisocyanopeptide Brushes. Macromolecules, 2008, 41, 1945-1951.	2.2	25
167	Controlled Bending of Microscale Auâ^'Polyelectrolyte Brush Bilayers. Macromolecules, 2010, 43, 5382-5386.	2.2	25
168	Microfluidic production of monodisperse functional o/w droplets and study of their reversible pH dependent aggregation behavior. Soft Matter, 2011, 7, 4214.	1.2	25
169	Ultrasensitivity by Molecular Titration in Spatially Propagating Enzymatic Reactions. Biophysical Journal, 2013, 105, 1057-1066.	0.2	25
170	Autonomous mesoscale positioning emerging from myelin filament self-organization and Marangoni flows. Nature Communications, 2020, 11, 4800.	5.8	25
171	Environmental conditions drive self-organization of reaction pathways in a prebiotic reaction network. Nature Chemistry, 2022, 14, 623-631.	6.6	24
172	Intra-Species Bacterial Quorum Sensing Studied at Single Cell Level in a Double Droplet Trapping System. International Journal of Molecular Sciences, 2013, 14, 10570-10581.	1.8	23
173	A Method for Detecting Circulating Tumor Cells Based on the Measurement of Singleâ€Cell Metabolism in Dropletâ€Based Microfluidics. Angewandte Chemie, 2016, 128, 8723-8726.	1.6	23
174	Grip on complexity in chemical reaction networks. Beilstein Journal of Organic Chemistry, 2017, 13, 1486-1497.	1.3	23
175	Fabrication of Subâ€10â€‰nm Metallic Lines of Low Lineâ€Width Roughness by Hydrogen Reduction of Patterned Metalâ€“Organic Materials. Advanced Functional Materials, 2010, 20, 2317-2323.	7.8	22
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