Wilhelm T S Huck

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9203000/publications.pdf

Version: 2024-02-01

218 papers	28,567 citations	4146 87 h-index	5394 164 g-index
236 all docs	236 docs citations	236 times ranked	30226 citing authors

#	Article	IF	Citations
1	Photoswitchable Molecular Communication between Programmable DNAâ€Based Artificial Membraneless Organelles. Angewandte Chemie - International Edition, 2022, 61, .	13.8	27
2	Photoswitchable Molecular Communication between Programmable DNAâ€Based Artificial Membraneless Organelles. Angewandte Chemie, 2022, 134, .	2.0	5
3	The Effect of Geometry and TGFâ€Î² Signaling on Tumor Cell Migration from Freeâ€Standing Microtissues. Advanced Healthcare Materials, 2022, 11, e2102696.	7.6	3
4	DNA Input Classification by a Riboregulator-Based Cell-Free Perceptron. ACS Synthetic Biology, 2022, 11, 1510-1520.	3.8	8
5	A Bayesian Approach to Extracting Kinetic Information from Artificial Enzymatic Networks. Analytical Chemistry, 2022, 94, 7311-7318.	6.5	8
6	Traditional protocols and optimization methods lead to absent expression in a mycoplasma cell-free gene expression platform. Synthetic Biology, 2022, 7, .	2.2	2
7	A microfluidic optimal experimental design platform for forward design of cell-free genetic networks. Nature Communications, 2022, 13, .	12.8	12
8	Environmental conditions drive self-organization of reaction pathways in a prebiotic reaction network. Nature Chemistry, 2022, 14, 623-631.	13.6	24
9	Peptideâ€Based Coacervateâ€Core Vesicles with Semipermeable Membranes. Advanced Materials, 2022, 34, .	21.0	27
10	Microfabricated Gaps Reveal the Effect of Geometrical Control in Wound Healing. Advanced Healthcare Materials, 2021, 10, 2000630.	7.6	10
11	The Dynamics of an Oscillating Enzymatic Reaction Network is Crucially Determined by Side Reactions. ChemSystemsChem, 2021, 3, e2000033.	2.6	9
12	Energy expenditure during cell spreading influences the cellular response to matrix stiffness. Biomaterials, 2021, 267, 120494.	11.4	38
13	One-Step Generation of Multisomes from Lipid-Stabilized Double Emulsions. ACS Applied Materials & Interfaces, 2021, 13, 6739-6747.	8.0	10
14	Reversible Photoswitchable Inhibitors Generate Ultrasensitivity in Out-of-Equilibrium Enzymatic Reactions. Journal of the American Chemical Society, 2021, 143, 5709-5716.	13.7	13
15	Reversible Photoswitchable Inhibitors Enable Wavelengthâ€Selective Regulation of Outâ€ofâ€Equilibrium Biâ€enzymatic Systems. ChemSystemsChem, 2021, 3, .	2.6	1
16	Cell-Free Characterization of Coherent Feed-Forward Loop-Based Synthetic Genetic Circuits. ACS Synthetic Biology, 2021, 10, 1406-1416.	3.8	15
17	A physicochemical orthophosphate cycle via a kinetically stable thermodynamically activated intermediate enables mild prebiotic phosphorylations. Nature Communications, 2021, 12, 5517.	12.8	20
18	Single-cell intracellular epitope and transcript detection reveals signal transduction dynamics. Cell Reports Methods, 2021, 1, 100070.	2.9	21

#	Article	IF	Citations
19	A short peptide synthon for liquidâ€“liquid phase separation. Nature Chemistry, 2021, 13, 1046-1054.	13.6	91
20	Singleâ€Cell Analysis Using Droplet Microfluidics. Advanced Biology, 2020, 4, e1900188.	3.0	169
21	Dynamic Environments as a Tool to Preserve Desired Output in a Chemical Reaction Network. Chemistry - A European Journal, 2020, 26, 1676-1682.	3.3	8
22	Probing single-cell metabolism reveals prognostic value of highly metabolically active circulating stromal cells in prostate cancer. Science Advances, 2020, 6, .	10.3	22
23	Transcription and Translation in Cytomimetic Protocells Perform Most Efficiently at Distinct Macromolecular Crowding Conditions. ACS Synthetic Biology, 2020, 9, 2797-2807.	3.8	39
24	Autonomous mesoscale positioning emerging from myelin filament self-organization and Marangoni flows. Nature Communications, 2020, 11, 4800.	12.8	25
25	Intelligent Microfluidics: The Convergence of Machine Learning and Microfluidics in Materials Science and Biomedicine. Matter, 2020, 3, 1893-1922.	10.0	85
26	Early warning signals in chemical reaction networks. Chemical Communications, 2020, 56, 3725-3728.	4.1	11
27	Dysmetabolic Circulating Tumor Cells Are Prognostic in Metastatic Breast Cancer. Cancers, 2020, 12, 1005.	3.7	5
28	Modular Design of Small Enzymatic Reaction Networks Based on Reversible and Cleavable Inhibitors. Angewandte Chemie, 2019, 131, 14681-14685.	2.0	3
29	Modular Design of Small Enzymatic Reaction Networks Based on Reversible and Cleavable Inhibitors. Angewandte Chemie - International Edition, 2019, 58, 14539-14543.	13.8	15
30	A Multilayer Microfluidic Platform for the Conduction of Prolonged Cell-Free Gene Expression. Journal of Visualized Experiments, 2019, , .	0.3	8
31	Catalytic transport of molecular cargo using diffusive binding along a polymer track. Nature Chemistry, 2019, 11, 359-366.	13.6	21
32	ChemSystemsChem: All Systems Go!. ChemSystemsChem, 2019, 1, 3-5.	2.6	1
33	Robustness, Entrainment, and Hybridization in Dissipative Molecular Networks, and the Origin of Life. Journal of the American Chemical Society, 2019, 141, 8289-8295.	13.7	44
34	Branched DNA Architectures Produced by PCRâ€Based Assembly as Gene Compartments for Cellâ€Free Geneâ€Expression Reactions. ChemBioChem, 2019, 20, 2597-2603.	2.6	26
35	Combined quantification of intracellular (phospho-)proteins and transcriptomics from fixed single cells. Scientific Reports, 2019, 9, 1469.	3.3	73
36	Cellular Volume and Matrix Stiffness Direct Stem Cell Behavior in a 3D Microniche. ACS Applied Materials & Interfaces, 2019, 11, 1754-1759.	8.0	66

#	Article	IF	Citations
37	Cell-free microcompartmentalised transcriptionâ€“translation for the prototyping of synthetic communication networks. Current Opinion in Biotechnology, 2019, 58, 72-80.	6.6	53
38	On the importance of reaction networks for synthetic living systems. Emerging Topics in Life Sciences, 2019, 3, 517-527.	2.6	10
39	Sigma Factor-Mediated Tuning of Bacterial Cell-Free Synthetic Genetic Oscillators. ACS Synthetic Biology, 2018, 7, 2879-2887.	3.8	29
40	Bottomâ€Up Construction of an Adaptive Enzymatic Reaction Network. Angewandte Chemie, 2018, 130, 14261-14265.	2.0	10
41	Bottomâ€Up Construction of an Adaptive Enzymatic Reaction Network. Angewandte Chemie - International Edition, 2018, 57, 14065-14069.	13.8	36
42	Fabrication of 3D Tubular Hydrogel Materials through On-Site Surface Free Radical Polymerization. Chemistry of Materials, 2018, 30, 6756-6768.	6.7	32
43	Recent Advances in Engineering the Stem Cell Microniche in 3D. Advanced Science, 2018, 5, 1800448.	11.2	83
44	Dissipative adaptation in driven self-assembly leading to self-dividing fibrils. Nature Nanotechnology, 2018, 13, 849-855.	31.5	160
45	Microfluidic-Assisted Fabrication of Clay Microgels for Cell-Free Protein Synthesis. ACS Applied Materials & Interfaces, 2018, 10, 29308-29313.	8.0	41
46	Single-cell analysis reveals that stochasticity and paracrine signaling control interferon-alpha production by plasmacytoid dendritic cells. Nature Communications, 2018, 9, 3317.	12.8	116
47	Macromolecularly Crowded Protocells from Reversibly Shrinking Monodisperse Liposomes. Journal of the American Chemical Society, 2018, 140, 7399-7402.	13.7	72
48	Preprogramming Complex Hydrogel Responses using Enzymatic Reaction Networks. Angewandte Chemie - International Edition, 2017, 56, 1794-1798.	13.8	54
49	Evidence of Ion-Pairing in Cationic Brushes from Evaluation of Brush Charging and Structure by Electrokinetic and Surface Conductivity Analysis. Journal of Physical Chemistry C, 2017, 121, 2915-2922.	3.1	16
50	Preprogramming Complex Hydrogel Responses using Enzymatic Reaction Networks. Angewandte Chemie, 2017, 129, 1820-1824.	2.0	13
51	Collagen Gels with Different Fibrillar Microarchitectures Elicit Different Cellular Responses. ACS Applied Materials & Interfaces, 2017, 9, 19630-19637.	8.0	120
52	Microfluidic Assembly of Monodisperse Vesosomes as Artificial Cell Models. Journal of the American Chemical Society, 2017, 139, 587-590.	13.7	217
53	Adaptation trajectories during adhesion and spreading affect future cell states. Scientific Reports, 2017, 7, 12308.	3.3	6
54	Photochemical Control over Oscillations in Chemical Reaction Networks. Journal of the American Chemical Society, 2017, 139, 15296-15299.	13.7	35

#	Article	IF	Citations
55	A trypsin-based bistable switch. Tetrahedron, 2017, 73, 4896-4900.	1.9	19
56	Rational design and dynamics of self-propelled colloidal bead chains: from rotators to flagella. Scientific Reports, 2017, 7, 16758.	3.3	37
57	3D microniches reveal the importance of cell size and shape. Nature Communications, 2017, 8, 1962.	12.8	145
58	Microfluidic Formation of Monodisperse Coacervate Organelles in Liposomes. Angewandte Chemie, 2017, 129, 9868-9872.	2.0	51
59	Microfluidic Formation of Monodisperse Coacervate Organelles in Liposomes. Angewandte Chemie - International Edition, 2017, 56, 9736-9740.	13.8	187
60	Grip on complexity in chemical reaction networks. Beilstein Journal of Organic Chemistry, 2017, 13, 1486-1497.	2.2	23
61	Molecular Engineering of Robustness and Resilience in Enzymatic Reaction Networks. Journal of the American Chemical Society, 2017, 139, 8146-8151.	13.7	20
62	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.	13.8	109
63	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.	2.0	23
64	The nanotechnology of life-inspired systems. Nature Nanotechnology, 2016, 11, 585-592.	31.5	348
65	Quantitative Singleâ€Cell mRNA Analysis in Hydrogel Beads. Angewandte Chemie, 2016, 128, 6810-6813.	2.0	10
66	Dynamic self-organization of side-propelling colloidal rods: experiments and simulations. Soft Matter, 2016, 12, 9657-9665.	2.7	22
67	A Compartmentalized Out-of-Equilibrium Enzymatic Reaction Network for Sustained Autonomous Movement. ACS Central Science, 2016, 2, 843-849.	11.3	133
68	Quantitative Singleâ€Cell mRNA Analysis in Hydrogel Beads. Angewandte Chemie - International Edition, 2016, 55, 6698-6701.	13.8	30
69	Monodisperse Uni- and Multicompartment Liposomes. Journal of the American Chemical Society, 2016, 138, 7584-7591.	13.7	207
70	Cellâ€Like Nanostructured Environments Alter Diffusion and Reaction Kinetics in Cellâ€Free Gene Expression. ChemBioChem, 2016, 17, 228-232.	2.6	18
71	Biocompatible fluorinated polyglycerols for droplet microfluidics as an alternative to PEG-based copolymer surfactants. Lab on A Chip, 2016, 16, 65-69.	6.0	74
72	Macromolecular crowding creates heterogeneous environments of gene expression in picolitre droplets. Nature Nanotechnology, 2016, 11, 191-197.	31.5	123

#	Article	IF	Citations
73	Rational design of functional and tunable oscillating enzymatic networks. Nature Chemistry, 2015, 7, 160-165.	13.6	219
74	Programmable chemical reaction networks: emulating regulatory functions in living cells using a bottom-up approach. Chemical Society Reviews, 2015, 44, 7465-7483.	38.1	123
75	The microenvironment of double emulsions in rectangular microchannels. Lab on A Chip, 2015, 15, 2327-2334.	6.0	26
76	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.	13.7	31
77	Deformation of double emulsions under conditions of flow cytometry hydrodynamic focusing. Lab on A Chip, 2015, 15, 4291-4301.	6.0	27
78	Associative Interactions in Crowded Solutions of Biopolymers Counteract Depletion Effects. Journal of the American Chemical Society, 2015, 137, 13041-13048.	13.7	55
79	One drop at a time: toward droplet microfluidics as a versatile tool for single-cell analysis. NPG Asia Materials, 2014, 6, e133-e133.	7.9	92
80	25th Anniversary Article: Designer Hydrogels for Cell Cultures: A Materials Selection Guide. Advanced Materials, 2014, 26, 125-148.	21.0	368
81	Alterations in Red Blood Cell Deformability during Storage: A Microfluidic Approach. BioMed Research International, 2014, 2014, 1-9.	1.9	45
82	Vesicle budding from polymersomes templated by microfluidically prepared double emulsions. Materials Horizons, 2014, 1, 96-101.	12.2	29
83	Threshold Sensing through a Synthetic Enzymatic Reactionâ€“Diffusion Network. Angewandte Chemie - International Edition, 2014, 53, 8066-8069.	13.8	46
84	Interface limited charge extraction and recombination in organic photovoltaics. Energy and Environmental Science, 2014, 7, 2227.	30.8	33
85	Biocompatible macro-initiators controlling radical retention in microfluidic on-chip photo-polymerization of water-in-oil emulsions. Chemical Communications, 2014, 50, 112-114.	4.1	43
86	Fluorescent hydrogels for studying Ca2+-dependent reactionâ€“diffusion processes. Chemical Communications, 2014, 50, 3089-3092.	4.1	3
87	An electro-coalescence chip for effective emulsion breaking in droplet microfluidics. Lab on A Chip, 2014, 14, 2398-2402.	6.0	29
88	On the flow topology inside droplets moving in rectangular microchannels. Lab on A Chip, 2014, 14, 3611-3620.	6.0	91
89	Complexity of molecular crowding in cell-free enzymatic reaction networks. Nature Nanotechnology, 2014, 9, 406-407.	31.5	17
90	Role of the extracellular matrix in regulating stem cell fate. Nature Reviews Molecular Cell Biology, 2013, 14, 467-473.	37.0	732

#	Article	IF	Citations
91	Ultrarapid Generation of Femtoliter Microfluidic Droplets for Single-Molecule-Counting Immunoassays. ACS Nano, 2013, 7, 5955-5964.	14.6	188
92	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.	1.3	45
93	Controlled Polymerâ€Brush Growth from Microliter Volumes using Sacrificialâ€Anode Atomâ€Transfer Radical Polymerization. Angewandte Chemie - International Edition, 2013, 52, 9125-9129.	13.8	66
94	Probing cellular heterogeneity in cytokine-secreting immune cells using droplet-based microfluidics. Lab on A Chip, 2013, 13, 4740.	6.0	204
95	Self-organization of the bacterial cell-division protein FtsZ in confined environments. Soft Matter, 2013, 9, 10493.	2.7	34
96	Monodisperse collagenâ€“gelatin beads as potential platforms for 3D cell culturing. Journal of Materials Chemistry B, 2013, 1, 5128.	5.8	75
97	All-polymer field-effect transistors using a brush gate dielectric. Journal of Materials Chemistry C, 2013, 1, 7736.	5.5	7
98	Panchromatic â€œDye-Dopedâ€•Polymer Solar Cells: From Femtosecond Energy Relays to Enhanced Photo-Response. Journal of Physical Chemistry Letters, 2013, 4, 442-447.	4.6	14
99	Ultrasensitivity by Molecular Titration in Spatially Propagating Enzymatic Reactions. Biophysical Journal, 2013, 105, 1057-1066.	0.5	25
100	Donorâ€“acceptor interface modification by zwitterionic conjugated polyelectrolytes in polymer photovoltaics. Energy and Environmental Science, 2013, 6, 1589.	30.8	46
101	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.	13.7	176
102	Sensitive, High Throughput Detection of Proteins in Individual, Surfactant-Stabilized Picoliter Droplets Using Nanoelectrospray Ionization Mass Spectrometry. Analytical Chemistry, 2013, 85, 3812-3816.	6.5	72
103	Learning a New Language: Moving Countries and Changing Subjects. Angewandte Chemie - International Edition, 2013, 52, 13110-13111.	13.8	5
104	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.	4.1	23
105	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.	7.1	282
106	Eine neue Sprache lernen: das Land und das Thema wechseln. Angewandte Chemie, 2013, 125, 13348-13349.	2.0	2
107	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.	2.9	43
108	Microfluidic platform for combinatorial synthesis in picolitre droplets. Lab on A Chip, 2012, 12, 1320.	6.0	87

#	Article	IF	Citations
109	Extracellular-matrix tethering regulates stem-cell fate. Nature Materials, 2012, 11, 642-649.	27.5	1,346
110	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.	13.7	185
111	Synthesis, Purification, and Characterization of Well-Defined All-Conjugated Diblock Copolymers PF8TBT-b-P3HT. Macromolecules, 2012, 45, 4142-4151.	4.8	88
112	Fabrication of Microgel Particles with Complex Shape via Selective Polymerization of Aqueous Twoâ€Phase Systems. Small, 2012, 8, 2356-2360.	10.0	121
113	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.	14.9	125
114	Investigation of â€œOn Waterâ€•Conditions Using a Biphasic Fluidic Platform. Angewandte Chemie - International Edition, 2012, 51, 7981-7984.	13.8	63
115	Electrochemically Induced Surfaceâ€Initiated Atomâ€Transfer Radical Polymerization. Angewandte Chemie - International Edition, 2012, 51, 5092-5095.	13.8	147
116	Mimicking normal tissue architecture and perturbation in cancer with engineered micro-epidermis. Biomaterials, 2012, 33, 5221-5229.	11.4	44
117	Island brushes to control adhesion of water in oil droplets on planar surfaces. Soft Matter, 2011, 7, 7013.	2.7	13
118	Microfluidic production of monodisperse functional o/w droplets and study of their reversible pH dependent aggregation behavior. Soft Matter, 2011, 7, 4214.	2.7	25
119	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.	13.7	189
120	Monitoring a Reaction at Submillisecond Resolution in Picoliter Volumes. Analytical Chemistry, 2011, 83, 1462-1468.	6.5	53
121	Quantitative tracking of the growth of individual algal cells in microdroplet compartments. Integrative Biology (United Kingdom), 2011, 3, 1043.	1.3	84
122	Microdroplet fabrication of silverâ€“agarose nanocomposite beads for SERS optical accumulation. Soft Matter, 2011, 7, 1321-1325.	2.7	39
123	Effect of Polymer Brush Architecture on Antibiofouling Properties. Biomacromolecules, 2011, 12, 4169-4172.	5.4	145
124	Controlling the contents of microdroplets by exploiting the permeability of PDMS. Lab on A Chip, 2011, 11, 1132.	6.0	35
125	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.	13.7	128
126	Chain-Growth Suzuki Polymerization of n-Type Fluorene Copolymers. Macromolecules, 2011, 44, 9057-9061.	4.8	122

#	Article	IF	Citations
127	Polymer Brushes Showing Nonâ€Fouling in Blood Plasma Challenge the Currently Accepted Design of Protein Resistant Surfaces. Macromolecular Rapid Communications, 2011, 32, 952-957.	3.9	184
128	Formation of Wellâ€Ordered Heterojunctions in Polymer:PCBM Photovoltaic Devices. Advanced Functional Materials, 2011, 21, 139-146.	14.9	78
129	Controlled Folding of 2D Auâ€“Polymer Brush Composites into 3D Microstructures. Advanced Functional Materials, 2011, 21, 652-657.	14.9	76
130	Direct Correlation between Local Pressure and Fluorescence Output in Mechanoresponsive Polyelectrolyte Brushes. Angewandte Chemie - International Edition, 2011, 50, 9629-9632.	13.8	28
131	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.	6.0	203
132	Controlling nanoscale morphology in polymer photovoltaic devices. Nano Today, 2010, 5, 231-242.	11.9	97
133	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.	14.9	22
134	Nanowires: Fabrication of Sub-10â€‰nm Metallic Lines of Low Line-Width Roughness by Hydrogen Reduction of Patterned Metal-Organic Materials (Adv. Funct. Mater. 14/2010). Advanced Functional Materials, 2010, 20, n/a-n/a.	14.9	0
135	Microdroplets in Microfluidics: An Evolving Platform for Discoveries in Chemistry and Biology. Angewandte Chemie - International Edition, 2010, 49, 5846-5868.	13.8	903
136	Exploiting the superior protein resistance of polymer brushes to control single cell adhesion and polarisation at the micron scale. Biomaterials, 2010, 31, 5030-5041.	11.4	99
137	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.	10.3	414
138	Emerging applications of stimuli-responsive polymer materials. Nature Materials, 2010, 9, 101-113.	27.5	5,007
139	Polymer Brushes: Routes toward Mechanosensitive Surfaces. Accounts of Chemical Research, 2010, 43, 466-474.	15.6	79
140	A double droplet trap system for studying mass transport across a droplet-droplet interface. Lab on A Chip, 2010, 10, 1281.	6.0	138
141	Controlled Bending of Microscale Auâ^'Polyelectrolyte Brush Bilayers. Macromolecules, 2010, 43, 5382-5386.	4.8	25
142	Polyelectrolyte-Bridged Metal/Cotton Hierarchical Structures for Highly Durable Conductive Yarns. ACS Applied Materials & Interfaces, 2010, 2, 529-535.	8.0	184
143	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.	4.8	103
144	Formation of Nanopatterned Polymer Blends in Photovoltaic Devices. Nano Letters, 2010, 10, 1302-1307.	9.1	248

#	Article	IF	Citations
145	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
146	Biofunctionalized Protein Resistant Oligo(ethylene glycol)-Derived Polymer Brushes as Selective Immobilization and Sensing Platforms. Biomacromolecules, 2009, 10, 2885-2894.	5.4	100
147	Formation of Hierarchically Structured Thin Films. Advanced Functional Materials, 2009, 19, 2236-2243.	14.9	35
148	Coupling Microdroplet Microreactors with Mass Spectrometry: Reading the Contents of Single Droplets Online. Angewandte Chemie - International Edition, 2009, 48, 3665-3668.	13.8	162
149	Direct Measurement of Normal and Shear Forces between Surface-Grown Polyelectrolyte Layers. Journal of Physical Chemistry B, 2009, 113, 3947-3956.	2.6	67
150	Surface modification of PDMS via self-organization of vinyl-terminated small molecules. Soft Matter, 2009, 5, 2286.	2.7	33
151	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.	13.7	151
152	Antibacterial and Antifouling Polymer Brushes Incorporating Antimicrobial Peptide. Bioconjugate Chemistry, 2009, 20, 71-77.	3.6	232
153	Suzukiâ€“Miyaura coupling reactions in aqueous microdroplets with catalytically active fluorous interfaces. Chemical Communications, 2009, , 6225.	4.1	65
154	Polymer brush resist for responsive wettability. Soft Matter, 2009, 5, 2738.	2.7	54
155	Simultaneous measurement of reactions in microdroplets filled by concentration gradients. Lab on A Chip, 2009, 9, 1707.	6.0	65
156	The switching properties of chiral nematic liquid crystals using electrically commanded surfaces. Soft Matter, 2009, 5, 354-362.	2.7	37
157	Controlling the Retention of Small Molecules in Emulsion Microdroplets for Use in Cell-Based Assays. Analytical Chemistry, 2009, 81, 3008-3016.	6.5	182
158	Responsive polymers for nanoscale actuation. Materials Today, 2008, 11, 24-32.	14.2	133
159	Exploring Actuation and Mechanotransduction Properties of Polymer Brushes. Macromolecular Rapid Communications, 2008, 29, 539-546.	3.9	43
160	An Integrated Device for Monitoring Timeâ€Dependent in vitro Expression From Single Genes in Picolitre Droplets. ChemBioChem, 2008, 9, 439-446.	2.6	172
161	From Microdroplets to Microfluidics: Selective Emulsion Separation in Microfluidic Devices. Angewandte Chemie - International Edition, 2008, 47, 2042-2045.	13.8	144
162	Efficient Conjugatedâ€Polymer Optoelectronic Devices Fabricated by Thinâ€Film Transferâ€Printing Technique. Advanced Functional Materials, 2008, 18, 1012-1019.	14.9	125

#	Article	IF	Citations
163	Thickness-Dependent Properties of Polyzwitterionic Brushes. Macromolecules, 2008, 41, 6317-6321.	4.8	116
164	The electrochemical detection of droplets in microfluidic devices. Lab on A Chip, 2008, 8, 1937.	6.0	70
165	Synthesis and Characterization of Surface-Initiated Helical Polyisocyanopeptide Brushes. Macromolecules, 2008, 41, 1945-1951.	4.8	25
166	Effect of Nanoconfinement on the Collapse Transition of Responsive Polymer Brushes. Nano Letters, 2008, 8, 3819-3824.	9.1	85
167	Development of Quantitative Cell-Based Enzyme Assays in Microdroplets. Analytical Chemistry, 2008, 80, 3890-3896.	6.5	191
168	Polyelectrolyte Brush Amplified Electroactuation of Microcantilevers. Nano Letters, 2008, 8, 725-730.	9.1	109
169	Wavelength tuning the photonic band gap in chiral nematic liquid crystals using electrically commanded surfaces. Applied Physics Letters, 2007, 91, .	3.3	38
170	Probing the Responsive Behavior of Polyelectrolyte Brushes Using Electrochemical Impedance Spectroscopy. Analytical Chemistry, 2007, 79, 176-182.	6.5	87
171	Synthesis of raspberry-like particles using polyelectrolyte multilayer-coated particles. Journal of Materials Chemistry, 2007, 17, 4943.	6.7	29
172	Polymer phase separation on lattice patterned surfaces. Soft Matter, 2007, 3, 230-237.	2.7	20
173	Surface-induced droplet fusion in microfluidic devices. Lab on A Chip, 2007, 7, 984.	6.0	179
174	Formation of Hybrid 2D Polymerâ˜'Metal Microobjects. Langmuir, 2007, 23, 1569-1576.	3.5	25
175	Synthesis and Characterization of Poly(3-Sulfopropylmethacrylate) Brushes for Potential Antibacterial Applications. Langmuir, 2007, 23, 3314-3321.	3.5	150
176	Thermo-Responsive Polymer Brushes with Tunable Collapse Temperatures in the Physiological Range. Macromolecules, 2007, 40, 4403-4405.	4.8	178
177	Uniaxial Alignment of Liquid-Crystalline Conjugated Polymers by Nanoconfinement. Nano Letters, 2007, 7, 987-992.	9.1	173
178	Self-Assembly Meets Nanofabrication: Recent Developments in Microcontact Printing and Dip-Pen Nanolithography. Angewandte Chemie - International Edition, 2007, 46, 2754-2757.	13.8	46
179	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.	2.2	36
180	â€œStick and slideâ€•ferrofluidic droplets on superhydrophobic surfaces. Applied Physics Letters, 2006, 89, 081911.	3.3	118

#	Article	IF	Citations
181	Multicomponent Polymer Brushes. Journal of the American Chemical Society, 2006, 128, 16253-16258.	13.7	177
182	Highly Reversible and Multi-Stage Cantilever Actuation Driven by Polyelectrolyte Brushes. Journal of the American Chemical Society, 2006, 128, 5326-5327.	13.7	164
183	Enhancement of Charge-Transport Characteristics in Polymeric Films Using Polymer Brushes. Nano Letters, 2006, 6, 573-578.	9.1	92
184	Surface grafted polymer brushes as ideal building blocks for â€œsmartâ€•surfaces. Physical Chemistry Chemical Physics, 2006, 8, 3815-3823.	2.8	272
185	UCST Wetting Transitions of Polyzwitterionic Brushes Driven by Self-Association. Angewandte Chemie - International Edition, 2006, 45, 1770-1774.	13.8	223
186	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.	13.8	57
187	Temperature-Responsive Glycopolymer Brushes Synthesized via RAFT Polymerization Using the Z-group Approach. Macromolecular Rapid Communications, 2006, 27, 1121-1126.	3.9	142
188	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.	3.9	48
189	Synthesis of oligo(ethylene glycol) methacrylate polymer brushes. European Polymer Journal, 2005, 41, 1757-1765.	5.4	122
190	Shape-memory nanoparticles from inherently non-spherical polymer colloids. Nature Materials, 2005, 4, 486-490.	27.5	131
191	Locking and Unlocking of Polyelectrolyte Brushes: Toward the Fabrication of Chemically Controlled Nanoactuators. Angewandte Chemie - International Edition, 2005, 44, 4578-4581.	13.8	150
192	Following Polymer Brush Growth Using the Quartz Crystal Microbalance Technique. Macromolecular Rapid Communications, 2005, 26, 1117-1121.	3.9	64
193	AFM study of cationically charged polymer brushes: switching between soft and hard matter. Soft Matter, 2005, 1, 66.	2.7	80
194	Self-Organization of Nanocrystals in Polymer Brushes. Application in Heterojunction Photovoltaic Diodes. Nano Letters, 2005, 5, 1653-1657.	9.1	146
195	Effects of nanoconfinement on the morphology and reactivity of organic materials. Chemical Communications, 2005, , 4143.	4.1	44
196	Bioadhesion at micro-patterned stimuli-responsive polymer brushes. Journal of Materials Chemistry, 2005, 15, 2089.	6.7	118
197	Switching the Properties of Polyelectrolyte Brushes via â€œHydrophobic Collapseâ€• Macromolecules, 2005, 38, 10192-10199.	4.8	175
198	Polymer Brushes: Towards Applications. , 2005, , 371-380.		4

#	Article	IF	Citations
199	Controlled growth and subsequent chemical modification of poly(glycidyl methacrylate) brushes on silicon wafers. Journal of Materials Chemistry, 2004, 14, 730.	6.7	123
200	Ordered Block-Copolymer Assembly Using Nanoimprint Lithography. Nano Letters, 2004, 4, 1633-1636.	9.1	131
201	Polymer brushes via surface-initiated polymerizations. Chemical Society Reviews, 2004, 33, 14.	38.1	1,274
202	Reactions on Monolayers: Organic Synthesis in Two Dimensions. European Journal of Organic Chemistry, 2003, 2003, 17-29.	2.4	154
203	Hyperbranched Polyglycidol on Si/SiO2Surfaces via Surface-Initiated Polymerization. Macromolecules, 2003, 36, 5088-5093.	4.8	104
204	Fluorinated Silane Self-Assembled Monolayers as Resists for Patterning Indium Tin Oxide. Langmuir, 2003, 19, 5273-5278.	3.5	52
205	Nanocontact Printing:Â A Route to Sub-50-nm-Scale Chemical and Biological Patterning. Langmuir, 2003, 19, 1963-1965.	3.5	207
206	Creating Nanoscale Patterns of Dendrimers on Silicon Surfaces with Dip-Pen Nanolithography. Nano Letters, 2002, 2, 713-716.	9.1	106
207	Surface-Initiated Polymerizations in Aqueous Media:â€‰ Effect of Initiator Density. Langmuir, 2002, 18, 1265-1269.	3.5	447
208	High-Resolution Contact Printing with Dendrimers. Nano Letters, 2002, 2, 347-349.	9.1	62
209	Patterning Electro-osmotic Flow with Patterned Surface Charge. Physical Review Letters, 2000, 84, 3314-3317.	7.8	317
210	Ordering of Spontaneously Formed Buckles on Planar Surfaces. Langmuir, 2000, 16, 3497-3501.	3.5	392
211	The controlled formation of ordered, sinusoidal structures by plasma oxidation of an elastomeric polymer. Applied Physics Letters, 1999, 75, 2557-2559.	3.3	603
212	Patterning Thin Films of Poly(ethylene imine) on a Reactive SAM Using Microcontact Printing. Langmuir, 1999, 15, 1208-1214.	3.5	122
213	Patterned Polymer Multilayers as Etch Resists. Langmuir, 1999, 15, 6862-6867.	3.5	72
214	Three-Dimensional Mesoscale Self-Assembly. Journal of the American Chemical Society, 1998, 120, 8267-8268.	13.7	106
215	Convergent and Divergent Noncovalent Synthesis of Metallodendrimers. Journal of the American Chemical Society, 1998, 120, 6240-6246.	13.7	109
216	Noncovalent Synthesis of Nanostructures: Combining Coordination Chemistry and Hydrogen Bonding. Angewandte Chemie International Edition in English, 1997, 36, 1006-1008.	4.4	136

#	Article	IF	Citations
217	Controlled Assembly of Nanosized Metallodendrimers. Angewandte Chemie International Edition in English, 1996, 35, 1213-1215.	4.4	127
218	Large Self-Assembled Organopalladium Spheres. Journal of the American Chemical Society, 1995, 117, 8293-8294.	13.7	127