Nicholas Abbott

List of Publications by Year
in descending order

368 papers	19,861 citations	9775 73 h-index	19169 118 g-index
376 all docs	376 docs citations	376 times ranked	12046 citing authors

#	Article	IF	Citations
1	Biomolecular Interactions at Phospholipid-Decorated Surfaces of Liquid Crystals. Science, 2003, 302, 2094-2097.	6.0	584
2	Electrochemical Principles for Active Control of Liquids on Submillimeter Scales. Science, 1999, 283, 57-60.	6.0	437
3	Optical Amplification of Ligand-Receptor Binding Using Liquid Crystals. Science, 1998, 279, 2077-2080.	6.0	433
4	Using Atom Transfer Radical Polymerization To Amplify Monolayers of Initiators Patterned by Microcontact Printing into Polymer Brushes for Pattern Transfer. Macromolecules, 2000, 33, 597-605.	2.2	392
5	Patterned Self-Assembled Monolayers and Meso-Scale Phenomena. Accounts of Chemical Research, 1995, 28, 219-226.	7.6	390
6	Endotoxin-Induced Structural Transformations in Liquid Crystalline Droplets. Science, 2011, 332, 1297-1300.	6.0	339
7	Nanoscale mapping and functional analysis of individual adhesins on living bacteria. Nature Methods, 2005, 2, 515-520.	9.0	324
8	Chemical and biological sensing using liquid crystals. Liquid Crystals Reviews, 2013, 1, 29-51.	1.1	294
9	Principles for Measurement of Chemical Exposure Based on Recognition-Driven Anchoring Transitions in Liquid Crystals. Science, 2001, 293, 1296-1299.	6.0	271
10	Manipulation of the Wettability of Surfaces on the 0.1- to 1 -Micrometer Scale Through Micromachining and Molecular Self-Assembly. Science, 1992, 257, 1380-1382.	6.0	263
11	Observation of Saturn-Ring Defects around Solid Microspheres in Nematic Liquid Crystals. Physical Review Letters, 2000, 85, 4719-4722.	2.9	255
12	Liquid Crystal Emulsions as the Basis of Biological Sensors for the Optical Detection of Bacteria and Viruses. Advanced Functional Materials, 2009, 19, 2260-2265.	7.8	245
13	Design of Surfaces for Patterned Alignment of Liquid Crystals on Planar and Curved Substrates. Science, 1997, 276, 1533-1536.	6.0	236
14	Surface-Initiated Polymerization for Amplification of Self-Assembled Monolayers Patterned by Microcontact Printing. Angewandte Chemie - International Edition, 1999, 38, 647-649.	7.2	233
15	Surfaces modified with nanometer-thick silver-impregnated polymeric films that kill bacteria but support growth of mammalian cells. Biomaterials, 2010, 31, 680-690.	5.7	233
16	An Experimental System for Imaging the Reversible Adsorption of Amphiphiles at Aqueousâ˘'Liquid Crystal Interfaces. Langmuir, 2002, 18, 6101-6109.	1.6	226
17	Topological defects in liquid crystals as templates for molecular self-assembly. Nature Materials, 2016, 15, 106-112.	13.3	211
18	Diblock, ABC triblock, and random methacrylic polyampholytes: synthesis by group transfer polymerization and solution behavior. Macromolecules, 1994, 27, 930-937.	2.2	200

#	Article	IF	Citations
19	Effect of Surfactant Structure on the Orientation of Liquid Crystals at Aqueousâ^'Liquid Crystal Interfacesâ€. Langmuir, 2003, 19, 6436-6442.	1.6	198
20	Covalently Modified Silicon and Diamond Surfaces:Â Resistance to Nonspecific Protein Adsorption and Optimization for Biosensing. Journal of the American Chemical Society, 2004, 126, 10220-10221.	6.6	189
21	The use of self-assembled monolayers and a selective etch to generate patterned gold features. Journal of the American Chemical Society, 1992, 114, 9188-9189.	6.6	174
22	Using Light to Control Dynamic Surface Tensions of Aqueous Solutions of Water Soluble Surfactants. Langmuir, 1999, 15, 4404-4410.	1.6	165
23	Modulation of hydrophobic interactions by proximally immobilized ions. Nature, 2015, 517, 347-350.	13.7	163
24	Self-assembly of amphiphiles, polymers and proteins at interfaces between thermotropic liquid crystals and aqueous phases. Surface Science Reports, 2008, 63, 255-293.	3.8	159
25	Tailoring the Interfaces between Nematic Liquid Crystal Emulsions and Aqueous Phases via Layer-by-Layer Assembly. Nano Letters, 2006, 6, 2243-2248.	4.5	155
26	Liquid Crystalline Materials for Biological Applications. Chemistry of Materials, 2012, 24, 746-758.	3.2	153
27	Sizeâ€Dependent Ordering of Liquid Crystals Observed in Polymeric Capsules with Micrometer and Smaller Diameters. Angewandte Chemie - International Edition, 2009, 48, 1652-1655.	7.2	137
28	Active Control of Wetting Using Applied Electrical Potentials and Self- Assembled Monolayers. Langmuir, 1995, 11, 16-18.	1.6	131
29	Design of Functional Materials Based on Liquid Crystalline Droplets. Chemistry of Materials, 2014, 26, 496-506.	3.2	130
30	Surface-Driven Switching of Liquid Crystals Using Redox-Active Groups on Electrodes. Science, 2003, 301, 623-626.	6.0	128
31	Potential-Dependent Wetting of Aqueous Solutions on Self-Assembled Monolayers Formed from 15-(Ferrocenylcarbonyl)pentadecanethiol on Gold. Langmuir, 1994, 10, 1493-1497.	1.6	120
32	Influence of Surfactant Tail Branching and Organization on the Orientation of Liquid Crystals at Aqueousâ^'Liquid Crystal Interfaces. Langmuir, 2005, 21, 6805-6814.	1.6	120
33	Recent Advances in Colloidal and Interfacial Phenomena Involving Liquid Crystals. Langmuir, 2011, 27, 5719-5738.	1.6	114
34	Introduction to Optical Methods for Characterizing Liquid Crystals at Interfaces. Langmuir, 2013, 29, 3154-3169.	1.6	113
35	Using Liquid Crystals to Amplify Proteinâ^'Receptor Interactions:Â Design of Surfaces with Nanometer-Scale Topography that Present Histidine-Tagged Protein Receptorsâ€. Langmuir, 2003, 19, 1671-1680.	1.6	111
36	Functional Monolayers for Improved Resistance to Protein Adsorption:â€‰ Oligo(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td	1.6	110

#	Article	IF	Citations
37	Orientations of Nematic Liquid Crystals on Surfaces Presenting Controlled Densities of Peptides:â€‰ Amplification of Proteinâ^'Peptide Binding Events. Langmuir, 2005, 21, 6451-6461.	1.6	110
38	Coupling of the Orientations of Thermotropic Liquid Crystals to Protein Binding Events at Lipid-Decorated Interfaces. Langmuir, 2007, 23, 8497-8507.	1.6	107
39	Defect Structure around Two Colloids in a Liquid Crystal. Physical Review Letters, 2003, 91, 235507.	2.9	106
40	Dynamic self-assembly of motile bacteria in liquid crystals. Soft Matter, 2014, 10, 88-95.	1.2	106
41	Imaging the Binding Ability of Proteins Immobilized on Surfaces with Different Orientations by Using Liquid Crystals. Journal of the American Chemical Society, 2004, 126, 9024-9032.	6.6	105
42	Antigen Binding Forces of Single Antilysozyme Fv Fragments Explored by Atomic Force Microscopy. Langmuir, 2005, 21, 5517-5523.	1.6	105
43	Anchoring of Nematic Liquid Crystals on Self-Assembled Monolayers Formed from Alkanethiols on Semitransparent Films of Gold. The Journal of Physical Chemistry, 1995, 99, 16511-16515.	2.9	104
44	Formation and Characterization of Phospholipid Monolayers Spontaneously Assembled at Interfaces between Aqueous Phases and Thermotropic Liquid Crystals. Langmuir, 2005, 21, 2218-2228.	1.6	104
45	Ordering Transitions in Thermotropic Liquid Crystals Induced by the Interfacial Assembly and Enzymatic Processing of Oligopeptide Amphiphiles. Advanced Materials, 2008, 20, 1185-1190.	11.1	104
46	Characterization of Adsorbate-Induced Ordering Transitions of Liquid Crystals within Monodisperse Droplets. Langmuir, 2009, 25, 9016-9024.	1.6	102
47	Design of Responsive and Active (Soft) Materials Using Liquid Crystals. Annual Review of Chemical and Biomolecular Engineering, 2016, 7, 163-196.	3.3	101
48	Anchoring of Nematic Liquid Crystals on Viruses with Different Envelope Structures. Nano Letters, 2006, 6, 1053-1058.	4.5	99
49	Ferrocenyl Surfactants at the Surface of Water:Â Principles for Active Control of Interfacial Properties. Langmuir, 1996, 12, 4116-4124.	1.6	98
50	Spatial and temporal control of surfactant systems. Journal of Colloid and Interface Science, 2009, 339, 1-18.	5.0	98
51	Nanoparticle self-assembly at the interface of liquid crystal droplets. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5297-5302.	3.3	98
52	Nanofibers and Lyotropic Liquid Crystals from a Class of Selfâ€Assembling Î²â€Peptides. Angewandte Chemie - International Edition, 2008, 47, 1241-1244.	7.2	96
53	Comparison of the Surface Activity and Bulk Aggregation of Ferrocenyl Surfactants with Cationic and Anionic Headgroups. Langmuir, 2001, 17, 5703-5706.	1.6	95
54	Self-reporting and self-regulating liquid crystals. Nature, 2018, 557, 539-544.	13.7	93

#	Article	IF	Citations
55	Protein partitioning in two-phase aqueous nonionic micellar solutions. Macromolecules, 1992, 25, 4797-4806.	2.2	91
56	Electroless Gold as a Substrate for Self-Assembled Monolayers. Langmuir, 1998, 14, 3287-3297.	1.6	91
57	Liquid-crystal-mediated self-assembly at nanodroplet interfaces. Nature, 2012, 485, 86-89.	13.7	91
58	Potential of mean force between a spherical particle suspended in a nematic liquid crystal and a substrate. Journal of Chemical Physics, 2002, 117, 7781-7787.	1.2	89
59	Uniform Anchoring of Nematic Liquid Crystals on Self-Assembled Monolayers Formed from Alkanethiols on Obliquely Deposited Films of Gold. Langmuir, 1996, 12, 2587-2593.	1.6	88
60	Chemoresponsive assemblies of microparticles at liquid crystalline interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3998-4003.	3.3	87
61	Influence of droplet size, pH and ionic strength on endotoxin-triggered ordering transitions in liquid crystalline droplets. Soft Matter, 2013, 9, 374-382.	1.2	87
62	Self-Assembled Monolayers on Electroless Gold Impart pH-Responsive Transport of Ions in Porous Membranes. Langmuir, 2000, 16, 2401-2404.	1.6	85
63	Self-assembly of surfactants and phospholipids at interfaces between aqueous phases and thermotropic liquid crystals. Current Opinion in Colloid and Interface Science, 2005, 10, 111-120.	3.4	81
64	Quantitative Characterization of Obliquely Deposited Substrates of Gold by Atomic Force Microscopy:â€‰ Influence of Substrate Topography on Anchoring of Liquid Crystals. Chemistry of Materials, 1999, 11, 612-623.	3.2	80
65	Lyotropic Liquid Crystals from Designed Helical Î²-Peptides. Journal of the American Chemical Society, 2006, 128, 8730-8731.	6.6	80
66	Influence of Simple Electrolytes on the Orientational Ordering of Thermotropic Liquid Crystals at Aqueous Interfaces. Langmuir, 2012, 28, 31-36.	1.6	80
67	Liquid Crystal Enabled Early Stage Detection of Beta Amyloid Formation on Lipid Monolayers. Advanced Functional Materials, 2015, 25, 6050-6060.	7.8	79
68	Azimuthal anchoring transition of nematic liquid crystals on self-assembled monolayers formed from odd and even alkanethiols. Physical Review E, 1996, 54, R4540-R4543.	0.8	78
69	Applications of functional surfactants. Current Opinion in Colloid and Interface Science, 2002, 7, 267-275.	3.4	78
70	Detection of organophosphorous nerve agents using liquid crystals supported on chemically functionalized surfaces. Sensors and Actuators B: Chemical, 2007, 128, 91-98.	4.0	78
71	In Situ and Reversible Control of the Surface Activity of Ferrocenyl Surfactants in Aqueous Solutions. Langmuir, 1995, 11, 4209-4212.	1.6	76
72	Stannous(II) trifluoromethane sulfonate: a versatile catalyst for the controlled ring-opening polymerization of lactides: Formation of stereoregular surfaces from polylactide â€œbrushesâ€. Journal of Polymer Science Part A, 2001, 39, 3529-3538.	2.5	75

#	Article	IF	Citations
73	Liquid Crystal Chemical Sensors That Cells Can Wear. Angewandte Chemie - International Edition, 2013, 52, 14011-14015.	7.2	75
74	Quantitative Interpretation of the Optical Textures of Liquid Crystals Caused by Specific Binding of Immunoglobulins to Surface-Bound Antigens. Langmuir, 2000, 16, 3529-3536.	1.6	74
75	Protein partitioning in two-phase aqueous polymer systems. 1. Novel physical pictures and a scaling thermodynamic formulation. Macromolecules, 1991, 24, 4334-4348.	2.2	73
76	Influence of van der Waals Forces from Metallic Substrates on Fluids Supported on Self-Assembled Monolayers Formed from Alkanethiols. Langmuir, 1997, 13, 7106-7114.	1.6	73
77	Polymeric multilayers that localize the release of chlorhexidine from biologic wound dressings. Biomaterials, 2012, 33, 6783-6792.	5.7	73
78	General Method for Site-Specific Protein Immobilization by Staudinger Ligation. Bioconjugate Chemistry, 2007, 18, 1064-1069.	1.8	72
79	Active Control of the Anchoring of 4â€˜-Pentyl-4-cyanobiphenyl (5CB) at an Aqueousâˆ'Liquid Crystal Interface By Using a Redox-Active Ferrocenyl Surfactant. Langmuir, 2003, 19, 8629-8637.	1.6	71
80	Using Liquid Crystals to Report Membrane Proteins Captured by Affinity Microcontact Printing from Cell Lysates and Membrane Extracts. Journal of the American Chemical Society, 2005, 127, 8912-8913.	6.6	70
81	Immobilization of Polymer-Decorated Liquid Crystal Droplets on Chemically Tailored Surfaces. Langmuir, 2010, 26, 10234-10242.	1.6	70
82	On protein partitioning in two-phase aqueous polymer systems. Bioseparation, 1990, 1, 191-225.	0.7	70
83	Using Micromachining, Molecular Self-Assembly, and Wet Etching to Fabricate 0.1-1-.mu.m-scale structures of Gold and Silicon. Chemistry of Materials, 1994, 6, 596-602.	3.2	68
84	Mechanistic Study of the Anchoring Behavior of Liquid Crystals Supported on Metal Salts and Their Orientational Responses to Dimethyl Methylphosphonate. Journal of Physical Chemistry B, 2004, 108, 20180-20186.	1.2	68
85	Monodisperse Emulsions through Templating Polyelectrolyte Multilayer Capsules. Chemistry of Materials, 2008, 20, 2063-2065.	3.2	67
86	Coupling of the Orientations of Liquid Crystals to Electrical Double Layers Formed by the Dissociation of Surface-Immobilized Salts. Journal of Physical Chemistry B, 2001, 105, 4936-4950.	1.2	66
87	Tryptophan Inhibits Biofilm Formation by Pseudomonas aeruginosa. Antimicrobial Agents and Chemotherapy, 2013, 57, 1921-1925.	1.4	66
88	Experimental Insights into the Nanostructure of the Cores of Topological Defects in Liquid Crystals. Physical Review Letters, 2016, 116, 147801.	2.9	66
89	Structural Transitions in Cholesteric Liquid Crystal Droplets. ACS Nano, 2016, 10, 6484-6490.	7.3	66
90	Ferrocene-Containing Cationic Lipids: Influence of Redox State on Cell Transfection. Journal of the American Chemical Society, 2005, 127, 11576-11577.	6.6	65

#	Article	IF	Citations
91	Small-Angle Neutron Scattering from Mixtures of Sodium Dodecyl Sulfate and a Cationic, Bolaform Surfactant Containing Azobenzene. Langmuir, 2005, 21, 6131-6136.	1.6	65
92	Single Nanoparticle Tracking Reveals Influence of Chemical Functionality of Nanoparticles on Local Ordering of Liquid Crystals and Nanoparticle Diffusion Coefficients. Nano Letters, 2009, 9, 2794-2801.	4.5	64
93	Protein partitioning in two-phase aqueous polymer systems. 3. A neutron scattering investigation of the polymer solution structure and protein-polymer interactions. Macromolecules, 1992, 25, 3932-3941.	2.2	63
94	A Molecular-Thermodynamic Model for Gibbs Monolayers Formed from Redox-Active Surfactants at the Surfaces of Aqueous Solutions:Â Redox-Induced Changes in Surface Tension. Langmuir, 1999, 15, 722-730.	1.6	63
95	Quenched disorder in a liquid-crystal biosensor: Adsorbed nanoparticles at confining walls. Journal of Chemical Physics, 2005, 122, 184711.	1.2	63
96	Liquid Crystal-Based Emulsions for Synthesis of Spherical and Non-Spherical Particles with Chemical Patches. Journal of the American Chemical Society, 2013, 135, 9972-9975.	6.6	63
97	Orientational Transitions of Liquid Crystals Driven by Binding of Organoamines to Carboxylic Acids Presented at Surfaces with Nanometer-Scale Topography. Langmuir, 2003, 19, 275-284.	1.6	61
98	Morphological transitions in liquid crystal nanodroplets. Soft Matter, 2012, 8, 8679.	1.2	61
99	Using Liquid Crystals to Reveal How Mechanical Anisotropy Changes Interfacial Behaviors of Motile Bacteria. Biophysical Journal, 2014, 107, 255-265.	0.2	61
100	Elastic Energy-Driven Phase Separation of Phospholipid Monolayers at the Nematic Liquid-Crystalâ€"Aqueous Interface. Physical Review Letters, 2008, 100, 048301.	2.9	60
101	Dispensing Surfactants from Electrodes:â€‰ Marangoni Phenomenon at the Surface of Aqueous Solutions of (11-Ferrocenylundecyl)trimethylammonium Bromide. Journal of the American Chemical Society, 1996, 118, 6499-6505.	6.6	59
102	Use of self-assembled monolayers, metal ions and smectic liquid crystals to detect organophosphonates. Sensors and Actuators B: Chemical, 2005, 104, 50-56.	4.0	59
103	Using Liquid Crystals To Image Reactants and Products of Acidâ˜'Base Reactions on Surfaces with Micrometer Resolution. Journal of the American Chemical Society, 1999, 121, 11300-11310.	6.6	57
104	Using Measurements of Anchoring Energies of Liquid Crystals on Surfaces To Quantify Proteins Captured by Immobilized Ligands. Journal of the American Chemical Society, 2007, 129, 11223-11231.	6.6	57
105	Preparation of Microscopic and Planar Oilâ˜'Water Interfaces That Are Decorated with Prescribed Densities of Insoluble Amphiphiles. Journal of the American Chemical Society, 2008, 130, 4326-4333.	6.6	57
106	Templated nanofiber synthesis via chemical vapor polymerization into liquid crystalline films. Science, 2018, 362, 804-808.	6.0	57
107	Imaging of Affinity Microcontact Printed Proteins by Using Liquid Crystals. Langmuir, 2004, 20, 6818-6826.	1.6	56
108	Lyotropic Liquid Crystals Formed from ACHC-Rich Î²-Peptides. Journal of the American Chemical Society, 2011, 133, 13604-13613.	6.6	56

#	Article	IF	Citations
109	Molecular Structure of Canonical Liquid Crystal Interfaces. Journal of the American Chemical Society, 2017, 139, 3841-3850.	6.6	56
110	Improving Liquid-Crystal-Based Biosensing in Aqueous Phases. ACS Applied Materials & Interfaces, 2012, 4, 6884-6890.	4.0	55
111	Orientations of Liquid Crystals on Mechanically Rubbed Films of Bovine Serum Albumin: A Possible Substrate for Biomolecular Assays Based on Liquid Crystals. Analytical Chemistry, 2000, 72, 4646-4653.	3.2	54
112	Influence of Molecular-Level Interactions on the Orientations of Liquid Crystals Supported on Nanostructured Surfaces Presenting Specifically Bound Proteins. Langmuir, 2001, 17, 5595-5604.	1.6	54
113	Formation of Oligopeptide-Based Polymeric Membranes at Interfaces between Aqueous Phases and Thermotropic Liquid Crystals. Chemistry of Materials, 2006, 18, 6147-6151.	3.2	53
114	Polymeric Multilayers that Contain Silver Nanoparticles can be Stamped onto Biological Tissues to Provide Antibacterial Activity. Advanced Functional Materials, 2011, 21, 1863-1873.	7.8	53
115	Interfacial Phenomena and the Ocular Surface. Ocular Surface, 2014, 12, 178-201.	2.2	53
116	Soft matter from liquid crystals. Soft Matter, 2019, 15, 6913-6929.	1.2	53
117	Liquid Crystal Mediated Interactions Between Nanoparticles in a Nematic Phase. Langmuir, 2012, 28, 6124-6131.	1.6	52
118	Characterization of the Reversible Interaction of Pairs of Nanoparticles Dispersed in Nematic Liquid Crystals. Langmuir, 2009, 25, 13318-13321.	1.6	51
119	Influence of Nanometer-Scale Topography of Surfaces on the Orientational Response of Liquid Crystals to Proteins Specifically Bound to Surface-Immobilized Receptors. Langmuir, 2001, 17, 5448-5457.	1.6	50
120	Redox-Dependent Surface Tension and Surface Phase Transitions of a Ferrocenyl Surfactant:Â Equilibrium and Dynamic Analyses with Fluorescence Images. Langmuir, 2003, 19, 8292-8301.	1.6	50
121	Nematic-Field-Driven Positioning of Particles in Liquid Crystal Droplets. Physical Review Letters, 2013, 111, 227801.	2.9	50
122	Interactions between spherical colloids mediated by a liquid crystal: A molecular simulation and mesoscale study. Journal of Chemical Physics, 2004, 121, 1949-1961.	1.2	49
123	Bacterial transport of colloids in liquid crystalline environments. Soft Matter, 2015, 11, 8404-8408.	1.2	49
124	Non-toxic thermotropic liquid crystals for use with mammalian cells. Liquid Crystals, 2004, 31, 611-621.	0.9	48
125	Fullâ€thickness splinted skin wound healing models in db/db and heterozygous mice: Implications for wound healing impairment. Wound Repair and Regeneration, 2014, 22, 368-380.	1.5	48
126	Blue-phase liquid crystal droplets. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13195-13200.	3.3	48

#	Article	IF	Citations
127	Influence of Specific Anions on the Orientational Ordering of Thermotropic Liquid Crystals at Aqueous Interfaces. Langmuir, 2012, 28, 12796-12805.	1.6	47
128	Combining Micromachining and Molecular Self-Assembly To Fabricate Microelectrodes. Langmuir, 1994, 10, 2672-2682.	1.6	46
129	Active control of interfacial properties. Current Opinion in Colloid and Interface Science, 2000, 5, 81-87.	3.4	46
130	Orientational Behavior of Thermotropic Liquid Crystals on Surfaces Presenting Electrostatically Bound Vesicular Stomatitis Virus. Langmuir, 2004, 20, 2375-2385.	1.6	46
131	Rubbed Films of Functionalized Bovine Serum Albumin as Substrates for the Imaging of Protein-Receptor Interactions Using Liquid Crystals. Advanced Materials, 2001, 13, 1445-1449.	11.1	44
132	Coupling of the Plasmon Resonances of Chemically Functionalized Gold Nanoparticles to Local Order in Thermotropic Liquid Crystals. Chemistry of Materials, 2007, 19, 1053-1061.	3.2	44
133	Principles for Manipulation of the Lateral Organization of Aqueous-Soluble Surface-Active Molecules at the Liquid Crystalâˆ'Aqueous Interface. Langmuir, 2009, 25, 2026-2033.	1.6	44
134	Stimuliâ€Responsive Cubosomes Formed from Blue Phase Liquid Crystals. Advanced Materials, 2015, 27, 6892-6898.	11.1	44
135	Effects of confinement, surface-induced orientations and strain on dynamical behaviors of bacteria in thin liquid crystalline films. Soft Matter, 2015, 11, 6821-6831.	1.2	44
136	A Practical Guide to the Preparation of Liquid Crystal-Templated Microparticles. Chemistry of Materials, 2017, 29, 53-61.	3.2	44
137	Machine Learning Algorithms for Liquid Crystal-Based Sensors. ACS Sensors, 2018, 3, 2237-2245.	4.0	44
138	Amplification of Specific Binding Events between Biological Species Using Lyotropic Liquid Crystals. Langmuir, 2002, 18, 5031-5035.	1.6	43
139	Infrared Spectroscopy of Competitive Interactions between Liquid Crystals, Metal Salts, and Dimethyl Methylphosphonate at Surfaces. Journal of Physical Chemistry B, 2006, 110, 26081-26088.	1.2	43
140	Liquid Crystals with Interfacial Ordering that Enhances Responsiveness to Chemical Targets. Advanced Materials, 2018, 30, e1706707.	11.1	43
141	Microfluidic sensing devices employing in situ-formed liquid crystal thin film for detection of biochemical interactions. Lab on A Chip, 2012, 12, 3746.	3.1	42
142	Ordering Transitions Triggered by Specific Binding of Vesicles to Protein-Decorated Interfaces of Thermotropic Liquid Crystals. Langmuir, 2012, 28, 6364-6376.	1.6	42
143	Measuring liquid crystal elastic constants with free energy perturbations. Soft Matter, 2014, 10, 882-893.	1.2	42
144	Self-Assembled Monolayers Formed on Electroless Gold Deposited on Silica Gel:Â A Potential Stationary Phase for Biological Assays. Analytical Chemistry, 1999, 71, 327-332.	3.2	41

#	Article	IF	Citations
145	Analysis of the Internal Configurations of Droplets of Liquid Crystal Using Flow Cytometry. Analytical Chemistry, 2013, 85, 10296-10303.	3.2	41
146	Deciphering the interactions between liquid crystals and chemically functionalized surfaces: Role of hydrogen bonding on orientations of liquid crystals. Surface Science, 2004, 570, 43-56.	0.8	40
147	Ferrocene-containing cationic lipids for the delivery of DNA: Oxidation state determines transfection activity. Journal of Controlled Release, 2006, 112, 129-138.	4.8	40
148	Optically Responsive and Mechanically Tunable Colloidâ€•inâ€•Liquid Crystal Gels that Support Growth of Fibroblasts. Advanced Materials, 2008, 20, 4804-4809.	11.1	40
149	Adsorbate-Induced Ordering Transitions of Nematic Liquid Crystals on Surfaces Decorated with Aluminum Perchlorate Salts. ACS Applied Materials & Interfaces, 2010, 2, 1857-1865.	4.0	40
150	Principles for Microscale Separations Based on Redox-Active Surfactants and Electrochemical Methods. Analytical Chemistry, 2001, 73, 4808-4814.	3.2	39
151	Characterization of Protein Immobilization at Silver Surfaces by Near Edge X-ray Absorption Fine Structure Spectroscopy. Langmuir, 2006, 22, 7719-7725.	1.6	39
152	PDGF-BB Does Not Accelerate Healing in Diabetic Mice with Splinted Skin Wounds. PLoS ONE, 2014, 9, e104447.	1.1	39
153	Redoxâ€Triggered Orientational Responses of Liquid Crystals to Chlorine Gas. Angewandte Chemie - International Edition, 2018, 57, 9665-9669.	7.2	39
154	Convolutional Network Analysis of Optical Micrographs for Liquid Crystal Sensors. Journal of Physical Chemistry C, 2020, 124, 15152-15161.	1.5	39
155	Effect of Light on Self-Assembly of Aqueous Mixtures of Sodium Dodecyl Sulfate and a Cationic, Bolaform Surfactant Containing Azobenzene. Langmuir, 2007, 23, 4819-4829.	1.6	38
156	Reversible Condensation of DNA Using a Redox-Active Surfactant. Langmuir, 2007, 23, 5609-5614.	1.6	38
157	A microstructure for the detection of vapor-phase analytes based on orientational transitions of liquid crystals. Smart Materials and Structures, 2008, 17, 012001.	1.8	38
158	Antibacterial Efficacy of Silver-Impregnated Polyelectrolyte Multilayers Immobilized on a Biological Dressing in a Murine Wound Infection Model. Annals of Surgery, 2012, 256, 371-377.	2.1	38
159	Molecular Order Affects Interfacial Water Structure and Temperature-Dependent Hydrophobic Interactions between Nonpolar Self-Assembled Monolayers. Langmuir, 2019, 35, 2078-2088.	1.6	38
160	Protein partitioning in two-phase aqueous polymer systems. 2. On the free energy of mixing globular colloids and flexible polymers. Macromolecules, 1992, 25, 3917-3931.	2.2	37
161	Stepped Silicon Surfaces as Templates for One-Dimensional Nanostructuresâ€. Journal of Physical Chemistry B, 2004, 108, 14484-14490.	1.2	37
162	Using Nonuniform Electric Fields To Accelerate the Transport of Viruses to Surfaces from Media of Physiological Ionic Strength. Langmuir, 2007, 23, 3840-3848.	1.6	37

#	Article	IF	Citations
163	Effects of anchoring strength on the diffusivity of nanoparticles in model liquid-crystalline fluids. Soft Matter, 2011, 7, 6828.	1.2	37
164	Self-Assembly of Bioconjugated Amphiphilic Mesogens Having Specific Binding Moieties at Aqueousâ€"Liquid Crystal Interfaces. Chemistry of Materials, 2016, 28, 1170-1178.	3.2	37
165	Surface-Controlled Orientational Transitions in Elastically Strained Films of Liquid Crystal That Are Triggered by Vapors of Toluene. ACS Applied Materials & Interfaces, 2016, 8, 13114-13122.	4.0	37
166	Engineered Surface-Immobilized Enzyme that Retains High Levels of Catalytic Activity in Air. Journal of the American Chemical Society, 2017, 139, 2872-2875.	6.6	37
167	Functionalization of silicon step arrays II: Molecular orientation of alkanes and DNA. Journal of Applied Physics, 2001, 90, 3291-3295.	1.1	36
168	Influence of Lyotropic Liquid Crystals on the Ability of Antibodies To Bind to Surface-Immobilized Antigens. Chemistry of Materials, 2005, 17, 4774-4782.	3.2	36
169	Raman Spectroscopy Enables Noninvasive Biochemical Characterization and Identification of the Stage of Healing of a Wound. Analytical Chemistry, 2014, 86, 3764-3772.	3.2	36
170	Planar anchoring of nematic 4â€nâ€pentylâ€4â€²â€cyanobiphenyl on selfâ€assembled monolayers formed from alkanethiols on gold. Applied Physics Letters, 1996, 69, 1852-1854.	1.5	35
171	Using Droplets of Nematic Liquid Crystal To Probe the Microscopic and Mesoscopic Structure of Organic Surfaces. Langmuir, 1999, 15, 7213-7223.	1.6	35
172	Characterization of the Nanostructure of Complexes Formed by a Redox-Active Cationic Lipid and DNA. Journal of Physical Chemistry B, 2008, 112, 5849-5857.	1.2	35
173	Flow induced deformation of defects around nanoparticles and nanodroplets suspended in liquid crystals. Soft Matter, 2010, 6, 896.	1.2	35
174	Dynamics of the chemo-optical response of supported films of nematic liquid crystals. Sensors and Actuators B: Chemical, 2013, 183, 71-80.	4.0	35
175	Synthesis of Optically Complex, Porous, and Anisometric Polymeric Microparticles by Templating from Liquid Crystalline Droplets. Advanced Functional Materials, 2016, 26, 7343-7351.	7.8	35
176	Orientations of Liquid Crystals in Contact with Surfaces that Present Continuous Gradients of Chemical Functionality. Chemistry of Materials, 2006, 18, 2357-2363.	3.2	34
177	Nanoparticles in nematic liquid crystals: Interactions with nanochannels. Journal of Chemical Physics, 2007, 127, 124702.	1.2	34
178	Towards first-principles molecular design of liquid crystal-based chemoresponsive systems. Nature Communications, 2016, 7, 13338.	5.8	34
179	Protein partitioning in two-phase aqueous polymer systems. 4. Proteins in solutions of entangled polymers. Macromolecules, 1992, 25, 5192-5200.	2.2	33
180	Using Localized Surface Plasmon Resonances to Probe the Nanoscopic Origins of Adsorbate-Driven Ordering Transitions of Liquid Crystals in Contact with Chemically Functionalized Gold Nanodots. Nano Letters, 2008, 8, 2362-2368.	4.5	33

#	Article	IF	Citations
181	Design of Surfaces for Liquid Crystal-Based Bioanalytical Assays. ACS Applied Materials & Interfaces, 2010, 2, 722-731.	4.0	33
182	Design of Chemoresponsive Liquid Crystals through Integration of Computational Chemistry and Experimental Studies. Chemistry of Materials, 2017, 29, 3563-3571.	3.2	33
183	Active Control of Interfacial Properties:Â A Comparison of Dimeric and Monomeric Ferrocenyl Surfactants at the Surface of Aqueous Solutions. Langmuir, 1997, 13, 203-208.	1.6	32
184	Manipulation of the Orientational Response of Liquid Crystals to Proteins Specifically Bound to Covalently Immobilized and Mechanically Sheared Films of Functionalized Bovine Serum Albumin. Langmuir, 2002, 18, 5269-5276.	1.6	32
185	Nonadditive Interactions Mediated by Water at Chemically Heterogeneous Surfaces: Nonionic Polar Groups and Hydrophobic Interactions. Journal of the American Chemical Society, 2017, 139, 18536-18544.	6.6	32
186	Effect of Electrolyte Concentration on Interfacial and Bulk Solution Properties of Ferrocenyl Surfactants with Anionic Headgroups. Langmuir, 2002, 18, 7826-7830.	1.6	31
187	Measurement of the Azimuthal Anchoring Energy of Liquid Crystals in Contact with Oligo(ethylene) Tj ETQq1 1 0.784314 rgBT /Overl Langmuir, 2006, 22, 4654-4659.	1.6	31
188	Design of Biomolecular Interfaces Using Liquid Crystals Containing Oligomeric Ethylene Glycol. Advanced Functional Materials, 2010, 20, 2098-2106.	7.8	31
189	Amplification of the Stereochemistry of Biomolecular Adsorbates by Deracemization of Chiral Domains in Bentâ€Core Liquid Crystals. Advanced Materials, 2013, 25, 245-249.	11.1	31
190	Effect of Stratification on Surface Properties of Corneal Epithelial Cells. , 2015, 56, 8340.		31
191	Interfacial ordering of thermotropic liquid crystals triggered by the secondary structures of oligopeptides. Chemical Communications, 2015, 51, 16844-16847.	2.2	31
192	Enantiomeric Interactions between Liquid Crystals and Organized Monolayers of Tyrosine-Containing Dipeptides. Journal of the American Chemical Society, 2012, 134, 548-558.	6.6	30
193	Areas of opportunity related to design of chemical and biological sensors based on liquid crystals. Liquid Crystals Today, 2020, 29, 24-35.	2.3	30
194	Detection and switching of the oxidation state of Fe in a self-assembled monolayer. Surface Science, 2005, 587, L191-L196.	0.8	29
195	Reduction in Wound Bioburden using a Silverâ€Loaded Dissolvable Microfilm Construct. Advanced Healthcare Materials, 2014, 3, 916-928.	3.9	29
196	Compatibility of lyotropic liquid crystals with viruses and mammalian cells that support the replication of viruses. Biomaterials, 2005, 26, 7173-7182.	5.7	28
197	Sequence Dependent Behavior of Amphiphilic Î²-Peptides on Gold Surfaces. Chemistry of Materials, 2007, 19, 4436-4441.	3.2	28
198	Spontaneous Formation of Water Droplets at Oilâ^'Solid Interfaces. Langmuir, 2010, 26, 13797-13804.	1.6	28

#	Article	IF	Citations
199	Organized assemblies of colloids formed at the poles of micrometer-sized droplets of liquid crystal. Soft Matter, 2014, 10, 8821-8828.	1.2	28
200	Characterization of the Molecular Orientation of Self-Assembled Monolayers of Alkanethiols on Obliquely Deposited Gold Films by Using Infraredâ^'Visible Sum-Frequency Spectroscopy. Langmuir, 2003, 19, 10501-10509.	1.6	27
201	Surface Activity of Amphiphilic Helical Î²-Peptides from Molecular Dynamics Simulation. Langmuir, 2009, 25, 2811-2823.	1.6	27
202	Influence of Order within Nonpolar Monolayers on Hydrophobic Interactions. Langmuir, 2017, 33, 4628-4637.	1.6	27
203	Computational Chemistryâ€Guided Design of Selective Chemoresponsive Liquid Crystals Using Pyridine and Pyrimidine Functional Groups. Advanced Functional Materials, 2018, 28, 1703581.	7.8	27
204	The role of anions in adsorbate-induced anchoring transitions of liquid crystals on surfaces with discrete cation binding sites. Soft Matter, 2018, 14, 797-805.	1.2	27
205	Prolate and oblate chiral liquid crystal spheroids. Science Advances, 2020, 6, eaba6728.	4.7	27
206	Self-Assembled Monolayers on (111) Textured Electroless Gold. Langmuir, 1999, 15, 3011-3014.	1.6	26
207	Chemically Responsive Gels Prepared from Microspheres Dispersed in Liquid Crystals. Small, 2009, 5, 2589-2596.	5.2	26
208	Reversible Switching of Liquid Crystalline Order Permits Synthesis of Homogeneous Populations of Dipolar Patchy Microparticles. Advanced Functional Materials, 2014, 24, 6219-6226.	7.8	26
209	Importance of defining experimental conditions in a mouse excisional wound model. Wound Repair and Regeneration, 2015, 23, 251-261.	1.5	26
210	Using machine learning and liquid crystal droplets to identify and quantify endotoxins from different bacterial species. Analyst, The, 2021, 146, 1224-1233.	1.7	26
211	Using Isotropic, Nematic, and Smectic Fluids for the Study of Self-Assembled Monolayers Formed from Alkanethiols on Gold. Chemistry of Materials, 1996, 8, 1366-1369.	3.2	25
212	Monte Carlo simulations and dynamic field theory for suspended particles in liquid crystalline systems. Journal of Chemical Physics, 2003, 119, 2444-2455.	1.2	25
213	Influence of 4-cyano-4â€²-biphenylcarboxylic acid on the orientational ordering of cyanobiphenyl liquid crystals at chemically functionalized surfaces. Journal of Colloid and Interface Science, 2006, 304, 459-473.	5.0	25
214	Quantitative Methods Based on Twisted Nematic Liquid Crystals for Mapping Surfaces Patterned with Bio/Chemical Functionality Relevant to Bioanalytical Assays. Analytical Chemistry, 2008, 80, 2637-2645.	3.2	25
215	A Sensing Device Using Liquid Crystal in a Micropillar Array Supporting Structure. Journal of Microelectromechanical Systems, 2009, 18, 973-982.	1.7	25
216	Influence of Biological Media on the Structure and Behavior of Ferrocene-Containing Cationic Lipid/DNA Complexes Used for DNA Delivery. Langmuir, 2011, 27, 6615-6621.	1.6	25

#	Article	IF	Citations
217	The use of native chemical functional groups presented by wound beds for the covalent attachment of polymeric microcarriers of bioactive factors. Biomaterials, 2013, 34, 340-352.	5.7	25
218	Colloid-in-liquid crystal gels formed via spinodal decomposition. Soft Matter, 2014, 10, 1602.	1.2	25
219	Synthetic Mimics of Bacterial Lipid A Trigger Optical Transitions in Liquid Crystal Microdroplets at Ultralow Picogram-per-Milliliter Concentrations. Langmuir, 2015, 31, 12850-12855.	1.6	25
220	Segregation of liquid crystal mixtures in topological defects. Nature Communications, 2017, 8, 15064.	5.8	25
221	Chemical Activation of Lipoplexes Formed from DNA and a Redox-Active, Ferrocene-Containing Cationic Lipid. Bioconjugate Chemistry, 2008, 19, 2120-2128.	1.8	24
222	Structural and Optical Response of Polymer-Stabilized Blue Phase Liquid Crystal Films to Volatile Organic Compounds. ACS Applied Materials & Interfaces, 2020, 12, 42099-42108.	4.0	24
223	Active motion of multiphase oil droplets: emergent dynamics of squirmers with evolving internal structure. Soft Matter, 2021, 17, 2985-2993.	1.2	24
224	Lipoplexes Formed by DNA and Ferrocenyl Lipids: Effect of Lipid Oxidation State on Size, Internal Dynamics, and Î¶-Potential. Biophysical Journal, 2007, 93, 4414-4424.	0.2	23
225	ORDERING TRANSITIONS IN LIQUID CRYSTALS PERMIT IMAGING OF SPATIAL AND TEMPORAL PATTERNS FORMED BY PROTEINS PENETRATING INTO LIPID-LADEN INTERFACES. Chemical Engineering Communications, 2008, 196, 234-251.	1.5	23
226	Adsorbate-Induced Anchoring Transitions of Liquid Crystals on Surfaces Presenting Metal Salts with Mixed Anions. ACS Applied Materials & Interfaces, 2014, 6, 2362-2369.	4.0	23
227	Species variation and spatial differences in mucin expression from corneal epithelial cells. Experimental Eye Research, 2016, 152, 43-48.	1.2	23
228	Patterned surface anchoring of nematic droplets at miscible liquidâ€“liquid interfaces. Soft Matter, 2017, 13, 5714-5723.	1.2	23
229	Responsive superabsorbent hydrogels via photopolymerization in lyotropic liquid crystal templates. Polymer, 2018, 142, 119-126.	1.8	23
230	Amphiphile-Induced Phase Transition of Liquid Crystals at Aqueous Interfaces. ACS Applied Materials & Interfaces, 2018, 10, 37618-37624.	4.0	23
231	Combining Molecular Dynamics Simulations and Transition State Theory to Evaluate the Sorption Rate Constants for Decanol at the Surface of Water. Langmuir, 2001, 17, 8434-8443.	1.6	22
232	Langmuir films of flexible polymers transferred to aqueous/liquid crystal interfaces induce uniform azimuthal alignment of the liquid crystal. Journal of Colloid and Interface Science, 2010, 341, 124-135.	5.0	22
233	Synthesis and properties of hydroxy tail-terminated cyanobiphenyl liquid crystals. Liquid Crystals, 2019, 46, 397-407.	0.9	22
234	Evolution of a preferred orientation of polycrystalline grains in obliquely deposited gold films on an amorphous substrate. Physical Review B, 2000, 62, R4833-R4836.	1.1	21

#	Article	IF	Citations
235	Liquid Crystal Interfaces Programmed with Enzymeâ€Responsive Polymers and Surfactants. Small, 2015, 11, 5747-5751.	5.2	21
236	Inhibition of <i>Pseudomonas aeruginosa</i> biofilm formation on wound dressings. Wound Repair and Regeneration, 2015, 23, 842-854.	1.5	21
237	Dipole-induced structure in aromatic-terminated self-assembled monolayersâ€”A study by near edge x-ray absorption fine structure spectroscopy. Journal of Chemical Physics, 2004, 120, 10792-10798.	1.2	20
238	Interactions of Liquid Crystal-Forming Molecules with Phospholipid Bilayers Studied by Molecular Dynamics Simulations. Biophysical Journal, 2005, 89, 3141-3158.	0.2	20
239	Ordering transitions in micrometer-thick films of nematic liquid crystals driven by self-assembly of ganglioside GM1. Journal of Colloid and Interface Science, 2009, 336, 90-99.	5.0	20
240	Single-Molecule Force Spectroscopy of Î²-Peptides That Display Well-Defined Three-Dimensional Chemical Patterns. Journal of the American Chemical Society, 2011, 133, 3981-3988.	6.6	20
241	Hierarchical organization in liquid crystal-in-liquid crystal emulsions. Soft Matter, 2014, 10, 8627-8634.	1.2	20
242	Active Janus Particles at Interfaces of Liquid Crystals. Langmuir, 2017, 33, 10917-10926.	1.6	20
243	Oligomers as Triggers for Responsive Liquid Crystals. Langmuir, 2018, 34, 10092-10101.	1.6	20
244	Optical â€œBlinkingâ€•Triggered by Collisions of Single Supramolecular Assemblies of Amphiphilic Molecules with Interfaces of Liquid Crystals. Journal of the American Chemical Society, 2020, 142, 6139-6148.	6.6	20
245	Protein partitioning in two-phase aqueous polymer systems. 5. Decoupling of the effects of protein concentration, salt type, and polymer molecular weight. Macromolecules, 1993, 26, 825-828.	2.2	19
246	Anchoring Energies of Liquid Crystals Measured on Surfaces Presenting Oligopeptides. Langmuir, 2006, 22, 7776-7782.	1.6	19
247	Dynamic Ordering Transitions of Liquid Crystals Driven by Interfacial Complexes Formed between Polyanions and Amphiphilic Polyamines. Langmuir, 2008, 24, 13231-13236.	1.6	19
248	Redox-Based Control of the Transformation and Activation of siRNA Complexes in Extracellular Environments Using Ferrocenyl Lipids. Journal of the American Chemical Society, 2013, 135, 9111-9120.	6.6	19
249	Positioning colloids at the surfaces of cholesteric liquid crystal droplets. Soft Matter, 2016, 12, 8781-8789.	1.2	19
250	Thermally reconfigurable Janus droplets with nematic liquid crystalline and isotropic perfluorocarbon oil compartments. Soft Matter, 2019, 15, 2580-2590.	1.2	19
251	A New Strategy for Reporting Specific Protein Binding Events at Aqueousâ€“Liquid Crystal Interfaces in the Presence of Non-Specific Proteins. ACS Applied Materials & Interfaces, 2020, 12, 7869-7878.	4.0	19
252	Comparison of the anchoring of nematic liquid crystals on self-assembled monolayers formed from semifluorinated thiols and alkanethiols. Liquid Crystals, 1997, 23, 175-184.	0.9	18

#	Article	IF	Citations
253	A Chemodegradable Surfactant System Based on Oxidation of Disulfide Bonds Using Hypochlorite. Langmuir, 2000, 16, 5553-5561.	1.6	18
254	Ordering of Solid Microparticles at Liquid Crystalâ˜'Water Interfaces. Journal of Physical Chemistry B, 2008, 112, 16552-16558.	1.2	18
255	Nematic ordering drives the phase separation of mixed monolayers containing phospholipids modified with poly(ethylene glycol) at aqueousâ€“liquid crystal interfaces. Soft Matter, 2010, 6, 4095.	1.2	18
256	Colloidâ€inâ€Liquid Crystal Gels that Respond to Biomolecular Interactions. Small, 2013, 9, 2785-2792.	5.2	18
257	Comparison between Free and Immobilized Ion Effects on Hydrophobic Interactions: A Molecular Dynamics Study. Journal of Physical Chemistry B, 2015, 119, 13152-13159.	1.2	18
258	An Evolved Mxe GyrA Intein for Enhanced Production of Fusion Proteins. ACS Chemical Biology, 2015, 10, 527-538.	1.6	18
259	Strain-induced alignment and phase behavior of blue phase liquid crystals confined to thin films. Soft Matter, 2017, 13, 8999-9006.	1.2	18
260	Toluene-induced phase transitions in blue phase liquid crystals. Liquid Crystals, 2019, 46, 1925-1936.	0.9	18
261	Amplification of Elementary Surface Reaction Steps on Transition Metal Surfaces Using Liquid Crystals: Dissociative Adsorption and Dehydrogenation. Journal of the American Chemical Society, 2019, 141, 16003-16013.	6.6	18
262	Using finite element analysis to calculate the shapes of geometrically confined drops of liquid on patterned, self-assembled monolayers: a new method to estimate excess interfacial free energies .gamma.sv - .gamma.sl. Journal of the American Chemical Society, 1994, 116, 290-294.	6.6	17
263	Surface effects on orientation of liquid crystals. Current Opinion in Colloid and Interface Science, 1997, 2, 76-82.	3.4	17
264	Rate-Dependent Lowering of Surface Tension during Transformations of Water-Soluble Surfactants from Bolaform to Monomeric Structures. Langmuir, 1998, 14, 2235-2237.	1.6	17
265	Interfacial Properties of Unsymmetrical Bolaform Amphiphiles with One Ionic and One Nonionic Head Group. Journal of Colloid and Interface Science, 2001, 242, 411-418.	5.0	17
266	Defect structures and three-body potential of the mean force for nanoparticles in a nematic host. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 1033-1040.	2.4	17
267	Effects of Divalent Ligand Interactions on Surface-Induced Ordering of Liquid Crystals. Chemistry of Materials, 2010, 22, 5474-5482.	3.2	17
268	Characterization of the Nanostructure of Complexes Formed by Single- or Double-Stranded Oligonucleotides with a Cationic Surfactant. Journal of Physical Chemistry B, 2010, 114, 15554-15564.	1.2	17
269	The mobilities of micro- and nano-particles at interfaces of nematic liquid crystals. Soft Matter, 2012, 8, 2026.	1.2	17
270	Facile Chemical Functionalization of Proteins through Intein-Linked Yeast Display. Bioconjugate Chemistry, 2013, 24, 1634-1644.	1.8	17

#	Article	IF	Citations
271	Straining soft colloids in aqueous nematic liquid crystals. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5564-5569.	3.3	17
272	Using Chemoattractants to Lure Bacteria to Contactâ€Killing Surfaces. Angewandte Chemie - International Edition, 2016, 55, 5698-5702.	7.2	17
273	Synthesis and properties of fluorine tail-terminated cyanobiphenyls and terphenyls for chemoresponsive liquid crystals. Liquid Crystals, 2020, 47, 3-16.	0.9	17
274	Control of the Folding Dynamics of Selfâ€Reconfiguring Magnetic Microbots Using Liquid Crystallinity. Advanced Intelligent Systems, 2020, 2, 1900114.	3.3	17
275	Electrochemical Control of the Interactions of Polymers and Redox-Active Surfactants. Langmuir, 2005, 21, 12007-12015.	1.6	16
276	Role of Desorption Kinetics in Determining Marangoni Flows Generated by Using Electrochemical Methods and Redox-Active Surfactants. Langmuir, 2005, 21, 2235-2241.	1.6	16
277	Self-assembly of biomolecules at surfaces characterized by NEXAFS. Canadian Journal of Chemistry, 2007, 85, 793-800.	0.6	16
278	Characterization of the Growth of Polyelectrolyte Multilayers Formed at Interfaces between Aqueous Phases and Thermotropic Liquid Crystals. Langmuir, 2008, 24, 5534-5542.	1.6	16
279	Surfactant-Induced Ordering and Wetting Transitions of Droplets of Thermotropic Liquid Crystals â€œCagedâ€•Inside Partially Filled Polymeric Capsules. Langmuir, 2014, 30, 14944-14953.	1.6	16
280	Controlled deformation of vesicles by flexible structured media. Science Advances, 2016, 2, e1600978.	4.7	16
281	Multiâ€Scale Responses of Liquid Crystals Triggered by Interfacial Assemblies of Cleavable Homopolymers. ChemPhysChem, 2018, 19, 2037-2045.	1.0	16
282	Biomolecular Binding at Aqueous Interfaces of Langmuir Monolayers of Bioconjugated Amphiphilic Mesogenic Molecules: A Molecular Dynamics Study. Langmuir, 2020, 36, 12281-12287.	1.6	16
283	Cationic Side Chain Identity Directs the Hydrophobically Driven Self-Assembly of Amphiphilic Î²-Peptides in Aqueous Solution. Langmuir, 2021, 37, 3288-3298.	1.6	16
284	Diblock, ABC triblock, and random methacrylic polyampholytes: synthesis by group transfer polymerization and solution behavior. [Erratum to document cited in CA120(10):107863g]. Macromolecules, 1994, 27, 2364-2364.	2.2	15
285	Association of Helical Î²-Peptides and their Aggregation Behavior from the Potential of Mean Force in Explicit Solvent. Biophysical Journal, 2009, 96, 4349-4362.	0.2	15
286	Ordering Transitions in Nematic Liquid Crystals Induced by Vesicles Captured through Ligandâ^'Receptor Interactions. Langmuir, 2011, 27, 1419-1429.	1.6	15
287	Chemical oxidation of a redox-active, ferrocene-containing cationic lipid: Influence on interactions with DNA and characterization in the context of cell transfection. Journal of Colloid and Interface Science, 2012, 387, 56-64.	5.0	15
288	Covalent Immobilization of Caged Liquid Crystal Microdroplets on Surfaces. ACS Applied Materials & Interfaces, 2015, 7, 26892-26903.	4.0	15

#	Article	IF	Citations
289	New horizons for surfactant science in chemical engineering. AICHE Journal, 2001, 47, 2634-2639.	1.8	14
290	Anchoring of Liquid Crystals on Surface-Initiated Polymeric Brushes. ChemPhysChem, 2002, 3, 448.	1.0	14
291	Spatial Control of Cell Transfection Using Soluble or Solid-Phase Redox Agents and a Redox-Active Ferrocenyl Lipid. ACS Applied Materials & Interfaces, 2013, 5, 8283-8288.	4.0	14
292	Steering Active Emulsions with Liquid Crystals. Langmuir, 2020, 36, 6948-6956.	1.6	14
293	Dynamic and reversible shape response of red blood cells in synthetic liquid crystals. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 26083-26090.	3.3	14
294	Alignment of Liquid Crystals on Stepped and Passivated Silicon Templates Prepared in Ultrahigh Vacuum. Langmuir, 2000, 16, 6731-6738.	1.6	13
295	Liquid Crystal-Based Sensors for Rapid Analysis of Fatty Acid Contamination in Biodiesel. Molecular Crystals and Liquid Crystals, 2014, 594, 42-54.	0.4	13
296	Liquid crystal droplet-based amplification of microvesicles that are shed by mammalian cells. Analyst, The, 2014, 139, 2386-2396.	1.7	13
297	Chiral interactions in liquid crystals. Nature Materials, 2018, 17, 14-15.	13.3	13
298	Liquid Crystal Emulsions That Intercept and Report on Bacterial Quorum Sensing. ACS Applied Materials & Interfaces, 2020, 12, 29056-29065.	4.0	13
299	Addition of ascorbic acid to the extracellular environment activates lipoplexes of a ferrocenyl lipid and promotes cell transfection. Journal of Controlled Release, 2012, 157, 249-259.	4.8	12
300	Helical versus All-Trans Conformations of Oligo(ethylene glycol)-Terminated Alkanethiol Self-Assembled Monolayers. Langmuir, 2014, 30, 10263-10269.	1.6	12
301	Dynamic anchoring transitions at aqueousâ€“liquid crystal interfaces induced by specific and non-specific binding of vesicles to proteins. Journal of Colloid and Interface Science, 2015, 449, 452-461.	5.0	12
302	Interaction of the Hydrophobic Tip of an Atomic Force Microscope with Oligopeptides Immobilized Using Short and Long Tethers. Langmuir, 2016, 32, 2985-2995.	1.6	12
303	Tough aliphatic-aromatic copolyester and chicken egg white flexible biopolymer blend with bacteriostatic effects. Food Packaging and Shelf Life, 2018, 15, 9-16.	3.3	12
304	Reconfigurable Multicompartment Emulsion Drops Formed by Nematic Liquid Crystals and Immiscible Perfluorocarbon Oils. Langmuir, 2019, 35, 16312-16323.	1.6	12
305	Bacterial Quorum Sensing Signals Self-Assemble in Aqueous Media to Form Micelles and Vesicles: An Integrated Experimental and Molecular Dynamics Study. Journal of Physical Chemistry B, 2020, 124, 3616-3628.	1.2	12
306	Design Principles for Triggerable Polymeric Amphiphiles with Mesogenic Side Chains for Multiscale Responses with Liquid Crystals. Macromolecules, 2018, 51, 1978-1985.	2.2	11

#	Article	IF	Citations
307	Redoxâ€Triggered Orientational Responses of Liquid Crystals to Chlorine Gas. Angewandte Chemie, 2018, 130, 9813-9817.	1.6	11
308	Polymeric Films Containing Sodium Chlorite That Release Disinfectant Gas upon Activation with UV Light. Advanced Functional Materials, 2019, 29, 1804851.	7.8	11
309	Structured Liquid Droplets as Chemical Sensors that Function Inside Living Cells. ACS Applied Materials & Interfaces, 2021, 13, 42502-42512.	4.0	11
310	Formation of versus Recruitment to RNA-Rich Condensates: Controlling Effects Exerted by Peptide Side Chain Identity. Journal of the American Chemical Society, 2022, 144, 10386-10395.	6.6	11
311	Mechanical Stability of Helical Î²-Peptides and a Comparison of Explicit and Implicit Solvent Models. Biophysical Journal, 2008, 95, 3123-3136.	0.2	10
312	Engineering of PDMS surfaces for use in microsystems for capture and isolation of complex and biomedically important proteins: Epidermal growth factor receptor as a model system. Lab on A Chip, 2008, 8, 1357.	3.1	10
313	Electrochemical Generation of Gradients in Surfactant Concentration Across Microfluidic Channels. Analytical Chemistry, 2009, 81, 772-781.	3.2	10
314	Characterization of Surfaces Presenting Covalently Immobilized Oligopeptides Using Near-Edge X-ray Absorption Fine Structure Spectroscopy. Langmuir, 2010, 26, 6464-6470.	1.6	10
315	Lateral Transport of Solutes in Microfluidic Channels Using Electrochemically Generated Gradients in Redox-Active Surfactants. Analytical Chemistry, 2011, 83, 3033-3041.	3.2	10
316	Galliumâ€Loaded Dissolvable Microfilm Constructs that Provide Sustained Release of Ga³⁺ for Management of Biofilms. Advanced Healthcare Materials, 2015, 4, 2849-2859.	3.9	10
317	Redox-triggered mixing and demixing of surfactants within assemblies formed in solution and at surfaces. Journal of Colloid and Interface Science, 2017, 502, 122-133.	5.0	10
318	New room temperature nematogens by cyano tail termination of alkoxy and alkylcyanobiphenyls and their anchoring behavior on metal salt-decorated surface. Liquid Crystals, 2020, 47, 540-556.	0.9	10
319	Using Liquid Crystals for <i>In Situ</i> Optical Mapping of Interfacial Mobility and Surfactant Concentrations at Flowing Aqueousâ€"Oil Interfaces. Langmuir, 2021, 37, 5810-5822.	1.6	10
320	Retention of Coiled-Coil Dimer Formation in the Absence of Ion Pairing at Positions Flanking the Hydrophobic Core. Biochemistry, 2019, 58, 4821-4826.	1.2	9
321	Designing chemically selective liquid crystalline materials that respond to oxidizing gases. Journal of Materials Chemistry C, 2021, 9, 6507-6517.	2.7	9
322	Surfaces Decorated with Enantiomorphically Pure Polymer Nanohelices via Hierarchical Chirality Transfer across Multiple Length Scales. Advanced Materials, 2022, 34, e2108386.	11.1	9
323	Epidermal Growth Factorâ€"Functionalized Polymeric Multilayer Films: Interplay between Spatial Location and Bioavailability of EGF. Journal of Investigative Dermatology, 2014, 134, 1757-1760.	0.3	8
324	Understanding lipopolysaccharide aggregation and its influence on activation of Factor C. Journal of Colloid and Interface Science, 2019, 552, 540-553.	5.0	8

#	Article	IF	Citations
325	Binding of Organophosphorus Nerve Agents and Their Simulants to Metal Salts. ACS Applied Materials & Interfaces, 2020, 12, 30941-30953.	4.0	8
326	Cuboidal liquid crystal phases under multiaxial geometrical frustration. Soft Matter, 2020, 16, 870-880.	1.2	8
327	Influence of multifluorophenyloxy terminus on the mesomorphism of the alkoxy and alkyl cyanobiphenyl compounds in search of new ambient nematic liquid crystals and mixtures. Liquid Crystals, 2021, 48, 672-688.	0.9	8
328	Coupling the chemical reactivity of bimetallic surfaces to the orientations of liquid crystals. Materials Horizons, 2021, 8, 2050-2056.	6.4	8
329	Stimuliâ€Responsive Liquid Crystal Printheads for Spatial and Temporal Control of Polymerization. Advanced Materials, 2022, , 2106535.	11.1	8
330	Influence of Surface Tension-Driven Convection on Cyclic Voltammograms of Langmuir Films of Redox-Active Amphiphiles. Langmuir, 2002, 18, 9882-9887.	1.6	7
331	Colloid Science Collides with Liquid Crystals. Science, 2013, 342, 1326-1327.	6.0	7
332	Liquid Crystals Anchored on Mixed Monolayers of Chiral versus Achiral Molecules: Continuous Change in Orientation as a Function of Enantiomeric Excess. Angewandte Chemie - International Edition, 2014, 53, 8079-8083.	7.2	7
333	Influence of Self-Assembling Redox Mediators on Charge Transfer at Hydrophobic Electrodes. Langmuir, 2015, 31, 10638-10648.	1.6	7
334	Generation of Gaseous ClO₂ from Thin Films of Solid NaClO₂ by Sequential Exposure to Ultraviolet Light and Moisture. ACS Applied Materials & Interfaces, 2017, 9, 16594-16603.	4.0	7
335	Programming van der Waals interactions with complex symmetries into microparticles using liquid crystallinity. Science Advances, 2020, 6, eabb1327.	4.7	7
336	Characterization of the interactions between synthetic nematic LCs and model cell membranes. Liquid Crystals, 2007, 34, 1387-1396.	0.9	6
337	Methods for Generation of Spatial Gradients in Concentration of Monomeric Surfactants and Micelles in Microfluidic Systems. Langmuir, 2007, 23, 9578-9585.	1.6	6
338	Imide Photodissociation Investigated by X-ray Absorption Spectroscopy. Journal of Physical Chemistry B, 2012, 116, 7048-7054.	1.2	6
339	Using ?prosurfactants? to enhance rates of delivery of surfactants. AIChE Journal, 2004, 50, 708-714.	1.8	5
340	Dimerization of Helical Î²-Peptides in Solution. Biophysical Journal, 2012, 102, 1435-1442.	0.2	5
341	Comparison of the Influence of Humidity and <scp>d</scp>-Mannitol on the Organization of Tetraethylene Glycol-Terminated Self-Assembled Monolayers and Immobilized Antimicrobial Peptides. Langmuir, 2014, 30, 7143-7151.	1.6	5
342	Interfacial Stacks of Polymeric Nanofilms on Soft Biological Surfaces that Release Multiple Agents. ACS Applied Materials & Interfaces, 2016, 8, 26541-26551.	4.0	5

#	Article	IF	Citations
343	Self-Assembly of Macromolecules Within Single Topological Defects of Nematic Solvents. Chemistry of Materials, 2020, 32, 6753-6764.	3.2	5
344	Programming Solitons in Liquid Crystals Using Surface Chemistry. Langmuir, 2022, 38, 3575-3584.	1.6	5
345	Sharing of Strain Between Nanofiber Forests and Liquid Crystals Leads to Programmable Responses to Electric Fields. Advanced Functional Materials, 2022, 32, .	7.8	5
346	Capacitive Based Liquid Crystal Chemical and Biological Sensors. , 2007, , .		4
347	Surface Adsorption in Nonpolarizable Atomic Models. Journal of Chemical Theory and Computation, 2014, 10, 5616-5624.	2.3	4
348	Hierarchical Microstructures Formed by Bidisperse Colloidal Suspensions within Colloid-in-Liquid Crystal Gels. ACS Applied Materials & Interfaces, 2015, 7, 7153-7162.	4.0	4
349	Influence of immobilized cations on the thermodynamic signature of hydrophobic interactions at chemically heterogeneous surfaces. Molecular Systems Design and Engineering, 2020, 5, 835-846.	1.7	4
350	Design of Chemoresponsive Soft Matter Using Hydrogen-Bonded Liquid Crystals. Materials, 2021, 14, 1055.	1.3	4
351	Using Liquid Crystals to Probe the Organization of Helical Polypeptide Brushes Induced by Solvent Pretreatment. Macromolecules, 2021, 54, 7786-7795.	2.2	4
352	Strongly Chiral Liquid Crystals in Nanoemulsions. Small, 2022, , 2105835.	5.2	4
353	Autonomous microfluidic sensing device employing liquid crystal for detection of biological interactions. , 2009, , .		3
354	Influence of the phase state of selfâ€assembling redox mediators on their electrochemical activity. AIChE Journal, 2014, 60, 1381-1392.	1.8	2
355	Using Chemoattractants to Lure Bacteria to Contactâ€Killing Surfaces. Angewandte Chemie, 2016, 128, 5792-5796.	1.6	2
356	Phosphorylation status of peptide monolayers modulates hydrogen bonding and orientations of nematic liquid crystals. Liquid Crystals, 2018, 45, 2253-2268.	0.9	2
357	Sculpting the shapes of giant unilamellar vesicles using isotropicâ€“nematicâ€“isotropic phase cycles. Soft Matter, 2021, 17, 9078-9086.	1.2	2
358	Changing the Wound: Covalent Immobilization of the Epidermal Growth Factor. ACS Biomaterials Science and Engineering, 2021, 7, 2649-2660.	2.6	2
359	Interfacial Polyelectrolyteâ€“Surfactant Complexes Regulate Escape of Microdroplets Elastically Trapped in Thermotropic Liquid Crystals. Langmuir, 2022, 38, 332-342.	1.6	2
360	Active Control of Surfactants. Studies in Surface Science and Catalysis, 2001, 132, 49-54.	1.5	1

#	Article	IF	Citations
361	A Liquid Crystal Based Gas Sensor Using Microfabricated Pillar Arrays as a Support Structure. , 2007, , .		1
362	Liquid Crystals: Liquid Crystal Interfaces Programmed with Enzyme-Responsive Polymers and Surfactants (Small 43/2015). Small, 2015, 11, 5722-5722.	5.2	1
363	Sensors: Liquid Crystal Enabled Early Stage Detection of Beta Amyloid Formation on Lipid Monolayers (Adv. Funct. Mater. 38/2015). Advanced Functional Materials, 2015, 25, 6147-6147.	7.8	1
364	Observation of Long-Range Orientational Ordering in Metal Films Evaporated at Oblique Incidence onto Glass. Materials Research Society Symposia Proceedings, 2000, 615, 771.	0.1	0
365	Turning Cutting-Edge Research into Secondary Curriculum. Materials Research Society Symposia Proceedings, 2004, 861, 36.	0.1	0
366	Liquid Crystals: Colloid-in-Liquid Crystal Gels that Respond to Biomolecular Interactions (Small) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	5.2	0
367	Using a Tabletop Scanning Electron Microscope as an Outreach Tool to Engage the Public With Cutting-edge Research. Microscopy and Microanalysis, 2018, 24, 2344-2345.	0.2	0
368	BREWing better broader impacts. MRS Bulletin, 2020, 45, 84-86.	1.7	0