David M Lynn

List of Publications by Year
in descending order

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82 papers	2,712 citations	186265 28 h-index	197818 49 g-index
87 all docs	87 docs citations	87 times ranked	3144 citing authors

#	Article	IF	Citations
1	Environmentally Responsive Emulsions of Thermotropic Liquid Crystals with Exceptional Long-Term Stability and Enhanced Sensitivity to Aqueous Amphiphiles. Langmuir, 2022, 38, 957-967.	3.5	7
2	Reactive Multilayers and Coatings Fabricated by Spray Assembly: Influence of Polymer Structure and Process Parameters on Multiscale Structure and Interfacial Properties. Chemistry of Materials, 2022, 34, 1245-1258.	6.7	11
3	Continuous Fabrication of Slippery Liquid-Infused Coatings on Rolls of Flexible Materials. ACS Applied Polymer Materials, 2022, 4, 787-795.	4.4	12
4	Antibody-Targeted Liposomes for Enhanced Targeting of the Blood-Brain Barrier. Pharmaceutical Research, 2022, 39, 1523-1534.	3.5	8
5	Sustained Release of a Synthetic Autoinducing Peptide Mimetic Blocks Bacterial Communication and Virulence In Vivo.. Angewandte Chemie - International Edition, 2022, 61, .	13.8	7
6	Slippery Antifouling Polymer Coatings Fabricated Entirely from Biodegradable and Biocompatible Components. ACS Applied Materials & Interfaces, 2022, 14, 17940-17949.	8.0	10
7	Identification of small molecules that strongly inhibit bacterial quorum sensing using a high-throughput lipid vesicle lysis assay. Cell Chemical Biology, 2022, 29, 605-614.e4.	5.2	6
8	Membrane Remodeling and Stimulation of Aggregation Following Î±-Synuclein Adsorption to Phosphotidylserine Vesicles. Journal of Physical Chemistry B, 2021, 125, 1582-1594.	2.6	16
9	Bacterial Quorum Sensing Signals Promote Large-Scale Remodeling of Lipid Membranes. Langmuir, 2021, 37, 9120-9136.	3.5	10
10	Polymer Coatings Comprised Entirely of Soft and Semipermeable Microcapsules. ACS Applied Polymer Materials, 2021, 3, 4044-4054.	4.4	2
11	Liquid Crystal-Infused Porous Polymer Surfaces: A â€œSlipperyâ€•Soft Material Platform for the Naked-Eye Detection and Discrimination of Amphiphilic Species. ACS Applied Materials & Interfaces, 2021, 13, 33652-33663.	8.0	5
12	Soft Materials that Intercept, Respond to, and Sequester Bacterial Siderophores. Chemistry of Materials, 2021, 33, 5401-5412.	6.7	2
13	Structured Liquid Droplets as Chemical Sensors that Function Inside Living Cells. ACS Applied Materials & Interfaces, 2021, 13, 42502-42512.	8.0	11
14	Interactions of Bacterial Quorum Sensing Signals with Model Lipid Membranes: Influence of Acyl Tail Structure on Multiscale Response. Langmuir, 2021, 37, 12049-12058.	3.5	3
15	Fabrication of Slippery Liquid-Infused Coatings in Flexible Narrow-Bore Tubing. ACS Applied Materials & Interfaces, 2021, 13, 55621-55632.	8.0	6
16	Slippery nanoemulsion-infused porous surfaces (SNIPS): anti-fouling coatings that can host and sustain the release of water-soluble agents. Chemical Communications, 2021, 57, 12691-12694.	4.1	3
17	Influence of Side Chain Hydrolysis on the Evolution of Nanoscale Roughness and Porosity in Amine-Reactive Polymer Multilayers. Chemistry of Materials, 2020, 32, 6935-6946.	6.7	4
18	Liquid Crystal Emulsions That Intercept and Report on Bacterial Quorum Sensing. ACS Applied Materials & Interfaces, 2020, 12, 29056-29065.	8.0	13

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19	Protonation-Driven Aqueous Lyotropic Self-Assembly of Synthetic Six-Tail Lipidoids. Langmuir, 2020, 36, 8240-8252.	3.5	5
20	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.	2.6	12
21	Tunable and Selective Degradation of Amine-Reactive Multilayers in Acidic Media. Biomacromolecules, 2019, 20, 3464-3474.	5.4	12
22	Hexane-1,2,5,6-tetrol as a Versatile and Biobased Building Block for the Synthesis of Sustainable (Chiral) Crystalline Mesoporous Polyboronates. ACS Sustainable Chemistry and Engineering, 2019, 7, 13430-13436.	6.7	7
23	Templated Synthesis of Polymer-Based Yolk/Shell Particles with Tunable Morphologies. Chemistry of Materials, 2019, 31, 7443-7452.	6.7	11
24	Preventing S. aureus biofilm formation on titanium surfaces by the release of antimicrobial Î²-peptides from polyelectrolyte multilayers. Acta Biomaterialia, 2019, 93, 50-62.	8.3	45
25	Polymeric Films Containing Sodium Chlorite That Release Disinfectant Gas upon Activation with UV Light. Advanced Functional Materials, 2019, 29, 1804851.	14.9	11
26	14-Helical Î²-Peptides Elicit Toxicity against C. albicans by Forming Pores in the Cell Membrane and Subsequently Disrupting Intracellular Organelles. Cell Chemical Biology, 2019, 26, 289-299.e4.	5.2	22
27	Nonwoven Polymer Nanofiber Coatings That Inhibit Quorum Sensing in Staphylococcus aureus: Toward New Nonbactericidal Approaches to Infection Control. ACS Infectious Diseases, 2017, 3, 271-280.	3.8	27
28	Amine-Reactive Azlactone-Containing Nanofibers for the Immobilization and Patterning of New Functionality on Nanofiber-Based Scaffolds. ACS Applied Materials & Interfaces, 2017, 9, 10243-10253.	8.0	8
29	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.	8.0	7
30	Layer-by-Layer Assembly of Amine-Reactive Multilayers Using an Azlactone-Functionalized Polymer and Small-Molecule Diamine Linkers. Biomacromolecules, 2017, 18, 1499-1508.	5.4	10
31	Superhydrophobic polymer multilayers for the filtrationâ€•and absorptionâ€based separation of oil/water mixtures. Journal of Polymer Science Part A, 2017, 55, 3127-3136.	2.3	10
32	Parallel DNA Synthesis on Poly(ethylene terephthalate). ChemBioChem, 2017, 18, 1914-1916.	2.6	6
33	Incorporation of Î²-Amino Acids Enhances the Antifungal Activity and Selectivity of the Helical Antimicrobial Peptide Aurein 1.2. ACS Chemical Biology, 2017, 12, 2975-2980.	3.4	18
34	A Reactive Platform Approach for the Rapid Synthesis and Discovery of High Ï‡/Low N Block Polymers. Macromolecules, 2016, 49, 6268-6276.	4.8	36
35	Synthesis and Characterization of Backbone Degradable Azlactone-Functionalized Polymers. Macromolecules, 2016, 49, 5514-5526.	4.8	26
36	Degradable Amine-Reactive Coatings Fabricated by the Covalent Layer-by-Layer Assembly of Poly(2-vinyl-4,4-dimethylazlactone) with Degradable Polyamine Building Blocks. Biomacromolecules, 2016, 17, 3067-3075.	5.4	16

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37	Antifungal activity of a Î²-peptide in synthetic urine media: Toward materials-based approaches to reducing catheter-associated urinary tract fungal infections. Acta Biomaterialia, 2016, 43, 240-250.	8.3	28
38	Using Chemoattractants to Lure Bacteria to Contactâ€Killing Surfaces. Angewandte Chemie - International Edition, 2016, 55, 5698-5702.	13.8	17
39	Slippery Liquidâ€Infused Porous Surfaces that Prevent Microbial Surface Fouling and Kill Nonâ€Adherent Pathogens in Surrounding Media: A Controlled Release Approach. Advanced Functional Materials, 2016, 26, 3599-3611.	14.9	132
40	Covalently Crosslinked and Physically Stable Polymer Coatings with Chemically Labile and Dynamic Surface Features Fabricated by Treatment of Azlactone-Containing Multilayers with Alcohol-, Thiol-, and Hydrazine-Based Nucleophiles. Chemistry of Materials, 2016, 28, 5063-5072.	6.7	22
41	Slippery Liquid-Infused Porous Surfaces that Prevent Bacterial Surface Fouling and Inhibit Virulence Phenotypes in Surrounding Planktonic Cells. ACS Infectious Diseases, 2016, 2, 509-517.	3.8	83
42	Using Chemoattractants to Lure Bacteria to Contactâ€Killing Surfaces. Angewandte Chemie, 2016, 128, 5792-5796.	2.0	2
43	Intraluminal Release of an Antifungal Î²-Peptide Enhances the Antifungal and Anti-Biofilm Activities of Multilayer-Coated Catheters in a Rat Model of Venous Catheter Infection. ACS Biomaterials Science and Engineering, 2016, 2, 112-121.	5.2	29
44	Antifungal Activity of 14-Helical Î²-Peptides against Planktonic Cells and Biofilms of Candida Species. Pharmaceuticals, 2015, 8, 483-503.	3.8	29
45	Synthetic Mimics of Bacterial Lipid A Trigger Optical Transitions in Liquid Crystal Microdroplets at Ultralow Picogram-per-Milliliter Concentrations. Langmuir, 2015, 31, 12850-12855.	3.5	25
46	Synthetic Surfaces with Robust and Tunable Underwater Superoleophobicity. Advanced Functional Materials, 2015, 25, 1672-1681.	14.9	104
47	Fabrication of Liquidâ€Infused Surfaces Using Reactive Polymer Multilayers: Principles for Manipulating the Behaviors and Mobilities of Aqueous Fluids on Slippery Liquid Interfaces. Advanced Materials, 2015, 27, 3007-3012.	21.0	143
48	Polymer Multilayers that Promote the Rapid Release and Contact Transfer of DNA. Biomacromolecules, 2015, 16, 2998-3007.	5.4	22
49	Nanoporous Superhydrophobic Coatings that Promote the Extended Release of Water-Labile Quorum Sensing Inhibitors and Enable Long-Term Modulation of Quorum Sensing in Staphylococcus aureus. ACS Biomaterials Science and Engineering, 2015, 1, 1039-1049.	5.2	43
50	Covalent Immobilization of Caged Liquid Crystal Microdroplets on Surfaces. ACS Applied Materials & Interfaces, 2015, 7, 26892-26903.	8.0	15
51	Photolithographic Synthesis of High-Density DNA and RNA Arrays on Flexible, Transparent, and Easily Subdivided Plastic Substrates. Analytical Chemistry, 2015, 87, 11420-11428.	6.5	27
52	Influence of the phase state of selfâ€assembling redox mediators on their electrochemical activity. AICHE Journal, 2014, 60, 1381-1392.	3.6	2
53	Post-Fabrication Placement of Arbitrary Chemical Functionality on Microphase-Separated Thin Films of Amine-Reactive Block Copolymers. ACS Macro Letters, 2014, 3, 1178-1182.	4.8	22
54	Surfactant-Induced Ordering and Wetting Transitions of Droplets of Thermotropic Liquid Crystals â€œCagedâ€•Inside Partially Filled Polymeric Capsules. Langmuir, 2014, 30, 14944-14953.	3.5	16

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55	Polymer multilayers loaded with antifungal Î²-peptides kill planktonic Candida albicans and reduce formation of fungal biofilms on the surfaces of flexible catheter tubes. Journal of Controlled Release, 2014, 191, 54-62.	9.9	48
56	Surface Coatings that Promote Rapid Release of Peptideâ€Based AgrC Inhibitors for Attenuation of Quorum Sensing in Staphylococcus aureus. Advanced Healthcare Materials, 2014, 3, 97-105.	7.6	30
57	Patterning and Impregnation of Superhydrophobic Surfaces Using Aqueous Solutions. ACS Applied Materials & Interfaces, 2013, 5, 7731-7736.	8.0	33
58	Restoration of Superhydrophobicity in Crushed Polymer Films by Treatment with Water: Selfâ€Healing and Recovery of Damaged Topographic Features Aided by an Unlikely Source. Advanced Materials, 2013, 25, 5104-5108.	21.0	125
59	Superhydrophobic Polymer Multilayers that Promote the Extended, Longâ€Term Release of Embedded Waterâ€Soluble Agents. Advanced Materials, 2013, 25, 6405-6409.	21.0	38
60	Covalent Layer-by-Layer Assembly Using Reactive Polymers. , 2013, , 371-406.		10
61	Fabrication of Oligonucleotide and Protein Arrays on Rigid and Flexible Substrates Coated with Reactive Polymer Multilayers. ACS Applied Materials & Interfaces, 2013, 5, 351-359.	8.0	21
62	Liquid Crystal Chemical Sensors That Cells Can Wear. Angewandte Chemie - International Edition, 2013, 52, 14011-14015.	13.8	75
63	Surfaceâ€Mediated Release of a Smallâ€Molecule Modulator of Bacterial Biofilm Formation: A Nonâ€Bactericidal Approach to Inhibiting Biofilm Formation in Pseudomonas aeruginosa. Advanced Healthcare Materials, 2013, 2, 993-1000.	7.6	25
64	In situ Synthesis of Oligonucleotide Arrays on Surfaces Coated with Crosslinked Polymer Multilayers. Chemistry of Materials, 2012, 24, 938-945.	6.7	12
65	Reactive Polymer Multilayers Fabricated by Covalent Layer-by-Layer Assembly: 1,4-Conjugate Addition-Based Approaches to the Design of Functional Biointerfaces. Biomacromolecules, 2012, 13, 1523-1532.	5.4	57
66	Azlactone-functionalized polymers as reactive platforms for the design of advanced materials: Progress in the last ten years. Polymer Chemistry, 2012, 3, 66-80.	3.9	103
67	Chemical Patterning and Physical Refinement of Reactive Superhydrophobic Surfaces. Advanced Materials, 2012, 24, 4291-4295.	21.0	73
68	Surface-mediated release of a synthetic small-molecule modulator of bacterial quorum sensing: Gradual release enhances activity. Chemical Communications, 2011, 47, 370-372.	4.1	29
69	Fabrication and Selective Functionalization of Amine-Reactive Polymer Multilayers on Topographically Patterned Microwell Cell Culture Arrays. Biomacromolecules, 2011, 12, 1998-2007.	5.4	46
70	Fabrication of covalently crosslinked and amine-reactive microcapsules by reactive layer-by-layer assembly of azlactone-containing polymer multilayers on sacrificial microparticle templates. Journal of Materials Chemistry, 2011, 21, 1736-1745.	6.7	34
71	Layerâ€byâ€Layer Fabrication of Covalently Crosslinked and Reactive Polymer Multilayers Using Azlactoneâ€Functionalized Copolymers: A Platform for the Design of Functional Biointerfaces. Advanced Engineering Materials, 2011, 13, B343-B352.	3.5	15
72	Release of DNA from polyelectrolyte multilayers fabricated using â€˜charge-shiftingâ€™ cationic polymers: Tunable temporal control and sequential, multi-agent release. Journal of Controlled Release, 2010, 148, 91-100.	9.9	39

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73	Reactive Layerâ€byâ€Layer Assembly of Suspended Thin Films and Semipermeable Membranes at Interfaces Created Between Aqueous and Organic Phases. Advanced Materials, 2010, 22, 994-998.	21.0	25
74	Immobilization of Polymer-Decorated Liquid Crystal Droplets on Chemically Tailored Surfaces. Langmuir, 2010, 26, 10234-10242.	3.5	70
75	Superhydrophobic Thin Films Fabricated by Reactive Layer-by-Layer Assembly of Azlactone-Functionalized Polymers. Chemistry of Materials, 2010, 22, 6319-6327.	6.7	99
76	Functionalization of Fibers Using Azlactone-Containing Polymers: Layer-by-Layer Fabrication of Reactive Thin Films on the Surfaces of Hair and Cellulose-Based Materials. ACS Applied Materials & Interfaces, 2010, 2, 1421-1429.	8.0	45
77	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.	2.7	18
78	Chemical Modification of Reactive Multilayered Films Fabricated from Poly(2-alkenyl azlactone)s: Design of Surfaces that Prevent or Promote Mammalian Cell Adhesion and Bacterial Biofilm Growth. Biomacromolecules, 2009, 10, 1564-1574.	5.4	75
79	Layers of opportunity: nanostructured polymer assemblies for the delivery of macromolecular therapeutics. Soft Matter, 2006, 2, 269.	2.7	77
80	Controlling interlayer diffusion to achieve sustained, multiagent delivery from layer-by-layer thin films. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10207-10212.	7.1	260
81	Erosion of multilayered films fabricated from degradable polyamines: Characterization and evidence in support of a mechanism that involves polymer hydrolysis. Journal of Polymer Science Part A, 2006, 44, 5161-5173.	2.3	29
82	Sustained Release of a Synthetic Autoinducing Peptide Mimetic Blocks Bacterial Communication and Virulence In Vivo. Angewandte Chemie, 0, , .	2.0	0