Louis A Madsen

List of Publications by Year
in descending order

70	2,347	172457	223800
papers	citations	29 h-index	46 g-index

71	71	71	3000
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ionic interactions control the modulus and mechanical properties of molecular ionic composite electrolytes. Journal of Materials Chemistry C, 2022, 10, 947-957.	5.5	9
2	Room Temperature to 150 Â°C Lithium Metal Batteries Enabled by a Rigid Molecular Ionic Composite Electrolyte. Advanced Energy Materials, 2021, 11, 2003559.	19.5	35
3	Solid-state rigid-rod polymer composite electrolytes with nanocrystalline lithium ion pathways. Nature Materials, 2021, 20, 1255-1263.	27.5	110
4	Solvent-Cast Solid Electrolyte Membranes Based on a Charged Rigid-Rod Polymer and Ionic Liquids. ACS Applied Energy Materials, 2021, 4, 6599-6605.	5.1	7
5	Christine Elizabeth Kaestle: January 28, 1972 to July 16, 2020. Journal of Sex Research, 2021, 58, 914-914.	2.5	0
6	Strong Variation of Micelleâ€“Unimer Coexistence as a Function of Core Chain Mobility. Macromolecules, 2021, 54, 6975-6981.	4.8	2
7	Photocatalyst-independent photoredox ring-opening polymerization of O-carboxyanhydrides: stereocontrol and mechanism. Chemical Science, 2021, 12, 3702-3712.	7.4	5
8	Local Water Transport in Rubbery versus Glassy Separation Membranes and Analogous Solutions. Macromolecules, 2021, 54, 11187-11197.	4.8	6
9	Prolonged Association between Water Molecules under Hydrophobic Nanoconfinement. Journal of Physical Chemistry B, 2021, 125, 13767-13777.	2.6	3
10	Exploring ideality and reality in an archetypal rodlike nematic liquid crystal. Liquid Crystals, 2020, 47, 2027-2042.	2.2	1
11	Quantifying Drug Cargo Partitioning in Block Copolymer Micelle Solutions. ACS Applied Polymer Materials, 2020, 2, 3749-3755.	4.4	8
12	Irreversible Shear-Activated Gelation of a Liquid Crystalline Polyelectrolyte. ACS Macro Letters, 2020, 9, 957-963.	4.8	6
13	Strong graphene oxide nanocomposites from aqueous hybrid liquid crystals. Nature Communications, 2020, 11, 830.	12.8	30
14	Ion Transport and Mechanical Properties of Non-Crystallizable Molecular Ionic Composite Electrolytes. Macromolecules, 2020, 53, 1405-1414.	4.8	22
15	Relating Geometric Nanoconfinement and Local Molecular Environment to Diffusion in Ionic Polymer Membranes. Macromolecules, 2020, 53, 3296-3305.	4.8	16
16	Room Temperature to 150 Â°C Lithium Metal Batteries Enabled By a â€œMolecular Ionic Compositeâ€•Solid Electrolyte. ECS Meeting Abstracts, 2020, MA2020-02, 964-964.	0.0	0
17	Confined Interlayer Water Promotes Structural Stability for High-Rate Electrochemical Proton Intercalation in Tungsten Oxide Hydrates. ACS Energy Letters, 2019, 4, 2805-2812.	17.4	88
18	Nanofibrillar Ionic Polymer Composites Enable High-Modulus Ion-Conducting Membranes. ACS Applied Materials & Interfaces, 2019, 11, 40551-40563.	8.0	18

#	Article	IF	Citations
19	Double helical conformation and extreme rigidity in a rodlike polyelectrolyte. Nature Communications, 2019, 10, 801.	12.8	36
20	Multiscale Tortuous Diffusion in Anion and Cation Exchange Membranes. Macromolecules, 2019, 52, 24-35.	4.8	34
21	Detection of the Order-to-Disorder Transition in Block Copolymer Electrolytes Using Quadrupolar 7Li NMR Splitting. ACS Macro Letters, 2019, 8, 107-112.	4.8	1
22	Polymerized ionic liquids: Effects of counterâ€anions on ion conduction and polymerization kinetics. Journal of Polymer Science Part A, 2018, 56, 1346-1357.	2.3	20
23	Anisotropic Ion Diffusion and Electrochemically Driven Transport in Nanostructured Block Copolymer Electrolytes. Journal of Physical Chemistry B, 2018, 122, 1537-1544.	2.6	39
24	Anisotropic viscoelasticity and molecular diffusion in nematic wormlike micelles. Liquid Crystals, 2018, 45, 844-856.	2.2	5
25	Influence of Rubbery versus Glassy Backbone Dynamics on Multiscale Transport in Polymer Membranes. Macromolecules, 2018, 51, 9222-9233.	4.8	22
26	Mapping Coexistence Phase Diagrams of Block Copolymer Micelles and Free Unimer Chains. Macromolecules, 2018, 51, 8127-8135.	4.8	11
27	Conformational Dynamics in an Organic Ionic Plastic Crystal. Journal of Physical Chemistry B, 2017, 121, 5439-5446.	2.6	38
28	Tuning Biocompatible Block Copolymer Micelles by Varying Solvent Composition: Dynamics and Populations of Micelles and Unimers. Macromolecules, 2017, 50, 4335-4343.	4.8	14
29	Tuning Biocompatible Block Copolymer Micelles by Varying Solvent Composition: Core/Corona Structure and Solvent Uptake. Macromolecules, 2017, 50, 4322-4334.	4.8	18
30	Molecular Structure and Dynamics of Ionic Liquids in a Rigid-Rod Polyanion-Based Ion Gel. Langmuir, 2017, 33, 322-331.	3.5	19
31	Bottom-Up Fabrication of Nanostructured Bicontinuous and Hexagonal Ion-Conducting Polymer Membranes. Macromolecules, 2017, 50, 5392-5401.	4.8	12
32	Highly Conductive and Thermally Stable Ion Gels with Tunable Anisotropy and Modulus. Advanced Materials, 2016, 28, 2571-2578.	21.0	70
33	A New Interleukin-13 Amino-Coated Gadolinium Metallofullerene Nanoparticle for Targeted MRI Detection of Glioblastoma Tumor Cells. Journal of the American Chemical Society, 2015, 137, 7881-7888.	13.7	76
34	Sulfonimide-Containing Triblock Copolymers for Improved Conductivity and Mechanical Performance. Macromolecules, 2015, 48, 4520-4528.	4.8	103
35	Water and sodium transport and liquid crystalline alignment in a sulfonated aramid membrane. Journal of Membrane Science, 2015, 489, 194-203.	8.2	29
36	Multiscale Lithium and Counterion Transport in an Electrospun Polymer-Gel Electrolyte. Macromolecules, 2015, 48, 4481-4490.	4.8	31

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37	A theranostic polycation containing trehalose and lanthanide chelate domains for siRNA delivery and monitoring. RSC Advances, 2015, 5, 74102-74106.	3.6	6
38	Diffusion of Drug Delivery Nanoparticles into Biogels Using Time-Resolved MicroMRI. Journal of Physical Chemistry Letters, 2014, 5, 3825-3830.	4.6	17
39	Anisotropic MRI Contrast Reveals Enhanced Ionic Transport in Plastic Crystals. Journal of the American Chemical Society, 2014, 136, 15638-15645.	13.7	31
40	Insights into the reversible oxygen reduction reaction in a series of phosphonium-based ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 25062-25070.	2.8	27
41	Cation and Anion Transport in a Dicationic Imidazolium-Based Plastic Crystal Ion Conductor. Journal of Physical Chemistry B, 2014, 118, 140218100421006.	2.6	26
42	Molecular Alignment and Ion Transport in Rigid Rod Polyelectrolyte Solutions. Macromolecules, 2014, 47, 2984-2992.	4.8	30
43	Gd₃N@C₈₄(OH)_x: A New Egg-Shaped Metallofullerene Magnetic Resonance Imaging Contrast Agent. Journal of the American Chemical Society, 2014, 136, 2630-2636.	13.7	67
44	Humidity-Modulated Phase Control and Nanoscopic Transport in Supramolecular Assemblies. Journal of Physical Chemistry B, 2014, 118, 3207-3217.	2.6	28
45	Observation of separate cation and anion electrophoretic mobilities in pure ionic liquids. Journal of Chemical Physics, 2014, 140, 084204.	3.0	62
46	The biaxial nematic phase of oxadiazole biphenol mesogens. Liquid Crystals, 2013, 40, 1655-1677.	2.2	36
47	Sulfonated Poly(arylene sulfide sulfone nitrile) Multiblock Copolymers with Ordered Morphology for Proton Exchange Membranes. Macromolecules, 2013, 46, 7797-7804.	4.8	75
48	Quantitation of Complexed versus Free Polymers in Interpolyelectrolyte Polyplex Formulations. ACS Macro Letters, 2013, 2, 1038-1041.	4.8	15
49	Correlating morphology, proton conductivity, and water transport in polyelectrolyte-fluoropolymer blend membranes. Journal of Membrane Science, 2013, 448, 292-299.	8.2	43
50	Unraveling the local energetics of transport in a polymer ion conductor. Chemical Communications, 2013, 49, 4283.	4.1	28
51	Hydroxyalkyl-Containing Imidazolium Homopolymers: Correlation of Structure with Conductivity. Macromolecules, 2013, 46, 3037-3045.	4.8	52
52	New insights for accurate chemically specific measurements of slow diffusing molecules. Journal of Chemical Physics, 2013, 138, 054201.	3.0	8
53	Switchable bistable ordering and real-time alignment dynamics in wormlike micelles. Soft Matter, 2012, 8, 57-60.	2.7	6
54	Probing Alignment and Phase Behavior in Intact Wood Cell Walls Using2H NMR Spectroscopy. Biomacromolecules, 2012, 13, 1043-1050.	5.4	8

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55	Uniaxial to biaxial nematic phase transition in a bent-core thermotropic liquid crystal by polarising microscopy. Liquid Crystals, 2012, 39, 19-23.	2.2	60
56	Cation/Anion Associations in Ionic Liquids Modulated by Hydration and Ionic Medium. Journal of Physical Chemistry B, 2011, 115, 4576-4582.	2.6	89
57	Oriented Morphology and Anisotropic Transport in Uniaxially Stretched Perfluorosulfonate Ionomer Membranes. Macromolecules, 2011, 44, 5701-5710.	4.8	82
58	Disulfonated Poly(arylene ether sulfone) Random Copolymer Blends Tuned for Rapid Water Permeation via Cation Complexation with Poly(ethylene glycol) Oligomers. Chemistry of Materials, 2011, 23, 1039-1049.	6.7	39
59	Linear coupling of alignment with transport in a polymer electrolyte membrane. Nature Materials, 2011, 10, 507-511.	27.5	144
60	Understanding Anisotropy, Transport, and Ion Associations Inside Ionic Polymers. ACS Symposium Series, 2011, , 251-263.	0.5	1
61	Ion transport and storage of ionic liquids in ionic polymer conductor network composites. Applied Physics Letters, 2010, 96, .	3.3	66
62	Anisotropy and Transport in Poly(arylene ether sulfone) Hydrophilicâ'Hydrophobic Block Copolymers. Macromolecules, 2010, 43, 347-353.	4.8	64
63	The role of water in transport of ionic liquids in polymeric artificial muscle actuators. Soft Matter, 2009, , .	2.7	6
64	Anisotropic Diffusion and Morphology in Perfluorosulfonate Ionomers Investigated by NMR. Macromolecules, 2009, 42, 255-262.	4.8	77
65	Polymer beacons for luminescence and magnetic resonance imaging of DNA delivery. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16913-16918.	7.1	90
66	Rheo-NMR of Wormlike Micelles Formed from Nonionic Pluronic Surfactants. Macromolecules, 2008, 41, 804-814.	4.8	20
67	Hydrophilic Channel Alignment Modes in Perfluorosulfonate Ionomers: Implications for Proton Transport. Macromolecules, 2008, 41, 4555-4557.	4.8	33
68	Plasticization of Poly(ethylene oxide) in Fluid CO2Measured by in-Situ NMR. Macromolecules, 2006, 39, 1483-1487.	4.8	20
69	Addressing nonâ€idealities in NMR experiments on rotating liquid crystals. Liquid Crystals, 2005, 32, 1419-1425.	2.2	14
70	Force-detected magnetic resonance without field gradients. Solid State Nuclear Magnetic Resonance, 1998, 11, 73-86.	2.3	33