Lynden A Archer

List of Publications by Year
in descending order

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256 papers	35,873 citations	4136 87 h-index	3260 185 g-index
269 all docs	269 docs citations	269 times ranked	25142 citing authors

#	Article	IF	Citations
1	Hollow Microâ€Nanostructures: Synthesis and Applications. Advanced Materials, 2008, 20, 3987-4019.	11.1	2,820
2	Porous Hollow Carbon@Sulfur Composites for Highâ€Power Lithiumâ€“Sulfur Batteries. Angewandte Chemie - International Edition, 2011, 50, 5904-5908.	7.2	1,587
3	Stable lithium electrodeposition in liquid and nanoporous solid electrolytes. Nature Materials, 2014, 13, 961-969.	13.3	1,382
4	Design principles for electrolytes and interfaces for stable lithium-metal batteries. Nature Energy, 2016, 1, .	19.8	1,339
5	Constructing Hierarchical Spheres from Large Ultrathin Anatase TiO₂ Nanosheets with Nearly 100% Exposed (001) Facets for Fast Reversible Lithium Storage. Journal of the American Chemical Society, 2010, 132, 6124-6130.	6.6	1,215
6	Designing solid-state electrolytes for safe, energy-dense batteries. Nature Reviews Materials, 2020, 5, 229-252.	23.3	1,167
7	Reversible epitaxial electrodeposition of metals in battery anodes. Science, 2019, 366, 645-648.	6.0	1,097
8	Designed Synthesis of Coaxial SnO₂@carbon Hollow Nanospheres for Highly Reversible Lithium Storage. Advanced Materials, 2009, 21, 2536-2539.	11.1	1,013
9	Suppression of Lithium Dendrite Growth Using Cross-Linked Polyethylene/Poly(ethylene oxide) Electrolytes: A New Approach for Practical Lithium-Metal Polymer Batteries. Journal of the American Chemical Society, 2014, 136, 7395-7402.	6.6	746
10	Solid-state polymer electrolytes with in-built fast interfacial transport for secondary lithium batteries. Nature Energy, 2019, 4, 365-373.	19.8	681
11	Cryo-STEM mapping of solidâ€“liquid interfaces and dendrites in lithium-metal batteries. Nature, 2018, 560, 345-349.	13.7	586
12	Metalâ€“Sulfur Battery Cathodes Based on PANâ€“Sulfur Composites. Journal of the American Chemical Society, 2015, 137, 12143-12152.	6.6	488
13	A stable room-temperature sodiumâ€“sulfur battery. Nature Communications, 2016, 7, 11722.	5.8	459
14	One-Pot Synthesis of Carbon-Coated SnO₂ Nanocolloids with Improved Reversible Lithium Storage Properties. Chemistry of Materials, 2009, 21, 2868-2874.	3.2	421
15	Fast ion transport at solidâ€“solid interfaces in hybrid battery anodes. Nature Energy, 2018, 3, 310-316.	19.8	413
16	Preparation of SnO₂/Carbon Composite Hollow Spheres and Their Lithium Storage Properties. Chemistry of Materials, 2008, 20, 6562-6566.	3.2	410
17	Poly(ethylene oxide)/Silica Nanocomposites:Â Structure and Rheology. Langmuir, 2002, 18, 10435-10442.	1.6	407
18	Formation of SnO₂ Hollow Nanospheres inside Mesoporous Silica Nanoreactors. Journal of the American Chemical Society, 2011, 133, 21-23.	6.6	391

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19	A highly reversible room-temperature lithium metal battery based on crosslinked hairy nanoparticles. Nature Communications, 2015, 6, 10101.	5.8	386
20	Langmuirâ€“Blodgett artificial solid-electrolyte interphases for practical lithium metal batteries. Nature Energy, 2018, 3, 889-898.	19.8	347
21	Lithiumâ€“Sulfur Battery Cathode Enabled by Lithiumâ€“Nitrile Interaction. Journal of the American Chemical Society, 2013, 135, 763-767.	6.6	329
22	SnO2 hollow structures and TiO2 nanosheets for lithium-ion batteries. Journal of Materials Chemistry, 2011, 21, 9912.	6.7	327
23	Nanomaterials: Science and applications in the lithiumâ€“sulfur battery. Nano Today, 2015, 10, 315-338.	6.2	324
24	A General Route to Nonspherical Anatase TiO₂ Hollow Colloids and Magnetic Multifunctional Particles. Advanced Materials, 2008, 20, 1853-1858.	11.1	315
25	Stable Cycling of Lithium Metal Batteries Using High Transference Number Electrolytes. Advanced Energy Materials, 2015, 5, 1402073.	10.2	314
26	Thermal formation of mesoporous single-crystal Co3O4 nano-needles and their lithium storage properties. Journal of Materials Chemistry, 2008, 18, 4397.	6.7	312
27	Regulating electrodeposition morphology of lithium: towards commercially relevant secondary Li metal batteries. Chemical Society Reviews, 2020, 49, 2701-2750.	18.7	310
28	Designing solid-liquid interphases for sodium batteries. Nature Communications, 2017, 8, 898.	5.8	303
29	Ionicâ€Liquidâ€“Nanoparticle Hybrid Electrolytes: Applications in Lithium Metal Batteries. Angewandte Chemie - International Edition, 2014, 53, 488-492.	7.2	295
30	Enhanced Liâ€“S Batteries Using Amine-Functionalized Carbon Nanotubes in the Cathode. ACS Nano, 2016, 10, 1050-1059.	7.3	289
31	Shell-by-Shell Synthesis of Tin Oxide Hollow Colloids with Nanoarchitectured Walls: Cavity Size Tuning and Functionalization. Small, 2007, 3, 261-265.	5.2	286
32	Lithium Fluoride Additives for Stable Cycling of Lithium Batteries at High Current Densities. Advanced Electronic Materials, 2016, 2, 1500246.	2.6	284
33	Ionic Liquidâ€Nanoparticle Hybrid Electrolytes and their Application in Secondary Lithiumâ€Metal Batteries. Advanced Materials, 2012, 24, 4430-4435.	11.1	278
34	The Liâ€“CO2 battery: a novel method for CO2 capture and utilization. RSC Advances, 2013, 3, 6656.	1.7	269
35	Regulating Li deposition at artificial solid electrolyte interphases. Journal of Materials Chemistry A, 2017, 5, 3483-3492.	5.2	258
36	25th Anniversary Article: Polymerâ€“Particle Composites: Phase Stability and Applications in Electrochemical Energy Storage. Advanced Materials, 2014, 26, 201-234.	11.1	244

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37	Nanoscale Ionic Materials. Advanced Materials, 2008, 20, 4353-4358.	11.1	235
38	Stabilizing metal battery anodes through the design of solid electrolyte interphases. Joule, 2021, 5, 1119-1142.	11.7	233
39	Stabilizing electrodeposition in elastic solid electrolytes containing immobilized anions. Science Advances, 2016, 2, e1600320.	4.7	228
40	Nanoporous Polymerâ€Ceramic Composite Electrolytes for Lithium Metal Batteries. Advanced Energy Materials, 2014, 4, 1300654.	10.2	222
41	Highly Stable Sodium Batteries Enabled by Functional Ionic Polymer Membranes. Advanced Materials, 2017, 29, 1605512.	11.1	214
42	Controlling electrochemical growth of metallic zinc electrodes: Toward affordable rechargeable energy storage systems. Science Advances, 2021, 7, .	4.7	209
43	A Liquid Derivative of 12-Tungstophosphoric Acid with Unusually High Conductivity. Journal of the American Chemical Society, 2004, 126, 15358-15359.	6.6	207
44	One-pot formation of SnO2 hollow nanospheres and Î±-Fe2O3@SnO2 nanorattles with large void space and their lithium storage properties. Nanoscale, 2009, 1, 280.	2.8	204
45	Designing Artificial Solid-Electrolyte Interphases for Single-Ion and High-Efficiency Transport in Batteries. Joule, 2017, 1, 394-406.	11.7	202
46	Stable Artificial Solid Electrolyte Interphases for Lithium Batteries. Chemistry of Materials, 2017, 29, 4181-4189.	3.2	199
47	Stability Analysis of Electrodeposition across a Structured Electrolyte with Immobilized Anions. Journal of the Electrochemical Society, 2014, 161, A847-A855.	1.3	198
48	Nanostructured Electrolytes for Stable Lithium Electrodeposition in Secondary Batteries. Accounts of Chemical Research, 2015, 48, 2947-2956.	7.6	195
49	A novel non-aqueous aluminum sulfur battery. Journal of Power Sources, 2015, 283, 416-422.	4.0	189
50	Solid electrolyte interphases for high-energy aqueous aluminum electrochemical cells. Science Advances, 2018, 4, eaau8131.	4.7	186
51	High Lithium Transference Number Electrolytes via Creation of 3-Dimensional, Charged, Nanoporous Networks from Dense Functionalized Nanoparticle Composites. Chemistry of Materials, 2013, 25, 834-839.	3.2	180
52	Building Organic/Inorganic Hybrid Interphases for Fast Interfacial Transport in Rechargeable Metal Batteries. Angewandte Chemie - International Edition, 2018, 57, 992-996.	7.2	178
53	Regulating electrodeposition morphology in high-capacity aluminium and zinc battery anodes using interfacial metalâ€“substrate bonding. Nature Energy, 2021, 6, 398-406.	19.8	169
54	Sodiumâ€“oxygen batteries: a new class of metalâ€“air batteries. Journal of Materials Chemistry A, 2014, 2, 12623.	5.2	160

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55	Nucleation and Early Stage Growth of Li Electrodeposits. Nano Letters, 2019, 19, 8191-8200.	4.5	159
56	Design Principles of Functional Polymer Separators for Highâ€Energy, Metalâ€Based Batteries. Small, 2018, 14, e1703001.	5.2	155
57	Phase stability and dynamics of entangled polymerâ€“nanoparticle composites. Nature Communications, 2015, 6, 7198.	5.8	154
58	Nanoscale Organic Hybrid Electrolytes. Advanced Materials, 2010, 22, 3677-3680.	11.1	153
59	Electroless Formation of Hybrid Lithium Anodes for Fast Interfacial Ion Transport. Angewandte Chemie - International Edition, 2017, 56, 13070-13077.	7.2	151
60	Electrochemical Interphases for High-Energy Storage Using Reactive Metal Anodes. Accounts of Chemical Research, 2018, 51, 80-88.	7.6	145
61	Electrolytic vascular systems for energy-dense robots. Nature, 2019, 571, 51-57.	13.7	143
62	Spontaneous and field-induced crystallographic reorientation of metal electrodeposits at battery anodes. Science Advances, 2020, 6, eabb1122.	4.7	143
63	Rechargeable Lithium Metal Batteries with an Inâ€Built Solidâ€State Polymer Electrolyte and a High Voltage/Loading Niâ€Rich Layered Cathode. Advanced Materials, 2020, 32, e1905629.	11.1	140
64	Nucleation and Growth of Lithium Peroxide in the Liâ€“O₂ Battery. Nano Letters, 2015, 15, 5995-6002.	4.5	139
65	In situ synthesis of lithium sulfideâ€“carbon composites as cathode materials for rechargeable lithium batteries. Journal of Materials Chemistry A, 2013, 1, 1433-1440.	5.2	138
66	Solid-state polymer electrolytes for high-performance lithium metal batteries. Nature Communications, 2019, 10, 4398.	5.8	137
67	Ionic liquid-nanoparticle hybrid electrolytes. Journal of Materials Chemistry, 2012, 22, 4066.	6.7	131
68	High-Capacity and Ultrafast Na-Ion Storage of a Self-Supported 3D Porous Antimony Persulfideâ€“Graphene Foam Architecture. Nano Letters, 2017, 17, 3668-3674.	4.5	129
69	Tethered Nanoparticleâ€“Polymer Composites: Phase Stability and Curvature. Langmuir, 2012, 28, 6276-6281.	1.6	128
70	The Ages in a Self-Suspended Nanoparticle Liquid. Nano Letters, 2010, 10, 111-115.	4.5	126
71	An in situ method of creating metal oxideâ€“carbon composites and their application as anode materials for lithium-ion batteries. Journal of Materials Chemistry, 2011, 21, 11092.	6.7	126
72	Self-assembled MoS2â€“carbon nanostructures: influence of nanostructuring and carbon on lithium battery performance. Journal of Materials Chemistry, 2012, 22, 12988.	6.7	124

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73	Semiconducting Metalâ€“Organic Polymer Nanosheets for a Photoinvolved Liâ€“O₂ Battery under Visible Light. Journal of the American Chemical Society, 2021, 143, 1941-1947.	6.6	124
74	Nanoporous Hybrid Electrolytes for Highâ€Energy Batteries Based on Reactive Metal Anodes. Advanced Energy Materials, 2017, 7, 1602367.	10.2	122
75	Proton Intercalation/Deâ€Intercalation Dynamics in Vanadium Oxides for Aqueous Aluminum Electrochemical Cells. Angewandte Chemie - International Edition, 2020, 59, 3048-3052.	7.2	122
76	Hybrid cathode architectures for lithium batteries based on TiS₂ and sulfur. Journal of Materials Chemistry A, 2015, 3, 19857-19866.	5.2	119
77	Ionic Liquid-Tethered Nanoparticle Suspensions: A Novel Class of Ionogels. Chemistry of Materials, 2012, 24, 1386-1392.	3.2	106
78	Carbon dioxide assist for non-aqueous sodiumâ€“oxygen batteries. Electrochemistry Communications, 2013, 27, 59-62.	2.3	106
79	Stable lithium electrodeposition in salt-reinforced electrolytes. Journal of Power Sources, 2015, 279, 413-418.	4.0	106
80	The O ₂ -assisted Al/CO ₂ electrochemical cell: A system for CO ₂ capture/conversion and electric power generation. Science Advances, 2016, 2, e1600968.	4.7	104
81	Nanoscale Organicâ^'Inorganic Hybrid Lubricants. Langmuir, 2011, 27, 3083-3094.	1.6	102
82	Composite lithium battery anodes based on carbon@Co3O4 nanostructures: Synthesis and characterization. Journal of Power Sources, 2012, 200, 53-58.	4.0	101
83	Layered Organosilicate Nanoparticles with Liquidlike Behavior. Small, 2004, 1, 80-82.	5.2	100
84	Stabilizing polymer electrolytes in high-voltage lithium batteries. Nature Communications, 2019, 10, 3091.	5.8	98
85	Second life and recycling: Energy and environmental sustainability perspectives for high-performance lithium-ion batteries. Science Advances, 2021, 7, eabi7633.	4.7	94
86	A rechargeable Naâ€“CO₂/O₂battery enabled by stable nanoparticle hybrid electrolytes. Journal of Materials Chemistry A, 2014, 2, 17723-17729.	5.2	92
87	An Unusual Example of Hyperbranched Metal Nanocrystals and Their Shape Evolution. Chemistry of Materials, 2006, 18, 3921-3923.	3.2	88
88	Electrolytes for high-energy lithium batteries. Applied Nanoscience (Switzerland), 2012, 2, 91-109.	1.6	84
89	Designer interphases for the lithium-oxygen electrochemical cell. Science Advances, 2017, 3, e1602809.	4.7	84
90	Enabling reversible redox reactions in electrochemical cells using protected LiAl intermetallics as lithium metal anodes. Science Advances, 2019, 5, eaax5587.	4.7	84

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91	Relaxation Dynamics of Nanoparticle-Tethered Polymer Chains. Macromolecules, 2015, 48, 6280-6293.	2.2	82
92	Highly Conductive, Sulfonated, UV-Cross-Linked Separators for Liâ€“S Batteries. Chemistry of Materials, 2016, 28, 5147-5154.	3.2	82
93	Designing electrolytes with polymerlike glass-forming properties and fast ion transport at low temperatures. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 26053-26060.	3.3	82
94	Stabilizing electrochemical interfaces in viscoelastic liquid electrolytes. Science Advances, 2018, 4, eaao6243.	4.7	81
95	Dynamic interphaseâ€“mediated assembly for deep cycling metal batteries. Science Advances, 2021, 7, eabl3752.	4.7	81
96	Physical Orphaning versus Chemical Instability: Is Dendritic Electrodeposition of Li Fatal?. ACS Energy Letters, 2019, 4, 1349-1355.	8.8	80
97	Nanoporous hybrid electrolytes. Journal of Materials Chemistry, 2011, 21, 10094.	6.7	78
98	Polymer nanocomposites: polymer and particle dynamics. Soft Matter, 2012, 8, 10813.	1.2	77
99	The synthesis and properties of nanoscale ionic materials. Applied Organometallic Chemistry, 2010, 24, 581-589.	1.7	76
100	Optical Polarimetry and Mechanical Rheometry of Poly(ethylene oxide)â^'Silica Dispersions. Macromolecules, 2004, 37, 1928-1936.	2.2	74
101	Structureâ€“property study of cross-linked hydrocarbon/poly(ethylene oxide) electrolytes with superior conductivity and dendrite resistance. Chemical Science, 2016, 7, 6832-6838.	3.7	71
102	Solid-state polymer electrolytes stabilized by task-specific salt additives. Journal of Materials Chemistry A, 2019, 7, 7823-7830.	5.2	70
103	On the crystallography and reversibility of lithium electrodeposits at ultrahigh capacity. Nature Communications, 2021, 12, 6034.	5.8	70
104	Hybrid Hairy Nanoparticle Electrolytes Stabilizing Lithium Metal Batteries. Chemistry of Materials, 2016, 28, 2147-2157.	3.2	69
105	Tethered Molecular Sorbents: Enabling Metalâ€Sulfur Battery Cathodes. Advanced Energy Materials, 2014, 4, 1400390.	10.2	67
106	Size-Dependent Particle Dynamics in Entangled Polymer Nanocomposites. Langmuir, 2016, 32, 596-603.	1.6	65
107	Interfacial Slip Violations in Polymer Solutions:Â Role of Microscale Surface Roughness. Langmuir, 2003, 19, 3304-3312.	1.6	62
108	Textured Electrodes: Manipulating Builtâ€in Crystallographic Heterogeneity of Metal Electrodes via Severe Plastic Deformation. Advanced Materials, 2022, 34, e2106867.	11.1	62

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109	Boundary Lubrication and Surface Mobility of Mixed Alkylsilane Self-Assembled Monolayers. Journal of Physical Chemistry B, 2003, 107, 13123-13132.	1.2	61
110	A highly conductive, non-flammable polymerâ€“nanoparticle hybrid electrolyte. RSC Advances, 2015, 5, 20800-20809.	1.7	61
111	Functionalizing Polymer Surfaces by Field-Induced Migration of Copolymer Additives. 1. Role of Surface Energy Gradients. Macromolecules, 2001, 34, 4572-4579.	2.2	60
112	Step Shear Dynamics of Entangled Polymer Liquids. Macromolecules, 2002, 35, 5194-5202.	2.2	60
113	Interfacial Friction of Surfaces Grafted with One- and Two-Component Self-Assembled Monolayers. Langmuir, 2005, 21, 5405-5413.	1.6	60
114	Structure and rheology of nanoparticleâ€“polymer suspensions. Soft Matter, 2012, 8, 4097.	1.2	60
115	Multifunctional Separator Coatings for Highâ€Performance Lithiumâ€“Sulfur Batteries. Advanced Materials Interfaces, 2016, 3, 1600450.	1.9	59
116	Soft Colloidal Glasses as Solid-State Electrolytes. Chemistry of Materials, 2018, 30, 5996-6004.	3.2	59
117	Stabilizing Zinc Electrodeposition in a Battery Anode by Controlling Crystal Growth. Small, 2021, 17, e2101798.	5.2	58
118	Flow field visualization of entangled polybutadiene solutions under nonlinear viscoelastic flow conditions. Journal of Rheology, 2013, 57, 1411-1428.	1.3	57
119	Crowded, Confined, and Frustrated: Dynamics of Molecules Tethered to Nanoparticles. Physical Review Letters, 2012, 109, 258301.	2.9	55
120	Building Organic/Inorganic Hybrid Interphases for Fast Interfacial Transport in Rechargeable Metal Batteries. Angewandte Chemie, 2018, 130, 1004-1008.	1.6	55
121	High energy lithiumâ€“oxygen batteries â€“ transport barriers and thermodynamics. Energy and Environmental Science, 2012, 5, 8927.	15.6	54
122	Interphases in Lithiumâ€“Sulfur Batteries: Toward Deployable Devices with Competitive Energy Density and Stability. ACS Energy Letters, 2018, 3, 2104-2113.	8.8	54
123	Interfacial Friction and Adhesion of Polymer Brushes. Langmuir, 2011, 27, 9387-9395.	1.6	51
124	Aerosol assisted synthesis of hierarchical tinâ€“carbon composites and their application as lithium battery anode materials. Journal of Materials Chemistry A, 2013, 1, 8710.	5.2	51
125	Linear and Nonlinear Viscoelasticity of Entangled Multiarm (Pom-Pom) Polymer Liquids. Macromolecules, 2004, 37, 1076-1088.	2.2	49
126	Entropic Attraction of Polymers toward Surfaces and Its Relationship to Surface Tension. Macromolecules, 2006, 39, 7718-7728.	2.2	49

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127	Thermal Jamming of a Colloidal Glass. Physical Review Letters, 2011, 107, 268302.	2.9	49
128	Multifunctional Cross-Linked Polymeric Membranes for Safe, High-Performance Lithium Batteries. Chemistry of Materials, 2018, 30, 2058-2066.	3.2	49
129	Stabilizing Protic and Aprotic Liquid Electrolytes at High-Bandgap Oxide Interphases. Chemistry of Materials, 2018, 30, 5655-5662.	3.2	49
130	Confining electrodeposition of metals in structured electrolytes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6620-6625.	3.3	49
131	On the Reversibility and Fragility of Sodium Metal Electrodes. Advanced Energy Materials, 2019, 9, 1901651.	10.2	48
132	Electroconvection in a Viscoelastic Electrolyte. Physical Review Letters, 2019, 122, 124501.	2.9	48
133	Production of fast-charge Zn-based aqueous batteries via interfacial adsorption of ion-oligomer complexes. Nature Communications, 2022, 13, 2283.	5.8	47
134	Linear Rheology of Entangled Six-Arm and Eight-Arm Polybutadienes. Macromolecules, 2001, 34, 6438-6449.	2.2	45
135	Nanocrystal Selfâ€Assembly Assisted by Oriented Attachment. Angewandte Chemie - International Edition, 2011, 50, 578-580.	7.2	44
136	Tube Dynamics in Binary Polymer Blends. Macromolecules, 2005, 38, 3917-3932.	2.2	43
137	Synthesis and Properties of Poly-Ether/Ethylene Carbonate Electrolytes with High Oxidative Stability. Chemistry of Materials, 2019, 31, 8466-8472.	3.2	43
138	Nonlinear rheology of highly entangled polymer solutions in start-up and steady shear flow. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 2275-2289.	2.4	42
139	Surface Tension of Symmetric Star Polymer Melts. Macromolecules, 2008, 41, 5007-5013.	2.2	42
140	A Dendriteâ€Free Lithium Metal Battery Model Based on Nanoporous Polymer/Ceramic Composite Electrolytes and Highâ€Energy Electrodes. Small, 2015, 11, 2631-2635.	5.2	42
141	Dynamics of Nanoparticles in Entangled Polymer Solutions. Langmuir, 2018, 34, 241-249.	1.6	42
142	CO₂ and ambient air in metalâ€“oxygen batteries: steps towards reality. Inorganic Chemistry Frontiers, 2015, 2, 1070-1079.	3.0	41
143	Functionalizing polymer surfaces by surface migration of copolymer additives: role of additive molecular weight. Polymer, 2002, 43, 2721-2728.	1.8	40
144	Stress Relaxation of Branched Polymers. Macromolecules, 2005, 38, 10763-10771.	2.2	40

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145	Self-Suspended Suspensions of Covalently Grafted Hairy Nanoparticles. Langmuir, 2015, 31, 3222-3231.	1.6	40
146	Characterization of Sulfur and Nanostructured Sulfur Battery Cathodes in Electron Microscopy Without Sublimation Artifacts. Microscopy and Microanalysis, 2017, 23, 155-162.	0.2	40
147	Piperidinium tethered nanoparticle-hybrid electrolyte for lithium metal batteries. Journal of Materials Chemistry A, 2014, 2, 11866-11873.	5.2	39
148	Stress Relaxation of End-Linked Polydimethylsiloxane Elastomers with Long Pendent Chains. Macromolecules, 2005, 38, 7174-7180.	2.2	38
149	Upgrading Carbonate Electrolytes for Ultraâ€stable Practical Lithium Metal Batteries. Angewandte Chemie - International Edition, 2022, 61, e202116214.	7.2	38
150	Self-suspended polymer grafted nanoparticles. Current Opinion in Chemical Engineering, 2017, 16, 92-101.	3.8	37
151	Spontaneous sharp bending of DNA: role of melting bubbles. Nucleic Acids Research, 2006, 34, 4554-4560.	6.5	36
152	Hierarchical Structure in Semicrystalline Polymers Tethered to Nanospheres. Macromolecules, 2014, 47, 687-694.	2.2	36
153	Model Membraneâ€Free Liâ€“S Batteries for Enhanced Performance and Cycle Life. Advanced Science, 2015, 2, 1500068.	5.6	36
154	Strain-accelerated dynamics of soft colloidal glasses. Physical Review E, 2011, 83, 041402.	0.8	35
155	Ultrathin zwitterionic polymeric interphases for stable lithium metal anodes. Matter, 2021, 4, 3753-3773.	5.0	35
156	Relaxation Dynamics of Polymer Liquids in Nonlinear Step Shear. Macromolecules, 2002, 35, 10216-10224.	2.2	34
157	Interfacial Friction and Adhesion of Cross-Linked Polymer Thin Films Swollen with Linear Chains. Langmuir, 2007, 23, 7562-7570.	1.6	34
158	Synthesis of organicâ€“inorganic hybrids by miniemulsion polymerization and their application for electrochemical energy storage. Energy and Environmental Science, 2012, 5, 7025.	15.6	34
159	Designing solid-electrolyte interphases for lithium sulfur electrodes using ionic shields. Nano Energy, 2017, 41, 573-582.	8.2	34
160	Linear and nonlinear rheology of bidisperse polymer blends. Journal of Rheology, 2001, 45, 691-708.	1.3	33
161	Stress Relaxation of Star/Linear Polymer Blends. Macromolecules, 2002, 35, 6687-6696.	2.2	33
162	Nonplanar Electrode Architectures for Ultrahigh Areal Capacity Batteries. ACS Energy Letters, 2019, 4, 271-275.	8.8	32

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163	?Fracture? phenomena in shearing flow of viscous liquids. Rheologica Acta, 1997, 36, 579-584.	1.1	31
164	Monte Carlo simulation of structure and nanoscale interactions in polymer nanocomposites. Journal of Chemical Physics, 2004, 121, 10814-10824.	1.2	31
165	Multiscale Dynamics of Polymers in Particle-Rich Nanocomposites. Macromolecules, 2016, 49, 5202-5212.	2.2	31
166	Rheological Behavior of Chain-Straightened Poly(Î±-olefin)s. Macromolecules, 2007, 40, 6807-6813.	2.2	30
167	Structure and Evolution of Quasiâ€Solidâ€State Hybrid Electrolytes Formed Inside Electrochemical Cells. Advanced Materials, 2022, 34, .	11.1	30
168	Stickâ^'Slip Dynamics of Entangled Polymer Liquids. Langmuir, 2002, 18, 2616-2624.	1.6	29
169	Branch-Point Motion in Asymmetric Star Polymers. Macromolecules, 2005, 38, 4484-4494.	2.2	29
170	Interdispersed siliconâ€“carbon nanocomposites and their application as anode materials for lithium-ion batteries. Electrochemistry Communications, 2013, 28, 40-43.	2.3	29
171	Dynamics and Rheology of Soft Colloidal Glasses. ACS Macro Letters, 2015, 4, 119-123.	2.3	29
172	Regulating the growth of aluminum electrodeposits: towards anode-free Al batteries. Journal of Materials Chemistry A, 2020, 8, 23231-23238.	5.2	29
173	Structure factor of blends of solvent-free nanoparticleâ€“organic hybrid materials: density-functional theory and small angle X-ray scattering. Soft Matter, 2014, 10, 9120-9135.	1.2	28
174	Hyperdiffusive Dynamics in Newtonian Nanoparticle Fluids. ACS Macro Letters, 2015, 4, 1149-1153.	2.3	27
175	Molecular Origins of Temperature-Induced Jamming in Self-Suspended Hairy Nanoparticles. Macromolecules, 2016, 49, 8738-8747.	2.2	27
176	Suppression of dendrite growth by cross-flow in microfluidics. Science Advances, 2021, 7, .	4.7	27
177	The early-stage growth and reversibility of Li electrodeposition in Br-rich electrolytes. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	26
178	Interactions, Structure, and Dynamics of Polymer-Tethered Nanoparticle Blends. Langmuir, 2016, 32, 8698-8708.	1.6	25
179	T4 DNA ligase is more than an effective trap of cyclized dsDNA. Nucleic Acids Research, 2007, 35, 5294-5302.	6.5	24
180	Mesoporous silicon@carbon composites via nanoparticle-seeded dispersion polymerization and their application as lithium-ion battery anode materials. Journal of Materials Chemistry A, 2013, 1, 5709.	5.2	24

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181	Structure and Transport Anomalies in Soft Colloids. Physical Review Letters, 2013, 110, 148302.	2.9	24
182	Electroconvection and Morphological Instabilities in Potentiostatic Electrodeposition across Liquid Electrolytes with Polymer Additives. Journal of the Electrochemical Society, 2018, 165, A3697-A3713.	1.3	24
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