Paul Braun

List of Publications by Year
in descending order

214	17,142	18436 62	15218 126
papers	citations	h-index	g-index

229	229	229	22006
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Force-induced activation of covalent bonds in mechanoresponsive polymeric materials. Nature, 2009, 459, 68-72.	13.7	1,446
2	Nanoscale thermal transport. II. 2003â€“2012. Applied Physics Reviews, 2014, 1, 011305.	5.5	1,277
3	Three-dimensional bicontinuous ultrafast-charge and -discharge bulk battery electrodes. Nature Nanotechnology, 2011, 6, 277-281.	15.6	1,006
4	Bioresorbable silicon electronic sensors for the brain. Nature, 2016, 530, 71-76.	13.7	778
5	Selfâ€Healing Polymer Coatings. Advanced Materials, 2009, 21, 645-649.	11.1	673
6	Semiconducting superlattices templated by molecular assemblies. Nature, 1996, 380, 325-328.	13.7	525
7	High-power lithium ion microbatteries from interdigitated three-dimensional bicontinuous nanoporous electrodes. Nature Communications, 2013, 4, 1732.	5.8	513
8	Electrochemically grown photonic crystals. Nature, 1999, 402, 603-604.	13.7	436
9	Fabricating complex three-dimensional nanostructures with high-resolution conformable phase masks. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12428-12433.	3.3	280
10	Embedded cavities and waveguides in three-dimensional silicon photonic crystals. Nature Photonics, 2008, 2, 52-56.	15.6	267
11	Conductivity and lithiophilicity gradients guide lithium deposition to mitigate short circuits. Nature Communications, 2019, 10, 1896.	5.8	256
12	Three-Dimensional Metal Scaffold Supported Bicontinuous Silicon Battery Anodes. Nano Letters, 2012, 12, 2778-2783.	4.5	254
13	Large-area MRI-compatible epidermal electronic interfaces for prosthetic control and cognitive monitoring. Nature Biomedical Engineering, 2019, 3, 194-205.	11.6	253
14	Thermal conductivity of nanoparticle suspensions. Journal of Applied Physics, 2006, 99, 084308.	1.1	251
15	Cavity-enhanced localized plasmon resonance sensing. Applied Physics Letters, 2010, 97, .	1.5	242
16	Force-Induced Redistribution of a Chemical Equilibrium. Journal of the American Chemical Society, 2010, 132, 16107-16111.	6.6	234
17	Glucose-Sensitive Inverse Opal Hydrogels:Â Analysis of Optical Diffraction Response. Langmuir, 2004, 20, 3096-3106.	1.6	232
18	Improved synthesis of Ti₃C₂T_x MXenes resulting in exceptional electrical conductivity, high synthesis yield, and enhanced capacitance. Nanoscale, 2021, 13, 3572-3580.	2.8	228

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19	Three-dimensional self-assembled photonic crystals with high temperature stability for thermal emission modification. Nature Communications, 2013, 4, 2630.	5.8	204
20	Holographic patterning of high-performance on-chip 3D lithium-ion microbatteries. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6573-6578.	3.3	179
21	Hydrothermal Synthesis of Er-Doped Luminescent TiO2Nanoparticles. Chemistry of Materials, 2003, 15, 1256-1263.	3.2	174
22	Hydrogel-Based Glucose Sensors: Effects of Phenylboronic Acid Chemical Structure on Response. Chemistry of Materials, 2013, 25, 3239-3250.	3.2	167
23	Multidimensional Architectures for Functional Optical Devices. Advanced Materials, 2010, 22, 1084-1101.	11.1	166
24	Selective Wettingâ€Induced Microâ€Electrode Patterning for Flexible Microâ€Supercapacitors. Advanced Materials, 2014, 26, 5108-5112.	11.1	146
25	Interlayer Lithium Plating in Au Nanoparticles Pillared Reduced Graphene Oxide for Lithium Metal Anodes. Advanced Functional Materials, 2018, 28, 1804133.	7.8	142
26	Electrochemically tunable thermal conductivity of lithium cobalt oxide. Nature Communications, 2014, 5, 4035.	5.8	137
27	Protein Adsorption on Poly(N-isopropylacrylamide) Brushes: Dependence on Grafting Density and Chain Collapse. Langmuir, 2011, 27, 8810-8818.	1.6	134
28	AuPd Metal Nanoparticles as Probes of Nanoscale Thermal Transport in Aqueous Solution. Journal of Physical Chemistry B, 2004, 108, 18870-18875.	1.2	132
29	Three-dimensional mesostructures as high-temperature growth templates, electronic cellular scaffolds, and self-propelled microrobots. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9455-E9464.	3.3	129
30	Exploiting Force Sensitive Spiropyrans as Molecular Level Probes. Macromolecules, 2013, 46, 3746-3752.	2.2	123
31	High energy flexible supercapacitors formed via bottom-up infilling of gel electrolytes into thick porous electrodes. Nature Communications, 2018, 9, 2578.	5.8	121
32	Mechanically and Chemically Robust Sandwich-Structured C@Si@C Nanotube Array Li-Ion Battery Anodes. ACS Nano, 2015, 9, 1985-1994.	7.3	119
33	Epitaxial growth of three-dimensionally architectured optoelectronic devices. Nature Materials, 2011, 10, 676-681.	13.3	113
34	Extremely Durable, Flexible Supercapacitors with Greatly Improved Performance at High Temperatures. ACS Nano, 2015, 9, 8569-8577.	7.3	113
35	Revealing the role of the cathodeâ€“electrolyte interface on solid-state batteries. Nature Materials, 2021, 20, 1392-1400.	13.3	106
36	Epitaxial Growth of High Dielectric Contrast Three-Dimensional Photonic Crystals. Advanced Materials, 2001, 13, 721-724.	11.1	102

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37	Nanoparticle-Mediated Epitaxial Assembly of Colloidal Crystals on Patterned Substrates. Langmuir, 2004, 20, 5262-5270.	1.6	100
38	Light-triggered thermal conductivity switching in azobenzene polymers. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5973-5978.	3.3	99
39	Microcapsules containing suspensions of carbon nanotubes. Journal of Materials Chemistry, 2009, 19, 6093.	6.7	98
40	Optical diffraction and high-energy features in three-dimensional photonic crystals. Physical Review B, 2005, 71, .	1.1	96
41	Solvent Swelling Activation of a Mechanophore in a Polymer Network. Macromolecules, 2014, 47, 2690-2694.	2.2	96
42	Fabrication of Threeâ€Đimensional Photonic Crystals Using Multibeam Interference Lithography and Electrodeposition. Advanced Materials, 2009, 21, 3012-3015.	11.1	94
43	3D Scaffolded Nickelâ€“Tin Liâ€Ion Anodes with Enhanced Cyclability. Advanced Materials, 2016, 28, 742-747.	11.1	90
44	Synergistically Enhanced Electrochemical Performance of Hierarchical MoS₂/TiNb₂O₇ Hetero-nanostructures as Anode Materials for Li-Ion Batteries. ACS Nano, 2017, 11, 1026-1033.	7.3	89
45	Interfacial thermal conductance in spun-cast polymer films and polymer brushes. Applied Physics Letters, 2010, 97, .	1.5	87
46	Graphene Sandwiched Mesostructured Liâ€Ion Battery Electrodes. Advanced Materials, 2016, 28, 7696-7702.	11.1	86
47	Electrochemical Fabrication of 3D Microperiodic Porous Materials. Advanced Materials, 2001, 13, 482-485.	11.1	85
48	Functionalized Hydrogel on Plasmonic Nanoantennas for Noninvasive Glucose Sensing. ACS Photonics, 2015, 2, 475-480.	3.2	85
49	High and low thermal conductivity of amorphous macromolecules. Physical Review B, 2017, 95, .	1.1	85
50	Thermally Functional Liquid Crystal Networks by Magnetic Field Driven Molecular Orientation. ACS Macro Letters, 2016, 5, 955-960.	2.3	84
51	Soft, skin-interfaced microfluidic systems with integrated immunoassays, fluorometric sensors, and impedance measurement capabilities. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 27906-27915.	3.3	84
52	Carboxyl functionalization of ultrasmall luminescent silicon nanoparticles through thermal hydrosilylation. Journal of Materials Chemistry, 2006, 16, 1421.	6.7	80
53	Unveiling Surface Redox Charge Storage of Interacting Two-Dimensional Heteronanosheets in Hierarchical Architectures. Nano Letters, 2015, 15, 2269-2277.	4.5	80
54	Electrodeposited 3D Tungsten Photonic Crystals with Enhanced Thermal Stability. Chemistry of Materials, 2011, 23, 4783-4788.	3.2	77

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55	Lyotropic Liquid Crystals as Nanoreactors for Nanoparticle Synthesis. Chemistry of Materials, 2004, 16, 2201-2207.	3.2	76
56	Protein Adsorption Modes Determine Reversible Cell Attachment on Poly(<i>Nâ€<</i>isopropyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 70	7.8	76
57	Three-Dimensionally Mesostructured Fe₂O₃ Electrodes with Good Rate Performance and Reduced Voltage Hysteresis. Chemistry of Materials, 2015, 27, 2803-2811.	3.2	74
58	Quasi-ballistic Electronic Thermal Conduction in Metal Inverse Opals. Nano Letters, 2016, 16, 2754-2761.	4.5	72
59	Transparent Selfâ€Healing Polymers Based on Encapsulated Plasticizers in a Thermoplastic Matrix. Advanced Functional Materials, 2011, 21, 4705-4711.	7.8	71
60	Reduced Graphene Oxide/LiI Composite Lithium Ion Battery Cathodes. Nano Letters, 2017, 17, 6893-6899.	4.5	67
61	Soft, skin-interfaced microfluidic systems with integrated enzymatic assays for measuring the concentration of ammonia and ethanol in sweat. Lab on A Chip, 2020, 20, 84-92.	3.1	67
62	Direct laser writing of volumetric gradient index lenses and waveguides. Light: Science and Applications, 2020, 9, 196.	7.7	66
63	Highâ€Performance Mesostructured Organic Hybrid Pseudocapacitor Electrodes. Advanced Functional Materials, 2016, 26, 903-910.	7.8	63
64	Interrelationship between Densification, Crystallization, and Chemical Evolution in Sol-Gel Titania Thin Films. Journal of the American Ceramic Society, 1994, 77, 1592-1596.	1.9	62
65	High Volumetric Capacity Three-Dimensionally Sphere-Caged Secondary Battery Anodes. Nano Letters, 2016, 16, 4501-4507.	4.5	62
66	Electroplating lithium transition metal oxides. Science Advances, 2017, 3, e1602427.	4.7	62
67	Thin Film Condensation on Nanostructured Surfaces. Advanced Functional Materials, 2018, 28, 1707000.	7.8	60
68	Improved Performance in FeF₂ Conversion Cathodes through Use of a Conductive 3D Scaffold and Al₂O₃ ALD Coating. Advanced Functional Materials, 2017, 27, 1702783.	7.8	55
69	Flexible Transient Optical Waveguides and Surfaceâ€Wave Biosensors Constructed from Monocrystalline Silicon. Advanced Materials, 2018, 30, e1801584.	11.1	55
70	Selfâ€Folded Gripperâ€Like Architectures from Stimuliâ€Responsive Bilayers. Advanced Materials, 2018, 30, e1801669.	11.1	53
71	Three dimensional silicon photonic crystals fabricated by two photon phase mask lithography. Applied Physics Letters, 2009, 94, .	1.5	52
72	Materials Chemistry in 3D Templates for Functional Photonics. Chemistry of Materials, 2014, 26, 277-286.	3.2	49

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73	Three-Dimensional Single Gyroid Photonic Crystals with a Mid-Infrared Bandgap. ACS Photonics, 2016, 3, 1131-1137.	3.2	49
74	Hydrothermal Fabrication of Threeâ€Dimensional Secondary Battery Anodes. Advanced Materials, 2014, 26, 7096-7101.	11.1	48
75	Rational Design of Hierarchically Openâ€Porous Spherical Hybrid Architectures for Lithiumâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1802816.	10.2	48
76	Triangular Elastomeric Stamps for Optical Applications: Nearâ€Field Phase Shift Photolithography, 3D Proximity Field Patterning, Embossed Antireflective Coatings, and SERS Sensing. Advanced Functional Materials, 2012, 22, 2927-2938.	7.8	47
77	High Volumetric and Gravimetric Capacity Electrodeposited Mesostructured Sb₂O₃ Sodium Ion Battery Anodes. Small, 2019, 15, e1900258.	5.2	46
78	Counterion Effects in Liquid Crystal Templating of Nanostructured CdS. Chemistry of Materials, 1997, 9, 1495-1498.	3.2	45
79	Millimeter-scale liquid metal droplet thermal switch. Applied Physics Letters, 2018, 112, .	1.5	44
80	Linear and nonlinear rheology and structural relaxation in dense glassy and jammed soft repulsive pNIPAM microgel suspensions. Soft Matter, 2019, 15, 1038-1052.	1.2	44
81	Enhanced Electrical and Mechanical Properties of Chemically Cross-Linked Carbon-Nanotube-Based Fibers and Their Application in High-Performance Supercapacitors. ACS Nano, 2020, 14, 632-639.	7.3	44
82	Effects of surface termination on the band gap of ultrabrightSi29nanoparticles: Experiments and computational models. Physical Review B, 2002, 65, .	1.1	43
83	Acid-Triggered, Acid-Generating, and Self-Amplifying Degradable Polymers. Journal of the American Chemical Society, 2019, 141, 2838-2842.	6.6	43
84	Highâ€Performance Packaged 3D Lithiumâ€Ion Microbatteries Fabricated Using Imprint Lithography. Advanced Materials, 2021, 33, e2006229.	11.1	43
85	Programming structure into 3D nanomaterials. Materials Today, 2009, 12, 28-35.	8.3	41
86	Highâ€Operatingâ€Temperature Direct Ink Writing of Mesoscale Eutectic Architectures. Advanced Materials, 2017, 29, 1604778.	11.1	41
87	Effects of Particle Size on Mg²⁺ Ion Intercalation into Î»-MnO₂ Cathode Materials. Nano Letters, 2019, 19, 4712-4720.	4.5	41
88	Transfer-Printing of Tunable Porous Silicon Microcavities with Embedded Emitters. ACS Photonics, 2014, 1, 1144-1150.	3.2	39
89	Electrode architectures for high capacity multivalent conversion compounds: iron (ii and iii) fluoride. RSC Advances, 2014, 4, 6730.	1.7	39
90	Heat capacity measurements of two-dimensional self-assembled hexadecanethiol monolayers on polycrystalline gold. Applied Physics Letters, 2004, 84, 5198-5200.	1.5	38

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91	Molecular Variables in the Self-Assembly of Supramolecular Nanostructures. Macromolecules, 2000, 33, 3550-3556.	2.2	37
92	Coherent Phonon-Grain Boundary Scattering in Silicon Inverse Opals. Nano Letters, 2013, 13, 618-624.	4.5	36
93	Self-Assembly of Monodisperse Starburst Carbon Spheres into Hierarchically Organized Nanostructured Supercapacitor Electrodes. ACS Applied Materials & Interfaces, 2015, 7, 9128-9133.	4.0	36
94	High strength metallic wood from nanostructured nickel inverse opal materials. Scientific Reports, 2019, 9, 719.	1.6	36
95	Thermal Conductivity of Graphite Thin Films Grown by Low Temperature Chemical Vapor Deposition on Ni (111). Advanced Materials Interfaces, 2016, 3, 1600234.	1.9	35
96	Monolithic mtesla-level magnetic induction by self-rolled-up membrane technology. Science Advances, 2020, 6, eaay4508.	4.7	35
97	Flexible and Wearable Fiber Microsupercapacitors Based on Carbon Nanotubeâ€“Agarose Gel Composite Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 19925-19933.	4.0	34
98	Biomimetic and Biologically Compliant Soft Architectures via 3D and 4D Assembly Methods: A Perspective. Advanced Materials, 2022, 34, e2108391.	11.1	34
99	Integration of high capacity materials into interdigitated mesostructured electrodes for high energy and high power density primary microbatteries. Journal of Power Sources, 2016, 315, 308-315.	4.0	32
100	Cationically Substituted Bi_{0.7}Fe_{0.3}OCl Nanosheets as Li Ion Battery Anodes. ACS Applied Materials & Interfaces, 2017, 9, 14187-14196.	4.0	32
101	A composite phase change material thermal buffer based on porous metal foam and low-melting-temperature metal alloy. Applied Physics Letters, 2020, 116, .	1.5	31
102	Holographically fabricated photonic crystals with large reflectance. Applied Physics Letters, 2007, 91, 241103.	1.5	30
103	In Operando Strain Measurement of Bicontinuous Siliconâ€Coated Nickel Inverse Opal Anodes for Liâ€Ion Batteries. Advanced Energy Materials, 2015, 5, 1500466.	10.2	30
104	Autonomic Molecular Transport by Polymer Films Containing Programmed Chemical Potential Gradients. Journal of the American Chemical Society, 2015, 137, 5066-5073.	6.6	30
105	Porous Silicon Gradient Refractive Index Micro-Optics. Nano Letters, 2016, 16, 7402-7407.	4.5	30
106	Tunable Visibly Transparent Optics Derived from Porous Silicon. ACS Photonics, 2017, 4, 909-914.	3.2	30
107	Tin Sulfideâ€Based Nanohybrid for Highâ€Performance Anode of Sodiumâ€Ion Batteries. Small, 2017, 13, 1700767.	5.2	30
108	Phase Change Material Heat Sink for Transient Cooling of High-Power Devices. International Journal of Heat and Mass Transfer, 2021, 170, 121033.	2.5	30

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109	Resonant Mode Engineering of Photonic Crystal Sensors Clad with Ultralow Refractive Index Porous Silicon Dioxide. Advanced Optical Materials, 2017, 5, 1700605.	3.6	29
110	Templateâ€Directed Directionally Solidified 3D Mesostructured AgClâ€“KCl Eutectic Photonic Crystals. Advanced Materials, 2015, 27, 4551-4559.	11.1	28
111	Programmable shape transformation of elastic spherical domes. Soft Matter, 2016, 12, 6184-6195.	1.2	28
112	Enhanced cycle stability of iron(II, III) oxide nanoparticles encapsulated with nitrogen-doped carbon and graphene frameworks for lithium battery anodes. Carbon, 2018, 129, 621-630.	5.4	28
113	An Integrated Liquid Metal Thermal Switch for Active Thermal Management of Electronics. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 2341-2351.	1.4	28
114	Modulating Noncovalent Cross-links with Molecular Switches. Journal of the American Chemical Society, 2019, 141, 3597-3604.	6.6	28
115	Soft Three-Dimensional Microscale Vibratory Platforms for Characterization of Nano-Thin Polymer Films. ACS Nano, 2019, 13, 449-457.	7.3	28
116	Kirigamiâ€Inspired Selfâ€Assembly of 3D Structures. Advanced Functional Materials, 2020, 30, 1909888.	7.8	28
117	Heteroepitaxial Growth of GaN on Unconventional Templates and Layerâ€Transfer Techniques for Largeâ€Area, Flexible/Stretchable Lightâ€Emitting Diodes. Advanced Optical Materials, 2016, 4, 505-521.	3.6	27
118	Functional materials and devices by self-assembly. MRS Bulletin, 2020, 45, 799-806.	1.7	27
119	3D periodic polyimide nano-networks for ultrahigh-rate and sustainable energy storage. Energy and Environmental Science, 2021, 14, 5894-5902.	15.6	26
120	Colloidal Particles that Rapidly Change Shape via Elastic Instabilities. Small, 2015, 11, 6051-6057.	5.2	24
121	Good Solidâ€State Electrolytes Have Low, Glassâ€Like Thermal Conductivity. Small, 2021, 17, e2101693.	5.2	23
122	Hole-mask colloidal nanolithography combined with tilted-angle-rotation evaporation: A versatile method for fabrication of low-cost and large-area complex plasmonic nanostructures and metamaterials. Beilstein Journal of Nanotechnology, 2014, 5, 577-586.	1.5	22
123	Metallic 1T phase MoS2/MnO composites with improved cyclability for lithium-ion battery anodes. Journal of Alloys and Compounds, 2019, 796, 25-32.	2.8	22
124	Complex three-dimensional conformal surfaces formed by atomic layer deposition: computation and experimental verification. Journal of Materials Chemistry, 2009, 19, 9126.	6.7	21
125	Reversible Conversion Reactions and Small First Cycle Irreversible Capacity Loss in Metal Sulfideâ€Based Electrodes Enabled by Solid Electrolytes. Advanced Functional Materials, 2019, 29, 1901719.	7.8	21
126	Archimedean lattices emerge in template-directed eutectic solidification. Nature, 2020, 577, 355-358.	13.7	21

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127	A Lipid-Inspired Highly Adhesive Interface for Durable Superhydrophobicity in Wet Environments and Stable Jumping Droplet Condensation. ACS Nano, 2022, 16, 4251-4262.	7.3	21
128	Deterministic Design of Chemistry and Mesostructure in Li-Ion Battery Electrodes. ACS Nano, 2018, 12, 3060-3064.	7.3	20
129	Colloidal Metalâ€“Organic Framework Hexapods Prepared from Postsynthesis Etching with Enhanced Catalytic Activity and Rollable Packing. ACS Applied Materials & Interfaces, 2018, 10, 40990-40995.	4.0	20
130	A Lamellar Yolkâ€“Shell Lithiumâ€“Sulfur Battery Cathode Displaying Ultralong Cycling Life, High Rate Performance, and Temperature Tolerance. Advanced Science, 2022, 9, e2103517.	5.6	20
131	Are artificial opals non-close-packed fcc structures?. Applied Physics Letters, 2007, 90, 241905.	1.5	19
132	Repetitive Holeâ€Mask Colloidal Lithography for the Fabrication of Largeâ€Area Lowâ€Cost Plasmonic Multishape Singleâ€Layer Metasurfaces. Advanced Optical Materials, 2015, 3, 680-686.	3.6	19
133	Templateâ€Directed Solidification of Eutectic Optical Materials. Advanced Optical Materials, 2018, 6, 1800071.	3.6	19
134	A programmable soft chemo-mechanical actuator exploiting a catalyzed photochemical water-oxidation reaction. Soft Matter, 2017, 13, 7312-7317.	1.2	18
135	Tuning coherent radiative thermal conductance in multilayer photonic crystals. Applied Physics Letters, 2008, 92, .	1.5	17
136	Epitaxial Growth of Three-Dimensionally Mesostructured Single-Crystalline Cu₂O via Templated Electrodeposition. Chemistry of Materials, 2014, 26, 7051-7058.	3.2	17
137	Micromechanical devices with controllable stiffness fabricated from regular 3D porous materials. Journal of Micromechanics and Microengineering, 2014, 24, 105006.	1.5	17
138	A Nearly Packagingâ€Free Design Paradigm for Light, Powerful, and Energyâ€Dense Primary Microbatteries. Advanced Materials, 2021, 33, e2101760.	11.1	17
139	Enabling New Classes of Templated Materials through Mesoporous Carbon Colloidal Crystals. Advanced Optical Materials, 2013, 1, 300-304.	3.6	16
140	Tunable Antireflection Coating to Remove Indexâ€Matching Requirement for Interference Lithography. Advanced Optical Materials, 2018, 6, 1701049.	3.6	16
141	Synthesis and Formation Mechanism of All-Organic Block Copolymer-Directed Templating of Laser-Induced Crystalline Silicon Nanostructures. ACS Applied Materials & Interfaces, 2018, 10, 42777-42785.	4.0	15
142	Amplified Detection of Chemical Warfare Agents Using Two-Dimensional Chemical Potential Gradients. ACS Omega, 2018, 3, 14665-14670.	1.6	15
143	Thermoresponsive Stiffening with Microgel Particles in a Semiflexible Fibrin Network. Macromolecules, 2019, 52, 3029-3041.	2.2	15
144	Two-Dimensional Diffusion of Prodan on Self-Assembled Monolayers Studied by Fluorescence Recovery after Photobleaching. Journal of Physical Chemistry B, 2004, 108, 13764-13770.	1.2	14

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145	Facile fabrication of graphene composite microwires via drying-induced size reduction of hydrogel filaments. RSC Advances, 2014, 4, 20927-20931.	1.7	14
146	High Fullâ€Electrode Basis Capacity Templateâ€Free 3D Nanocomposite Secondary Battery Anodes. Small, 2015, 11, 6265-6271.	5.2	14
147	Dynamic Gradient Directed Molecular Transport and Concentration in Hydrogel Films. Angewandte Chemie - International Edition, 2017, 56, 5001-5006.	7.2	14
148	Electrodeposited high strength, thermally stable spectrally selective rhenium nickel inverse opals. Nanoscale, 2017, 9, 11187-11194.	2.8	14
149	Carbon-Free, High-Capacity and Long Cycle Life 1Dâ€“2D NiMoO₄ Nanowires/Metallic 1T MoS₂ Composite Lithium-Ion Battery Anodes. ACS Applied Materials & Interfaces, 2019, 11, 44593-44600.	4.0	14
150	Reconfigurable nanoscale soft materials. Current Opinion in Solid State and Materials Science, 2019, 23, 41-49.	5.6	14
151	Polymer Composites Containing Phaseâ€Change Microcapsules Displaying Deep Undercooling Exhibit Thermal Historyâ€Dependent Mechanical Properties. Advanced Materials Technologies, 2020, 5, 2000286.	3.0	14
152	Polymer Brushes Patterned with Micrometer-Scale Chemical Gradients Using Laminar Co-Flow. ACS Applied Materials & Interfaces, 2014, 6, 14320-14326.	4.0	13
153	General Method for Forming Micrometer-Scale Lateral Chemical Gradients in Polymer Brushes. Chemistry of Materials, 2014, 26, 2678-2683.	3.2	13
154	Bifurcation of self-folded polygonal bilayers. Applied Physics Letters, 2017, 111, .	1.5	13
155	Flexible Binderâ€Free CuS/Polydopamineâ€Coated Carbon Cloth for High Voltage Supercapacitors. Energy Technology, 2018, 6, 1852-1858.	1.8	12
156	Force-Modulated Equilibria of Mechanophoreâ€“Metal Coordinate Bonds. Chemistry of Materials, 2020, 32, 3869-3878.	3.2	12
157	Ultralow Thermal Conductivity in Nanoporous Crystalline Fe₃O₄. Journal of Physical Chemistry C, 2021, 125, 6897-6908.	1.5	12
158	Linear and nonlinear viscoelasticity of concentrated thermoresponsive microgel suspensions. Journal of Colloid and Interface Science, 2021, 601, 886-898.	5.0	12
159	Enhanced emission from fcc fluorescent photonic crystals. Physical Review B, 2008, 77, .	1.1	11
160	3D Holographic Photonic Crystals Containing Embedded Functional Features. Advanced Optical Materials, 2016, 4, 1533-1540.	3.6	11
161	Low-Temperature Hydrothermal Synthesis of Colloidal Crystal Templated Nanostructured Single-Crystalline ZnO. Chemistry of Materials, 2017, 29, 9734-9741.	3.2	11
162	Relationship between Water Desorption and Low-Temperature Densification of Colloidal Anatase Thin Films. Journal of the American Ceramic Society, 1993, 76, 2529-2533.	1.9	10

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163	Pack Aluminization Assisted Enhancement of Thermo-mechanical Properties in Nickel Inverse Opal Structures. Chemistry of Materials, 2018, 30, 1648-1654.	3.2	10
164	Optically anisotropic porous silicon microlenses with tunable refractive indexes and birefringence profiles. Optical Materials Express, 2020, 10, 868.	1.6	10
165	Epitaxial growth of three dimensionally structured III-V photonic crystal via hydride vapor phase epitaxy. Journal of Applied Physics, 2015, 118, 224303.	1.1	9
166	High Energy Density CNT/NaI Composite Cathodes for Sodiumâ€Ion Batteries. Advanced Materials Interfaces, 2018, 5, 1801342.	1.9	9
167	Selective Autonomous Molecular Transport and Collection by Hydrogelâ€Embedded Supramolecular Chemical Gradients. Angewandte Chemie - International Edition, 2019, 58, 18165-18170.	7.2	9
168	Field Emitters Using Inverse Opal Structures. Advanced Functional Materials, 2019, 29, 1808571.	7.8	9
169	Electrodeposition of atmosphere-sensitive ternary sodium transition metal oxide films for sodium-based electrochemical energy storage. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	9
170	Directed Molecular Collection by Eâ€Jet Printed Microscale Chemical Potential Wells in Hydrogel Films. Advanced Materials, 2018, 30, 1803140.	11.1	8
171	Template directed assembly of dynamic micellar nanoparticles. Soft Matter, 2011, 7, 10252.	1.2	7
172	Molecular Transport Directed via Patterned Functionalized Surfaces. Advanced Materials, 2011, 23, 1739-1743.	11.1	7
173	Low-Temperature Pack Aluminization Process on Pipeline Steel To Inhibit Asphaltene Deposition. ACS Applied Materials & Interfaces, 2019, 11, 47596-47605.	4.0	7
174	Integration of colloids into a semi-flexible network of fibrin. Soft Matter, 2017, 13, 1430-1443.	1.2	6
175	Dynamic Gradient Directed Molecular Transport and Concentration in Hydrogel Films. Angewandte Chemie, 2017, 129, 5083-5088.	1.6	6
176	Processingâ€Đependent Microstructure of AgClâ€“CsAgCl₂ Eutectic Photonic Crystals. Advanced Optical Materials, 2018, 6, 1701316.	3.6	6
177	Selective Autonomous Molecular Transport and Collection by Hydrogelâ€Embedded Supramolecular Chemical Gradients. Angewandte Chemie, 2019, 131, 18333-18338.	1.6	6
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