Paul Braun

List of Publications by Year in Descending Order

213 papers	13,714 citations	57 h-index	114 g-index
229 ext. papers	15,357 ext. citations	11.7 avg, IF	6.66 L-index

#	Paper	IF	Citations
213	Biomimetic and Biologically Compliant Soft Architectures via 3D and 4D Assembly Methods: A Perspective.. *Advanced Materials*, **2022**, e2108391	24	5
212	A Lipid-Inspired Highly Adhesive Interface for Durable Superhydrophobicity in Wet Environments and Stable Jumping Droplet Condensation.. *ACS Nano*, **2022**,	16.7	2
211	A Lamellar Yolk-Shell Lithium-Sulfur Battery Cathode Displaying Ultralong Cycling Life, High Rate Performance, and Temperature Tolerance. *Advanced Science*, **2021**, 9, e2103517	13.6	7
210	Ultralow Thermal Conductivity in Nanoporous Crystalline Fe3O4. *Journal of Physical Chemistry C*, **2021**, 125, 6897-6908	3.8	3
209	Direct and Divergent Solid-Phase Synthesis of Azobenzene and Spiropyran Derivatives. *Journal of Organic Chemistry*, **2021**, 86, 4391-4397	4.2	0
208	High Energy Density and Stable Three-Dimensionally Structured Se-Loaded Bicontinuous Porous Carbon Battery Electrodes. *Energy Technology*, **2021**, 9, 2100175	3.5	4
207	Measuring Molecular Diffusion Through Thin Polymer Films with Dual-Band Plasmonic Antennas. *ACS Nano*, **2021**, 15, 10393-10405	16.7	2
206	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,	11.5	3
205	Revealing the role of the cathode-electrolyte interface on solid-state batteries. *Nature Materials*, **2021**, 20, 1392-1400	27	36
204	Phase Change Material Heat Sink for Transient Cooling of High-Power Devices. *International Journal of Heat and Mass Transfer*, **2021**, 170, 121033	4.9	11
203	Good Solid-State Electrolytes Have Low, Glass-Like Thermal Conductivity. *Small*, **2021**, 17, e2101693	11	8
202	A Nearly Packaging-Free Design Paradigm for Light, Powerful, and Energy-Dense Primary Microbatteries. *Advanced Materials*, **2021**, 33, e2101760	24	2
201	High-Performance Packaged 3D Lithium-Ion Microbatteries Fabricated Using Imprint Lithography. *Advanced Materials*, **2021**, 33, e2006229	24	20
200	Improved synthesis of TiCT MXenes resulting in exceptional electrical conductivity, high synthesis yield, and enhanced capacitance. *Nanoscale*, **2021**, 13, 3572-3580	7.7	59
199	Three-dimensional mesostructured binder-free nickel-based TiO2/RGO lithium-ion battery negative electrodes with enhanced volumetric capacity. *Ceramics International*, **2021**, 47, 21381-21387	5.1	2
198	Toward the realization of subsurface volumetric integrated optical systems. *Applied Physics Letters*, **2021**, 119, 130503	3.4	0
197	A Nearly Packaging-Free Design Paradigm for Light, Powerful, and Energy-Dense Primary Microbatteries (Adv. Mater. 35/2021). *Advanced Materials*, **2021**, 33, 2170275	24	

196	Linear and nonlinear viscoelasticity of concentrated thermoresponsive microgel suspensions. *Journal of Colloid and Interface Science*, **2021**, 601, 886-898	9.3	4
195	Kirigami-Inspired Self-Assembly of 3D Structures. *Advanced Functional Materials*, **2020**, 30, 1909888	15.6	16
194	A composite phase change material thermal buffer based on porous metal foam and low-melting-temperature metal alloy. *Applied Physics Letters*, **2020**, 116, 071901	3.4	12
193	Archimedean lattices emerge in template-directed eutectic solidification. *Nature*, **2020**, 577, 355-358	50.4	11
192	Monolithic mtesla-level magnetic induction by self-rolled-up membrane technology. *Science Advances*, **2020**, 6, eaay4508	14.3	14
191	Force-Modulated Equilibria of Mechanophore–Metal Coordinate Bonds. *Chemistry of Materials*, **2020**, 32, 3869-3878	9.6	6
190	Optically anisotropic porous silicon microlenses with tunable refractive indexes and birefringence profiles. *Optical Materials Express*, **2020**, 10, 868	2.6	5
189	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	7.2	34
188	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	16.7	24
187	Mechanical Deformation-Assisted Fabrication of Plasmonic Nanobowties with Broken Symmetry and Tunable Gaps. *Particle and Particle Systems Characterization*, **2020**, 37, 1900463	3.1	1
186	Functional materials and devices by self-assembly. *MRS Bulletin*, **2020**, 45, 799-806	3.2	11
185	Direct laser writing of volumetric gradient index lenses and waveguides. *Light: Science and Applications*, **2020**, 9, 196	16.7	27
184	Autonomic Molecular Transport for Ultrasensitive Surface-Enhanced Infrared Absorption Spectroscopy. *ACS Applied Polymer Materials*, **2020**, 2, 3929-3935	4.3	3
183	Polymer Composites Containing Phase-Change Microcapsules Displaying Deep Undercooling Exhibit Thermal History-Dependent Mechanical Properties. *Advanced Materials Technologies*, **2020**, 5, 2000286	6.8	8
182	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	11.5	35
181	Microcapsules: Polymer Composites Containing Phase-Change Microcapsules Displaying Deep Undercooling Exhibit Thermal History-Dependent Mechanical Properties (Adv. Mater. Technol. 10/2020). *Advanced Materials Technologies*, **2020**, 5, 2070062	6.8	
180	Exploiting Nonlinear Elasticity for Anomalous Magnetoresponsive Stiffening. *ACS Macro Letters*, **2020**, 9, 1632-1637	6.6	1
179	Real-Time Measurement of Polymer Brush Dynamics Using Silicon Photonic Microring Resonators: Analyte Partitioning and Interior Brush Kinetics. *Langmuir*, **2020**, 36, 10351-10360	4	0

178	An Integrated Liquid Metal Thermal Switch for Active Thermal Management of Electronics. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2019**, 9, 2341-2351	1.7	14
177	Linear and nonlinear rheology and structural relaxation in dense glassy and jammed soft repulsive pNIPAM microgel suspensions. *Soft Matter*, **2019**, 15, 1038-1052	3.6	29
176	High strength metallic wood from nanostructured nickel inverse opal materials. *Scientific Reports*, **2019**, 9, 719	4.9	28
175	Acid-Triggered, Acid-Generating, and Self-Amplifying Degradable Polymers. *Journal of the American Chemical Society*, **2019**, 141, 2838-2842	16.4	25
174	Modulating Noncovalent Cross-links with Molecular Switches. *Journal of the American Chemical Society*, **2019**, 141, 3597-3604	16.4	24
173	Effects of Particle Size on Mg Ion Intercalation into □MnO Cathode Materials. *Nano Letters*, **2019**, 19, 4712-4720	11.5	26
172	Metallic 1T phase MoS2/MnO composites with improved cyclability for lithium-ion battery anodes. *Journal of Alloys and Compounds*, **2019**, 796, 25-32	5.7	12
171	Conductivity and lithiophilicity gradients guide lithium deposition to mitigate short circuits. *Nature Communications*, **2019**, 10, 1896	17.4	150
170	Reversible Conversion Reactions and Small First Cycle Irreversible Capacity Loss in Metal Sulfide-Based Electrodes Enabled by Solid Electrolytes. *Advanced Functional Materials*, **2019**, 29, 1901719	15.6	15
169	High Volumetric and Gravimetric Capacity Electrodeposited Mesostructured Sb O Sodium Ion Battery Anodes. *Small*, **2019**, 15, e1900258	11	34
168	Trimethylsilyl Azide (TMSN3) Enhanced Li□2 Battery Electrolytes. *ACS Applied Energy Materials*, **2019**, 2, 2662-2671	6.1	5
167	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	11.5	56
166	Thermoresponsive Stiffening with Microgel Particles in a Semiflexible Fibrin Network. *Macromolecules*, **2019**, 52, 3029-3041	5.5	6
165	Effect of Surface Chemistry and Roughness on the High-Temperature Deposition of a Model Asphaltene. *Energy & Fuels*, **2019**, 33, 4104-4114	4.1	1
164	Innentitelbild: Selective Autonomous Molecular Transport and Collection by Hydrogel-Embedded Supramolecular Chemical Gradients (Angew. Chem. 50/2019). *Angewandte Chemie*, **2019**, 131, 18046-18046	3.6	
163	Carbon-Free, High-Capacity and Long Cycle Life 1D-2D NiMoO Nanowires/Metallic 1T MoS Composite Lithium-Ion Battery Anodes. *ACS Applied Materials & Interfaces*, **2019**, 11, 44593-44600	9.5	10
162	Selective Autonomous Molecular Transport and Collection by Hydrogel-Embedded Supramolecular Chemical Gradients. *Angewandte Chemie*, **2019**, 131, 18333-18338	3.6	4
161	Selective Autonomous Molecular Transport and Collection by Hydrogel-Embedded Supramolecular Chemical Gradients. *Angewandte Chemie - International Edition*, **2019**, 58, 18165-18170	16.4	5

160	Large-area MRI-compatible epidermal electronic interfaces for prosthetic control and cognitive monitoring. *Nature Biomedical Engineering*, **2019**, 3, 194-205	19	144
159	A bee pupa-infilled honeycomb structure-inspired LiMnSiO cathode for high volumetric energy density secondary batteries. *Chemical Communications*, **2019**, 55, 3582-3585	5.8	2
158	Field Emitters Using Inverse Opal Structures. *Advanced Functional Materials*, **2019**, 29, 1808571	15.6	8
157	Control of lamellar eutectic orientation via template-directed solidification. *Acta Materialia*, **2019**, 166, 715-722	8.4	2
156	Low-Temperature Pack Aluminization Process on Pipeline Steel To Inhibit Asphaltene Deposition. *ACS Applied Materials & Interfaces*, **2019**, 11, 47596-47605	9.5	2
155	Rational Design of Hierarchically Open-Porous Spherical Hybrid Architectures for Lithium-Ion Batteries. *Advanced Energy Materials*, **2019**, 9, 1802816	21.8	32
154	Soft Three-Dimensional Microscale Vibratory Platforms for Characterization of Nano-Thin Polymer Films. *ACS Nano*, **2019**, 13, 449-457	16.7	16
153	Reconfigurable nanoscale soft materials. *Current Opinion in Solid State and Materials Science*, **2019**, 23, 41-49	12	7
152	Tunable Antireflection Coating to Remove Index-Matching Requirement for Interference Lithography. *Advanced Optical Materials*, **2018**, 6, 1701049	8.1	12
151	Template-Directed Solidification of Eutectic Optical Materials. *Advanced Optical Materials*, **2018**, 6, 1800871	8.1	15
150	Pack Aluminization Assisted Enhancement of Thermo-mechanical Properties in Nickel Inverse Opal Structures. *Chemistry of Materials*, **2018**, 30, 1648-1654	9.6	10
149	Millimeter-scale liquid metal droplet thermal switch. *Applied Physics Letters*, **2018**, 112, 063505	3.4	25
148	Thin Film Condensation on Nanostructured Surfaces. *Advanced Functional Materials*, **2018**, 28, 1707000	15.6	42
147	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	10.4	22
146	Deterministic Design of Chemistry and Mesostructure in Li-Ion Battery Electrodes. *ACS Nano*, **2018**, 12, 3060-3064	16.7	15
145	Flexible Binder-Free CuS/Polydopamine-Coated Carbon Cloth for High Voltage Supercapacitors. *Energy Technology*, **2018**, 6, 1852-1858	3.5	8
144	Directed Molecular Collection by E-Jet Printed Microscale Chemical Potential Wells in Hydrogel Films. *Advanced Materials*, **2018**, 30, e1803140	24	5
143	Processing-Dependent Microstructure of AgCl□sAgCl2 Eutectic Photonic Crystals. *Advanced Optical Materials*, **2018**, 6, 1701316	8.1	5

142	Interlayer Lithium Plating in Au Nanoparticles Pillared Reduced Graphene Oxide for Lithium Metal Anodes. *Advanced Functional Materials*, **2018**, 28, 1804133	15.6	105
141	Optical Waveguides: Flexible Transient Optical Waveguides and Surface-Wave Biosensors Constructed from Monocrystalline Silicon (Adv. Mater. 32/2018). *Advanced Materials*, **2018**, 30, 1870239	24	1
140	Self-Folded Gripper-Like Architectures from Stimuli-Responsive Bilayers. *Advanced Materials*, **2018**, 30, e1801669	24	41
139	Electrochemical Fabrication of Flat, Polymer-Embedded Porous Silicon 1D Gradient Refractive Index Microlens Arrays. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1800088	1.6	1
138	Dendritic nanostructured FeS-based high stability and capacity Li-ion cathodes.. *RSC Advances*, **2018**, 8, 38745-38750	3.7	2
137	Colloidal Metal-Organic Framework Hexapods Prepared from Postsynthesis Etching with Enhanced Catalytic Activity and Rollable Packing. *ACS Applied Materials & Interfaces*, **2018**, 10, 40990-40995	9.5	14
136	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	9.5	9
135	Salt Water-Triggered Ionic Cross-Linking of Polymer Composites by Controlled Release of Functional Ions. *ACS Omega*, **2018**, 3, 16127-16133	3.9	
134	Amplified Detection of Chemical Warfare Agents Using Two-Dimensional Chemical Potential Gradients. *ACS Omega*, **2018**, 3, 14665-14670	3.9	8
133	High Energy Density CNT/NaI Composite Cathodes for Sodium-Ion Batteries. *Advanced Materials Interfaces*, **2018**, 5, 1801342	4.6	4
132	Flexible Transient Optical Waveguides and Surface-Wave Biosensors Constructed from Monocrystalline Silicon. *Advanced Materials*, **2018**, 30, e1801584	24	36
131	High energy flexible supercapacitors formed via bottom-up infilling of gel electrolytes into thick porous electrodes. *Nature Communications*, **2018**, 9, 2578	17.4	85
130	Integration of colloids into a semi-flexible network of fibrin. *Soft Matter*, **2017**, 13, 1430-1443	3.6	6
129	Tunable Visibly Transparent Optics Derived from Porous Silicon. *ACS Photonics*, **2017**, 4, 909-914	6.3	27
128	High and low thermal conductivity of amorphous macromolecules. *Physical Review B*, **2017**, 95,	3.3	61
127	Polymer Brush-Modified Microring Resonators for Partition-Enhanced Small Molecule Chemical Detection. *ChemistrySelect*, **2017**, 2, 1521-1524	1.8	2
126	Cationically Substituted BiFeOCl Nanosheets as Li Ion Battery Anodes. *ACS Applied Materials & Interfaces*, **2017**, 9, 14187-14196	9.5	20
125	Dynamic Gradient Directed Molecular Transport and Concentration in Hydrogel Films. *Angewandte Chemie*, **2017**, 129, 5083-5088	3.6	6

124	Electroplating lithium transition metal oxides. *Science Advances*, **2017**, 3, e1602427	14.3	45
123	Note: Qualitative degradation of the pesticide coumaphos in solution, controlled aerosol, and solid phases on quaternary ammonium fluoride polymer brushes. *Polymers for Advanced Technologies*, **2017**, 28, 567-567	3.2	0
122	Flexible and Wearable Fiber Microsupercapacitors Based on Carbon Nanotube-Agarose Gel Composite Electrodes. *ACS Applied Materials & Interfaces*, **2017**, 9, 19925-19933	9.5	25
121	Tin Sulfide-Based Nanohybrid for High-Performance Anode of Sodium-Ion Batteries. *Small*, **2017**, 13, 1700767	11	25
120	Dynamic Gradient Directed Molecular Transport and Concentration in Hydrogel Films. *Angewandte Chemie - International Edition*, **2017**, 56, 5001-5006	16.4	11
119	Synergistically Enhanced Electrochemical Performance of Hierarchical MoS/TiNbO Hetero-nanostructures as Anode Materials for Li-Ion Batteries. *ACS Nano*, **2017**, 11, 1026-1033	16.7	80
118	High-Operating-Temperature Direct Ink Writing of Mesoscale Eutectic Architectures. *Advanced Materials*, **2017**, 29, 1604778	24	28
117	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	11.5	104
116	Low-Temperature Hydrothermal Synthesis of Colloidal Crystal Templated Nanostructured Single-Crystalline ZnO. *Chemistry of Materials*, **2017**, 29, 9734-9741	9.6	8
115	A programmable soft chemo-mechanical actuator exploiting a catalyzed photochemical water-oxidation reaction. *Soft Matter*, **2017**, 13, 7312-7317	3.6	12
114	Reduced Graphene Oxide/LiI Composite Lithium Ion Battery Cathodes. *Nano Letters*, **2017**, 17, 6893-6899	11.5	41
113	Resonant Mode Engineering of Photonic Crystal Sensors Clad with Ultralow Refractive Index Porous Silicon Dioxide. *Advanced Optical Materials*, **2017**, 5, 1700605	8.1	21
112	Bifurcation of self-folded polygonal bilayers. *Applied Physics Letters*, **2017**, 111, 104101	3.4	9
111	Improved Performance in FeF2 Conversion Cathodes through Use of a Conductive 3D Scaffold and Al2O3 ALD Coating. *Advanced Functional Materials*, **2017**, 27, 1702783	15.6	38
110	Electrodeposited high strength, thermally stable spectrally selective rhenium nickel inverse opals. *Nanoscale*, **2017**, 9, 11187-11194	7.7	12
109	Qualitative degradation of the pesticide coumaphos in solution, controlled aerosol, and solid phases on quaternary ammonium fluoride polymer brushes. *Polymers for Advanced Technologies*, **2017**, 28, 73-79	3.2	0
108	Lithium-Ion Batteries: Graphene Sandwiched Mesostructured Li-Ion Battery Electrodes (Adv. Mater. 35/2016). *Advanced Materials*, **2016**, 28, 7695-7695	24	3
107	Graphene Sandwiched Mesostructured Li-Ion Battery Electrodes. *Advanced Materials*, **2016**, 28, 7696-702	24	68

106	Porous Silicon Gradient Refractive Index Micro-Optics. *Nano Letters*, **2016**, 16, 7402-7407	11.5	21
105	High-Performance Mesostructured Organic Hybrid Pseudocapacitor Electrodes. *Advanced Functional Materials*, **2016**, 26, 903-910	15.6	52
104	High Volumetric Capacity Three-Dimensionally Sphere-Caged Secondary Battery Anodes. *Nano Letters*, **2016**, 16, 4501-7	11.5	58
103	Three-Dimensional Single Gyroid Photonic Crystals with a Mid-Infrared Bandgap. *ACS Photonics*, **2016**, 3, 1131-1137	6.3	40
102	3D Scaffolded Nickel-Tin Li-Ion Anodes with Enhanced Cyclability. *Advanced Materials*, **2016**, 28, 742-7	24	80
101	Bioresorbable silicon electronic sensors for the brain. *Nature*, **2016**, 530, 71-6	50.4	582
100	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	8.9	21
99	Quasi-ballistic Electronic Thermal Conduction in Metal Inverse Opals. *Nano Letters*, **2016**, 16, 2754-61	11.5	65
98	3D Holographic Photonic Crystals Containing Embedded Functional Features. *Advanced Optical Materials*, **2016**, 4, 1533-1540	8.1	9
97	Thermal Conductivity of Graphite Thin Films Grown by Low Temperature Chemical Vapor Deposition on Ni (111). *Advanced Materials Interfaces*, **2016**, 3, 1600234	4.6	24
96	Programmable shape transformation of elastic spherical domes. *Soft Matter*, **2016**, 12, 6184-95	3.6	21
95	Heteroepitaxial Growth of GaN on Unconventional Templates and Layer-Transfer Techniques for Large-Area, Flexible/Stretchable Light-Emitting Diodes. *Advanced Optical Materials*, **2016**, 4, 505-521	8.1	20
94	Thermally Functional Liquid Crystal Networks by Magnetic Field Driven Molecular Orientation. *ACS Macro Letters*, **2016**, 5, 955-960	6.6	47
93	Unveiling surface redox charge storage of interacting two-dimensional heteronanosheets in hierarchical architectures. *Nano Letters*, **2015**, 15, 2269-77	11.5	73
92	Extremely Durable, Flexible Supercapacitors with Greatly Improved Performance at High Temperatures. *ACS Nano*, **2015**, 9, 8569-77	16.7	87
91	Three-Dimensionally Mesostructured Fe2O3 Electrodes with Good Rate Performance and Reduced Voltage Hysteresis. *Chemistry of Materials*, **2015**, 27, 2803-2811	9.6	60
90	Self-assembly of monodisperse starburst carbon spheres into hierarchically organized nanostructured supercapacitor electrodes. *ACS Applied Materials & Interfaces*, **2015**, 7, 9128-33	9.5	30
89	Functionalized Hydrogel on Plasmonic Nanoantennas for Noninvasive Glucose Sensing. *ACS Photonics*, **2015**, 2, 475-480	6.3	70

88	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, 6573-8	11.5	144
87	Autonomic molecular transport by polymer films containing programmed chemical potential gradients. *Journal of the American Chemical Society*, **2015**, 137, 5066-73	16.4	26
86	Photonic Crystals: Template-Directed Directionally Solidified 3D Mesostructured AgCl-KCl Eutectic Photonic Crystals (Adv. Mater. 31/2015). *Advanced Materials*, **2015**, 27, 4550-4550	24	
85	Epitaxial growth of three dimensionally structured III-V photonic crystal via hydride vapor phase epitaxy. *Journal of Applied Physics*, **2015**, 118, 224303	2.5	7
84	Colloidal Particles that Rapidly Change Shape via Elastic Instabilities. *Small*, **2015**, 11, 6051-7	11	21
83	High Full-Electrode Basis Capacity Template-Free 3D Nanocomposite Secondary Battery Anodes. *Small*, **2015**, 11, 6265-71	11	13
82	In Operando Strain Measurement of Bicontinuous Silicon-Coated Nickel Inverse Opal Anodes for Li-Ion Batteries. *Advanced Energy Materials*, **2015**, 5, 1500466	21.8	27
81	Enhanced Secondary Battery Anodes Based on Si and Fe3O4 Nanoparticle Infilled Monodisperse Carbon Starburst Colloidal Crystals. *Particle and Particle Systems Characterization*, **2015**, 32, 928-933	3.1	2
80	Template-Directed Directionally Solidified 3D Mesostructured AgCl-KCl Eutectic Photonic Crystals. *Advanced Materials*, **2015**, 27, 4551-9	24	26
79	Mechanically and chemically robust sandwich-structured C@Si@C nanotube array Li-ion battery anodes. *ACS Nano*, **2015**, 9, 1985-94	16.7	103
78	Repetitive Hole-Mask Colloidal Lithography for the Fabrication of Large-Area Low-Cost Plasmonic Multishape Single-Layer Metasurfaces. *Advanced Optical Materials*, **2015**, 3, 680-686	8.1	14
77	Nanoscale thermal transport. II. 2003–2012. *Applied Physics Reviews*, **2014**, 1, 011305	17.3	1050
76	Materials Chemistry in 3D Templates for Functional Photonics. *Chemistry of Materials*, **2014**, 26, 277-286	9.6	46
75	Facile fabrication of graphene composite microwires via drying-induced size reduction of hydrogel filaments. *RSC Advances*, **2014**, 4, 20927-20931	3.7	12
74	Transfer-Printing of Tunable Porous Silicon Microcavities with Embedded Emitters. *ACS Photonics*, **2014**, 1, 1144-1150	6.3	30
73	Electrode architectures for high capacity multivalent conversion compounds: iron (II and III) fluoride. *RSC Advances*, **2014**, 4, 6730	3.7	32
72	Hydrothermal fabrication of three-dimensional secondary battery anodes. *Advanced Materials*, **2014**, 26, 7096-101	24	46
71	Solvent Swelling Activation of a Mechanophore in a Polymer Network. *Macromolecules*, **2014**, 47, 2690-2694	5.8	78

70	Selective wetting-induced micro-electrode patterning for flexible micro-supercapacitors. *Advanced Materials*, **2014**, 26, 5108-12	24	127
69	Micromechanical devices with controllable stiffness fabricated from regular 3D porous materials. *Journal of Micromechanics and Microengineering*, **2014**, 24, 105006	2	14
68	Polymer brushes patterned with micrometer-scale chemical gradients using laminar co-flow. *ACS Applied Materials & Interfaces*, **2014**, 6, 14320-6	9.5	12
67	General Method for Forming Micrometer-Scale Lateral Chemical Gradients in Polymer Brushes. *Chemistry of Materials*, **2014**, 26, 2678-2683	9.6	13
66	Electrochemically tunable thermal conductivity of lithium cobalt oxide. *Nature Communications*, **2014**, 5, 4035	17.4	92
65	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, 577-86	3	20
64	Epitaxial Growth of Three-Dimensionally Mesostructured Single-Crystalline Cu2O via Templated Electrodeposition. *Chemistry of Materials*, **2014**, 26, 7051-7058	9.6	13
63	Hydrogel-Based Glucose Sensors: Effects of Phenylboronic Acid Chemical Structure on Response. *Chemistry of Materials*, **2013**, 25, 3239-3250	9.6	146
62	Enabling New Classes of Templated Materials through Mesoporous Carbon Colloidal Crystals. *Advanced Optical Materials*, **2013**, 1, 300-304	8.1	14
61	Three-dimensional self-assembled photonic crystals with high temperature stability for thermal emission modification. *Nature Communications*, **2013**, 4, 2630	17.4	166
60	Coherent phonon-grain boundary scattering in silicon inverse opals. *Nano Letters*, **2013**, 13, 618-24	11.5	33
59	High-power lithium ion microbatteries from interdigitated three-dimensional bicontinuous nanoporous electrodes. *Nature Communications*, **2013**, 4, 1732	17.4	449
58	Exploiting Force Sensitive Spiropyrans as Molecular Level Probes. *Macromolecules*, **2013**, 46, 3746-3752	5.5	109
57	Noninvasive optical glucose monitoring at physiological levels using a functionalized plasmonic sensor **2013**,		1
56	Programmed size-selected permeation of ssDNA into ZnS mesoporous hollow spheres. *Soft Matter*, **2012**, 8, 4396	3.6	2
55	Three-dimensional metal scaffold supported bicontinuous silicon battery anodes. *Nano Letters*, **2012**, 12, 2778-83	11.5	229
54	Triangular Elastomeric Stamps for Optical Applications: Near-Field Phase Shift Photolithography, 3D Proximity Field Patterning, Embossed Antireflective Coatings, and SERS Sensing. *Advanced Functional Materials*, **2012**, 22, 2927-2938	15.6	41
53	Protein Adsorption Modes Determine Reversible Cell Attachment on Poly(N-isopropyl acrylamide) Brushes. *Advanced Functional Materials*, **2012**, 22, 2394-2401	15.6	66

52	Protein adsorption on poly(N-isopropylacrylamide) brushes: dependence on grafting density and chain collapse. *Langmuir*, **2011**, 27, 8810-8	4	120
51	Three-dimensional bicontinuous ultrafast-charge and -discharge bulk battery electrodes. *Nature Nanotechnology*, **2011**, 6, 277-81	28.7	940
50	Epitaxial growth of three-dimensionally architectured optoelectronic devices. *Nature Materials*, **2011**, 10, 676-81	27	99
49	Transparent Self-Healing Polymers Based on Encapsulated Plasticizers in a Thermoplastic Matrix. *Advanced Functional Materials*, **2011**, 21, 4705-4711	15.6	64
48	Molecular transport directed via patterned functionalized surfaces. *Advanced Materials*, **2011**, 23, 1739-43	24	6
47	Transfer of Preformed Three-Dimensional Photonic Crystals onto Dye-Sensitized Solar Cells. *Angewandte Chemie*, **2011**, 123, 5830-5833	3.6	21
46	Template directed assembly of dynamic micellar nanoparticles. *Soft Matter*, **2011**, 7, 10252	3.6	6
45	Electrodeposited 3D Tungsten Photonic Crystals with Enhanced Thermal Stability. *Chemistry of Materials*, **2011**, 23, 4783-4788	9.6	73
44	Interfacial thermal conductance in spun-cast polymer films and polymer brushes. *Applied Physics Letters*, **2010**, 97, 011908	3.4	79
43	Force-induced redistribution of a chemical equilibrium. *Journal of the American Chemical Society*, **2010**, 132, 16107-11	16.4	213
42	Cavity-enhanced localized plasmon resonance sensing. *Applied Physics Letters*, **2010**, 97, 253116	3.4	208
41	Multidimensional architectures for functional optical devices. *Advanced Materials*, **2010**, 22, 1084-101	24	154
40	Self-Healing Polymer Coatings. *Advanced Materials*, **2009**, 21, 645-649	24	575
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