Joanna Aizenberg

List of Publications by Year
in descending order

176 papers	24,471 citations	12303 69 h-index	6979 154 g-index
189 all docs	189 docs citations	189 times ranked	20242 citing authors

#	Article	IF	Citations
1	Bioinspired self-repairing slippery surfaces with pressure-stable omniphobicity. Nature, 2011, 477, 443-447.	13.7	3,165
2	Liquid-Infused Nanostructured Surfaces with Extreme Anti-Ice and Anti-Frost Performance. ACS Nano, 2012, 6, 6569-6577.	7.3	1,118
3	Design of anti-icing surfaces: smooth, textured or slippery?. Nature Reviews Materials, 2016, 1, .	23.3	1,048
4	Skeleton of Euplectella sp.: Structural Hierarchy from the Nanoscale to the Macroscale. Science, 2005, 309, 275-278.	6.0	997
5	Control of crystal nucleation by patterned self-assembled monolayers. Nature, 1999, 398, 495-498.	13.7	812
6	Liquid-infused structured surfaces with exceptional anti-biofouling performance. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13182-13187.	3.3	783
7	Condensation on slippery asymmetric bumps. Nature, 2016, 531, 78-82.	13.7	656
8	Calcitic microlenses as part of the photoreceptor system in brittlestars. Nature, 2001, 412, 819-822.	13.7	605
9	A bioinspired omniphobic surface coating on medical devices prevents thrombosis and biofouling. Nature Biotechnology, 2014, 32, 1134-1140.	9.4	575
10	Reversible Switching of Hydrogel-Actuated Nanostructures into Complex Micropatterns. Science, 2007, 315, 487-490.	6.0	530
11	Adaptive fluid-infused porous films with tunable transparency and wettability. Nature Materials, 2013, 12, 529-534.	13.3	481
12	Assembly of large-area, highly ordered, crack-free inverse opal films. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10354-10359.	3.3	475
13	Oriented Growth of Calcite Controlled by Self-Assembled Monolayers of Functionalized Alkanethiols Supported on Gold and Silver. Journal of the American Chemical Society, 1999, 121, 4500-4509.	6.6	462
14	Hierarchical or Not? Effect of the Length Scale and Hierarchy of the Surface Roughness on Omniphobicity of Lubricant-Infused Substrates. Nano Letters, 2013, 13, 1793-1799.	4.5	426
15	Synthetic homeostatic materials with chemo-mechano-chemical self-regulation. Nature, 2012, 487, 214-218.	13.7	418
16	Liquid-based gating mechanism with tunable multiphase selectivity and antifouling behaviour. Nature, 2015, 519, 70-73.	13.7	394
17	Extremely Stretchable and Fast Selfâ€Healing Hydrogels. Advanced Materials, 2016, 28, 4678-4683.	11.1	394
18	Preventing mussel adhesion using lubricant-infused materials. Science, 2017, 357, 668-673.	6.0	375

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19	Self-Organization of a Mesoscale Bristle into Ordered, Hierarchical Helical Assemblies. Science, 2009, 323, 237-240.	6.0	368
20	Extremely durable biofouling-resistant metallic surfaces based on electrodeposited nanoporous tungstite films on steel. Nature Communications, 2015, 6, 8649.	5.8	326
21	Rationally Designed Complex, Hierarchical Microarchitectures. Science, 2013, 340, 832-837.	6.0	308
22	Bacterial flagella explore microscale hummocks and hollows to increase adhesion. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5624-5629.	3.3	262
23	A colloidoscope of colloid-based porous materials and their uses. Chemical Society Reviews, 2016, 45, 281-322.	18.7	256
24	Color from hierarchy: Diverse optical properties of micron-sized spherical colloidal assemblies. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10845-10850.	3.3	242
25	Oleoplaning droplets on lubricated surfaces. Nature Physics, 2017, 13, 1020-1025.	6.5	238
26	Encoding Complex Wettability Patterns in Chemically Functionalized 3D Photonic Crystals. Journal of the American Chemical Society, 2011, 133, 12430-12432.	6.6	237
27	Dynamic polymer systems with self-regulated secretion for the control of surface properties andÂmaterial healing. Nature Materials, 2015, 14, 790-795.	13.3	237
28	Interplay between materials and microfluidics. Nature Reviews Materials, 2017, 2, .	23.3	236
29	Liquid-Infused Silicone As a Biofouling-Free Medical Material. ACS Biomaterials Science and Engineering, 2015, 1, 43-51.	2.6	235
30	Biological glass fibers: Correlation between optical and structural properties. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 3358-3363.	3.3	233
31	Designing Liquidâ€Infused Surfaces for Medical Applications: A Review. Advanced Materials, 2018, 30, e1802724.	11.1	232
32	Multifunctional ferrofluid-infused surfaces with reconfigurable multiscale topography. Nature, 2018, 559, 77-82.	13.7	229
33	Self-Replenishing Vascularized Fouling-Release Surfaces. ACS Applied Materials & Interfaces, 2014, 6, 13299-13307.	4.0	208
34	Lubricantâ€Infused Nanoparticulate Coatings Assembled by Layerâ€byâ€Layer Deposition. Advanced Functional Materials, 2014, 24, 6658-6667.	7.8	206
35	3D Printable and Reconfigurable Liquid Crystal Elastomers with Lightâ€Induced Shape Memory via Dynamic Bond Exchange. Advanced Materials, 2020, 32, e1905682.	11.1	195
36	Controlling local disorder in self-assembled monolayers by patterning the topography of their metallic supports. Nature, 1998, 394, 868-871.	13.7	186

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37	Stability of Surface-Immobilized Lubricant Interfaces under Flow. Chemistry of Materials, 2015, 27, 1792-1800.	3.2	181
38	Micromechanical properties of biological silica in skeletons of deep-sea sponges. Journal of Materials Research, 2006, 21, 2068-2078.	1.2	171
39	Fluorogel Elastomers with Tunable Transparency, Elasticity, Shapeâ€Memory, and Antifouling Properties. Angewandte Chemie - International Edition, 2014, 53, 4418-4422.	7.2	161
40	Bioâ€inspired Design of Submerged Hydrogelâ€Actuated Polymer Microstructures Operating in Response to pH. Advanced Materials, 2011, 23, 1442-1446.	11.1	149
41	Mechanically robust lattices inspired by deep-sea glass sponges. Nature Materials, 2021, 20, 237-241.	13.3	144
42	Interfacial materials with special wettability. MRS Bulletin, 2013, 38, 366-371.	1.7	137
43	Effects of Laminate Architecture on Fracture Resistance of Sponge Biosilica: Lessons from Nature. Advanced Functional Materials, 2008, 18, 1241-1248.	7.8	132
44	An aptamer-functionalized chemomechanically modulated biomolecule catch-and-release system. Nature Chemistry, 2015, 7, 447-454.	6.6	128
45	Lubricant-infused micro/nano-structured surfaces with tunable dynamic omniphobicity at high temperatures. Applied Physics Letters, 2013, 102, .	1.5	127
46	Wetting in Color: Colorimetric Differentiation of Organic Liquids with High Selectivity. ACS Nano, 2012, 6, 1427-1437.	7.3	118
47	Rational Design of Mechanoâ€Responsive Optical Materials by Fine Tuning the Evolution of Strainâ€Dependent Wrinkling Patterns. Advanced Optical Materials, 2013, 1, 381-388.	3.6	115
48	Spatial Control of Condensation and Freezing on Superhydrophobic Surfaces with Hydrophilic Patches. Advanced Functional Materials, 2013, 23, 4577-4584.	7.8	109
49	Transparent antifouling material for improved operative field visibility in endoscopy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11676-11681.	3.3	106
50	Emerging Trends in Micro- and Nanoscale Technologies in Medicine: From Basic Discoveries to Translation. ACS Nano, 2017, 11, 5195-5214.	7.3	104
51	Origins of Extreme Liquid Repellency on Structured, Flat, and Lubricated Hydrophobic Surfaces. Physical Review Letters, 2018, 120, 244503.	2.9	103
52	Structural colour in colourimetric sensors and indicators. Journal of Materials Chemistry C, 2013, 1, 6075.	2.7	102
53	An immobilized liquid interface prevents device associated bacterial infection inÂvivo. Biomaterials, 2017, 113, 80-92.	5.7	97
54	Role of Flagella in Adhesion of <i>Escherichia coli</i> to Abiotic Surfaces. Langmuir, 2015, 31, 6137-6144.	1.6	96

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55	Calcium Carbonate Storage in Amorphous Form and Its Template-Induced Crystallization. Chemistry of Materials, 2008, 20, 1064-1068.	3.2	91
56	Adaptive all the way down: Building responsive materials from hierarchies of chemomechanical feedback. Chemical Society Reviews, 2013, 42, 7072.	18.7	91
57	Multiresponsive polymeric microstructures with encoded predetermined and self-regulated deformability. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12950-12955.	3.3	91
58	Bioinspired micrograting arrays mimicking the reverse color diffraction elements evolved by the butterfly <i>Pierella luna</i>. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15630-15634.	3.3	89
59	Photothermally triggered actuation of hybrid materials as a new platform for in vitro cell manipulation. Nature Communications, 2017, 8, 14700.	5.8	88
60	Controlled switching of the wetting behavior of biomimetic surfaces with hydrogel-supported nanostructures. Journal of Materials Chemistry, 2008, 18, 3841.	6.7	86
61	Fabrics coated with lubricated nanostructures display robust omniphobicity. Nanotechnology, 2014, 25, 014019.	1.3	86
62	Liquid-induced topological transformations of cellular microstructures. Nature, 2021, 592, 386-391.	13.7	82
63	Enhancement of absorption and color contrast in ultra-thin highly absorbing optical coatings. Applied Physics Letters, 2013, 103, .	1.5	81
64	Stimuli-Responsive Chemomechanical Actuation: A Hybrid Materials Approach. Accounts of Chemical Research, 2014, 47, 530-539.	7.6	81
65	Probing Atomic Distributions in Mono- and Bimetallic Nanoparticles by Supervised Machine Learning. Nano Letters, 2019, 19, 520-529.	4.5	80
66	Multifunctionality of chiton biomineralized armor with an integrated visual system. Science, 2015, 350, 952-956.	6.0	79
67	Bucklingâ€Induced Reversible Symmetry Breaking and Amplification of Chirality Using Supported Cellular Structures. Advanced Materials, 2013, 25, 3380-3385.	11.1	76
68	Tunable Anisotropy in Inverse Opals and Emerging Optical Properties. Chemistry of Materials, 2014, 26, 1622-1628.	3.2	71
69	A highly conspicuous mineralized composite photonic architecture in the translucent shell of the blue-rayed limpet. Nature Communications, 2015, 6, 6322.	5.8	71
70	Film Dynamics and Lubricant Depletion by Droplets Moving on Lubricated Surfaces. Physical Review X, 2018, 8, .	2.8	71
71	Combining Bottomâ€Up Selfâ€Assembly with Topâ€Down Microfabrication to Create Hierarchical Inverse Opals with High Structural Order. Small, 2015, 11, 4334-4340.	5.2	69
72	Depletion of Lubricant from Nanostructured Oil-Infused Surfaces by Pendant Condensate Droplets. ACS Nano, 2020, 14, 8024-8035.	7.3	68

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73	Hydrogel-actuated integrated responsive systems (HAIRS): Moving towards adaptive materials. Current Opinion in Solid State and Materials Science, 2011, 15, 236-245.	5.6	66
74	Controlled growth and form of precipitating microsculptures. Science, 2017, 355, 1395-1399.	6.0	66
75	Maskless photolithography: Embossed photoresist as its own optical element. Applied Physics Letters, 1998, 73, 2893-2895.	1.5	63
76	Control of Shape and Size of Nanopillar Assembly by Adhesion-Mediated Elastocapillary Interaction. ACS Nano, 2010, 4, 6323-6331.	7.3	63
77	Self-regulated non-reciprocal motions in single-material microstructures. Nature, 2022, 605, 76-83.	13.7	63
78	Tailoring re-entrant geometry in inverse colloidal monolayers to control surface wettability. Journal of Materials Chemistry A, 2016, 4, 6853-6859.	5.2	62
79	Achieving High Selectivity for Alkyne Hydrogenation at High Conversions with Compositionally Optimized PdAu Nanoparticle Catalysts in Raspberry Colloid-Templated SiO₂. ACS Catalysis, 2020, 10, 441-450.	5.5	61
80	Patterning Hierarchy in Direct and Inverse Opal Crystals. Small, 2012, 8, 1904-1911.	5.2	55
81	Dynamic air/liquid pockets for guiding microscale flow. Nature Communications, 2018, 9, 733.	5.8	51
82	New functional insights into the internal architecture of the laminated anchor spicules of <i>Euplectella aspergillum</i>. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4976-4981.	3.3	50
83	Dilute Pd/Au Alloy Nanoparticles Embedded in Colloid-Templated Porous SiO₂: Stable Au-Based Oxidation Catalysts. Chemistry of Materials, 2019, 31, 5759-5768.	3.2	50
84	Dilute Alloys Based on Au, Ag, or Cu for Efficient Catalysis: From Synthesis to Active Sites. Chemical Reviews, 2022, 122, 8758-8808.	23.0	50
85	Dynamically Actuated Liquidâ€Infused Poroelastic Film with Precise Control over Droplet Dynamics. Advanced Functional Materials, 2018, 28, 1802632.	7.8	46
86	Micropatterned Hydrogel Surface with High-Aspect-Ratio Features for Cell Guidance and Tissue Growth. ACS Applied Materials & Interfaces, 2016, 8, 21939-21945.	4.0	45
87	The Optical Janus Effect: Asymmetric Structural Color Reflection Materials. Advanced Materials, 2017, 29, 1606876.	11.1	45
88	Three-Phase Co-assembly: In Situ Incorporation of Nanoparticles into Tunable, Highly Ordered, Porous Silica Films. ACS Photonics, 2014, 1, 53-60.	3.2	44
89	Characterization of a Mechanically Tunable Gyroid Photonic Crystal Inspired by the Butterfly <i>Parides Sesostris</i>. Advanced Optical Materials, 2016, 4, 99-105.	3.6	44
90	Designing angle-independent structural colors using Monte Carlo simulations of multiple scattering. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	44

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91	Bacterial Interactions with Immobilized Liquid Layers. Advanced Healthcare Materials, 2017, 6, 1600948.	3.9	42
92	Tunability of liquid-infused silicone materials for biointerfaces. Biointerphases, 2018, 13, 06D401.	0.6	42
93	A Biologically Inspired, Functionally Graded End Effector for Soft Robotics Applications. Soft Robotics, 2017, 4, 317-323.	4.6	41
94	Nanocrystalline Precursors for the Coâ€Assembly of Crackâ€Free Metal Oxide Inverse Opals. Advanced Materials, 2018, 30, e1706329.	11.1	41
95	Enhancing catalytic performance of dilute metal alloy nanomaterials. Communications Chemistry, 2020, 3, .	2.0	41
96	Calcite shape modulation through the lattice mismatch between the self-assembled monolayer template and the nucleated crystal face. CrystEngComm, 2007, 9, 1219.	1.3	40
97	Spiropyran Photoisomerization Dynamics in Multiresponsive Hydrogels. Journal of the American Chemical Society, 2022, 144, 219-227.	6.6	39
98	Non-equilibrium signal integration in hydrogels. Nature Communications, 2020, 11, 386.	5.8	38
99	Unifying Design Strategies in Demosponge and Hexactinellid Skeletal Systems. Journal of Adhesion, 2010, 86, 72-95.	1.8	36
100	Dropwise condensation on hydrophobic bumps and dimples. Applied Physics Letters, 2018, 112, .	1.5	35
101	Viewpoint: Homeostasis as Inspirationâ€"Toward Interactive Materials. Advanced Materials, 2020, 32, e1905554.	11.1	35
102	Decoding reactive structures in dilute alloy catalysts. Nature Communications, 2022, 13, 832.	5.8	35
103	Combinatorial wetting in colour: an optofluidic nose. Lab on A Chip, 2012, 12, 3666.	3.1	33
104	Neural network assisted analysis of bimetallic nanocatalysts using X-ray absorption near edge structure spectroscopy. Physical Chemistry Chemical Physics, 2020, 22, 18902-18910.	1.3	33
105	Low-temperature synthesis of nanoscale silica multilayers â€" atomic layer deposition in a test tube. Journal of Materials Chemistry, 2010, 20, 6009.	6.7	32
106	Microbristle in gels: Toward all-polymer reconfigurable hybrid surfaces. Soft Matter, 2010, 6, 750.	1.2	32
107	Controlling the Stability and Reversibility of Micropillar Assembly by Surface Chemistry. Journal of the American Chemical Society, 2011, 133, 5545-5553.	6.6	31
108	Bioinspired Universal Flexible Elastomerâ€Based Microchannels. Small, 2018, 14, e1702170.	5.2	31

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109	Modular Design of Advanced Catalytic Materials Using Hybrid Organicâ€“Inorganic Raspberry Particles. Advanced Functional Materials, 2018, 28, 1704559.	7.8	31
110	Structurally assisted super black in colourful peacock spiders. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20190589.	1.2	30
111	Metallic Liquid Gating Membranes. ACS Nano, 2020, 14, 2465-2474.	7.3	30
112	An artificial vasculature for adaptive thermal control of windows. Solar Energy Materials and Solar Cells, 2013, 117, 429-436.	3.0	29
113	Hierarchical structural control of visual properties in self-assembled photonic-plasmonic pigments. Optics Express, 2014, 22, 27750.	1.7	29
114	New Architectures for Designed Catalysts: Selective Oxidation using AgAu Nanoparticles on Colloidâ€Templated Silica. Chemistry - A European Journal, 2018, 24, 1833-1837.	1.7	29
115	New Materials through Bioinspiration and Nanoscience. Advanced Functional Materials, 2013, 23, 4398-4399.	7.8	28
116	Dynamics of evaporative colloidal patterning. Physics of Fluids, 2015, 27, .	1.6	28
117	Infused polymers for cell sheet release. Scientific Reports, 2016, 6, 26109.	1.6	28
118	The Elemental Composition of Demospongiae from the Red Sea, Gulf of Aqaba. PLoS ONE, 2014, 9, e95775.	1.1	26
119	Colorimetric Ethanol Indicator Based on Instantaneous, Localized Wetting of a Photonic Crystal. ACS Applied Materials & Interfaces, 2020, 12, 1924-1929.	4.0	26
120	Entropic Control of HD Exchange Rates over Dilute Pd-in-Au Alloy Nanoparticle Catalysts. ACS Catalysis, 2021, 11, 6971-6981.	5.5	25
121	Twist again: Dynamically and reversibly controllable chirality in liquid crystalline elastomer microposts. Science Advances, 2020, 6, eaay5349.	4.7	24
122	Fabrication of Photonic Microbricks via Crack Engineering of Colloidal Crystals. Advanced Functional Materials, 2020, 30, 1908242.	7.8	23
123	Why Are Water Droplets Highly Mobile on Nanostructured Oil-Impregnated Surfaces?. ACS Applied Materials & Interfaces, 2021, 13, 15901-15909.	4.0	23
124	Microstructural design for mechanicalâ€“optical multifunctionality in the exoskeleton of the flower beetle <i>Torynorrhina flammea</i>. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	23
125	Evaporation-Induced Self-Assembly of Metal Oxide Inverse Opals: From Synthesis to Applications. Accounts of Chemical Research, 2022, 55, 1809-1820.	7.6	23
126	Bioinspired Soft Microactuators. Advanced Materials, 2021, 33, e2008558.	11.1	22

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127	Controlling Liquid Crystal Orientations for Programmable Anisotropic Transformations in Cellular Microstructures. Advanced Materials, 2021, 33, e2105024.	11.1	22
128	Photo-tuning of highly selective wetting in inverse opals. Soft Matter, 2014, 10, 1325-1328.	1.2	20
129	Wide-Angle Spectrally Selective Absorbers and Thermal Emitters Based on Inverse Opals. ACS Photonics, 2019, 6, 2607-2611.	3.2	20
130	Finite-difference Time-domain (FDTD) Optical Simulations: A Primer for the Life Sciences and Bio-Inspired Engineering. Micron, 2021, 151, 103160.	1.1	19
131	Chemo-Mechanically Regulated Oscillation of an Enzymatic Reaction. Chemistry of Materials, 2013, 25, 521-523.	3.2	17
132	Microscopic origins of the crystallographically preferred growth in evaporation-induced colloidal crystals. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	17
133	Delamination of a thin sheet from a soft adhesive Winkler substrate. Physical Review E, 2018, 97, 062803.	0.8	15
134	Effect of Surface Chemistry on Incorporation of Nanoparticles within Calcite Single Crystals. Crystal Growth and Design, 2019, 19, 4429-4435.	1.4	14
135	On the mechanism of marine fouling-prevention performance of oil-containing silicone elastomers. Scientific Reports, 2022, 12, .	1.6	14
136	Growth of polygonal rings and wires of CuS on structured surfaces. CrystEngComm, 2011, 13, 1077-1080.	1.3	13
137	Tunable infrared transmission for energy-efficient pneumatic building faÃ§ades. Energy and Buildings, 2020, 226, 110377.	3.1	13
138	Raspberry colloid-templated approach for the synthesis of palladium-based oxidation catalysts with enhanced hydrothermal stability and low-temperature activity. Catalysis Today, 2021, 360, 241-251.	2.2	13
139	Dilute Pd-in-Au alloy RCT-SiO2 catalysts for enhanced oxidative methanol coupling. Journal of Catalysis, 2021, 404, 943-953.	3.1	13
140	Multifunctional actuation systems responding to chemical gradients. Soft Matter, 2012, 8, 8289.	1.2	12
141	Designing a gelâ€“fiber composite to extract nanoparticles from solution. Soft Matter, 2015, 11, 8692-8700.	1.2	12
142	New Role of Pd Hydride as a Sensor of Surface Pd Distributions in Pdâ^'Au Catalysts. ChemCatChem, 2020, 12, 717-721.	1.8	12
143	Silicaâ€“titania hybrids for structurally robust inverse opals with controllable refractive index. Journal of Materials Chemistry C, 2020, 8, 109-116.	2.7	12
144	Opto-chemo-mechanical transduction in photoresponsive gels elicits switchable self-trapped beams with remote interactions. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3953-3959.	3.3	12

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145	Selfâ€Stratifying Porous Silicones with Enhanced Liquid Infusion and Protective Skin Layer for Biofouling Prevention. Advanced Materials Interfaces, 2021, 8, 2000359.	1.9	12
146	The dynamic behavior of dilute metallic alloy Pd_xAu_{1âˆ’x}/SiO₂ raspberry colloid templated catalysts under CO oxidation. Catalysis Science and Technology, 2021, 11, 4072-4082.	2.1	12
147	Enhanced condensation heat transfer using porous silica inverse opal coatings on copper tubes. Scientific Reports, 2021, 11, 10675.	1.6	12
148	Two-parameter sequential adsorption model applied to microfiber clustering. Soft Matter, 2010, 6, 2421.	1.2	11
149	Computational modeling of oscillating fins that â€œcatch and releaseâ€• targeted nanoparticles in bilayer flows. Soft Matter, 2016, 12, 1374-1384.	1.2	11
150	Tuning and Freezing Disorder in Photonic Crystals using Percolation Lithography. Scientific Reports, 2016, 6, 19542.	1.6	10
151	On the Origin of Sinterâ€Resistance and Catalyst Accessibility in Raspberryâ€Colloidâ€Templated Catalyst Design. Advanced Functional Materials, 2021, 31, 2106876.	7.8	10
152	Patterned crystal growth and heat wave generation in hydrogels. Nature Communications, 2022, 13, 259.	5.8	10
153	Harnessing structural instability and material instability in the hydrogel-actuated integrated responsive structures (HAIRS). Extreme Mechanics Letters, 2017, 13, 84-90.	2.0	9
154	Inverting the Swelling Trends in Modular Selfâ€Oscillating Gels Crosslinked by Redoxâ€Active Metal Bipyridine Complexes. Advanced Functional Materials, 2018, 28, 1704205.	7.8	9
155	Harnessing Cooperative Interactions between Thermoresponsive Aptamers and Gels To Trap and Release Nanoparticles. ACS Applied Materials & Interfaces, 2016, 8, 30475-30483.	4.0	8
156	Patterning non-equilibrium morphologies in stimuli-responsive gels through topographical confinement. Soft Matter, 2020, 16, 1463-1472.	1.2	7
157	Controllable growth of interpenetrating or random copolymer networks. Soft Matter, 2021, 17, 7177-7187.	1.2	7
158	Highly Ordered Inverse Opal Structures Synthesized from Shapeâ€Controlled Nanocrystal Building Blocks. Angewandte Chemie - International Edition, 2022, 61, .	7.2	7
159	Dynamic Self-Repairing Hybrid Liquid-in-Solid Protective Barrier for Cementitious Materials. ACS Applied Materials & Interfaces, 2020, 12, 31922-31932.	4.0	6
160	Inverse Opal Films for Medical Sensing: Application in Diagnosis of Neonatal Jaundice. Advanced Healthcare Materials, 2021, 10, e2001326.	3.9	5
161	Mapping blood biochemistry by Raman spectroscopy at the cellular level. Chemical Science, 2021, 13, 133-140.	3.7	5
162	Biomimetic Nanostructured Surfaces with Designer Mechanics and Geometry for Broad Applications. Materials Research Society Symposia Proceedings, 2009, 1236, 1.	0.1	4

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163	Tunable Long-Range Interactions between Self-Trapped Beams driven by the Thermal Response of Photoresponsive Hydrogels. Chemistry of Materials, 2020, 32, 10594-10600.	3.2	4
164	Beyond biotemplating: multiscale porous inorganic materials with high catalytic efficiency. Chemical Communications, 2020, 56, 3389-3392.	2.2	4
165	Quantifying oxygen induced surface enrichment of a dilute PdAu alloy catalyst. Catalysis Science and Technology, 2021, 11, 7530-7534.	2.1	4
166	Stable Liquid Jets Bouncing off Soft Gels. Physical Review Letters, 2018, 120, 028006.	2.9	3
167	Using Dissipative Particle Dynamics to Model Effects of Chemical Reactions Occurring within Hydrogels. Nanomaterials, 2021, 11, 2764.	1.9	3
168	Homeostasis: Viewpoint: Homeostasis as Inspirationâ€"Toward Interactive Materials (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	11.1	2
169	Bioinspired design and optimization for thin film wearable and building cooling systems. Bioinspiration and Biomimetics, 2021, , .	1.5	2
170	Opal Crystals: Patterning Hierarchy in Direct and Inverse Opal Crystals (Small 12/2012). Small, 2012, 8, 1798-1798.	5.2	1
171	Photonic Microbricks: Fabrication of Photonic Microbricks via Crack Engineering of Colloidal Crystals (Adv. Funct. Mater. 26/2020). Advanced Functional Materials, 2020, 30, 2070172.	7.8	1
172	Gradient Droplet Arrays by Accelerationâ€Mode Dipâ€Coating. Advanced Materials Interfaces, 2022, 9, .	1.9	1
173	New Architectures for Designed Catalysts: Selective Oxidation using AgAu Nanoparticles on Colloid-Templated Silica. Chemistry - A European Journal, 2018, 24, 1743-1743.	1.7	0
174	Droplet Dynamics: Dynamically Actuated Liquid-Infused Poroelastic Film with Precise Control over Droplet Dynamics (Adv. Funct. Mater. 39/2018). Advanced Functional Materials, 2018, 28, 1870277.	7.8	0
175	MORPHING HARD AND SOFT BIO-INSPIRED MATERIALS BY REACTION-TRANSPORT DYNAMICS. , 2021, , .		0
176	Highly Ordered Inverse Opal Structures Synthesized from Shapeâ€Controlled Nanocrystal Building Blocks. Angewandte Chemie, 0, , .	1.6	0