Joanna Aizenberg

List of Publications by Year in Descending Order

168 papers	18,932 citations	62 h-index	137 g-index
189 ext. papers	21,814 ext. citations	15.5 avg, IF	7 L-index

#	Paper	IF	Citations
168	Patterned crystal growth and heat wave generation in hydrogels.. *Nature Communications*, **2022**, 13, 259	17.4	3
167	Decoding reactive structures in dilute alloy catalysts.. *Nature Communications*, **2022**, 13, 832	17.4	9
166	Self-regulated non-reciprocal motions in single-material microstructures.. *Nature*, **2022**, 605, 76-83	50.4	8
165	Mapping blood biochemistry by Raman spectroscopy at the cellular level.. *Chemical Science*, **2021**, 13, 133-140	9.4	
164	Why Are Water Droplets Highly Mobile on Nanostructured Oil-Impregnated Surfaces?. *ACS Applied Materials & Interfaces*, **2021**, 13, 15901-15909	9.5	8
163	Liquid-induced topological transformations of cellular microstructures. *Nature*, **2021**, 592, 386-391	50.4	21
162	Bioinspired Soft Microactuators. *Advanced Materials*, **2021**, 33, e2008558	24	8
161	Enhanced condensation heat transfer using porous silica inverse opal coatings on copper tubes. *Scientific Reports*, **2021**, 11, 10675	4.9	3
160	Entropic Control of HD Exchange Rates over Dilute Pd-in-Au Alloy Nanoparticle Catalysts. *ACS Catalysis*, **2021**, 11, 6971-6981	13.1	10
159	Dilute Pd-in-Au alloy RCT-SiO2 catalysts for enhanced oxidative methanol coupling. *Journal of Catalysis*, **2021**,	7.3	5
158	Microstructural design for mechanical-optical multifunctionality in the exoskeleton of the flower beetle. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	5
157	Self-Stratifying Porous Silicones with Enhanced Liquid Infusion and Protective Skin Layer for Biofouling Prevention. *Advanced Materials Interfaces*, **2021**, 8, 2000359	4.6	7
156	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	5.3	8
155	Inverse Opal Films for Medical Sensing: Application in Diagnosis of Neonatal Jaundice. *Advanced Healthcare Materials*, **2021**, 10, e2001326	10.1	2
154	Mechanically robust lattices inspired by deep-sea glass sponges. *Nature Materials*, **2021**, 20, 237-241	27	46
153	Controllable growth of interpenetrating or random copolymer networks. *Soft Matter*, **2021**, 17, 7177-7187	3.6	0
152	The dynamic behavior of dilute metallic alloy PdxAu1−x/SiO2 raspberry colloid templated catalysts under CO oxidation. *Catalysis Science and Technology*, **2021**, 11, 4072-4082	5.5	6

151	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,	11.5	5
150	Controlling Liquid Crystal Orientations for Programmable Anisotropic Transformations in Cellular Microstructures. *Advanced Materials*, **2021**, 33, e2105024	24	4
149	Finite-difference Time-domain (FDTD) Optical Simulations: A Primer for the Life Sciences and Bio-Inspired Engineering. *Micron*, **2021**, 151, 103160	2.3	2
148	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,	11.5	17
147	Spiropyran Photoisomerization Dynamics in Multiresponsive Hydrogels.. *Journal of the American Chemical Society*, **2021**,	16.4	6
146	Tunable Long-Range Interactions between Self-Trapped Beams driven by the Thermal Response of Photoresponsive Hydrogels. *Chemistry of Materials*, **2020**, 32, 10594-10600	9.6	2
145	Neural network assisted analysis of bimetallic nanocatalysts using X-ray absorption near edge structure spectroscopy. *Physical Chemistry Chemical Physics*, **2020**, 22, 18902-18910	3.6	16
144	Homeostasis: Viewpoint: Homeostasis as Inspiration□oward Interactive Materials (Adv. Mater. 20/2020). *Advanced Materials*, **2020**, 32, 2070159	24	2
143	Dynamic Self-Repairing Hybrid Liquid-in-Solid Protective Barrier for Cementitious Materials. *ACS Applied Materials & Interfaces*, **2020**, 12, 31922-31932	9.5	2
142	Depletion of Lubricant from Nanostructured Oil-Infused Surfaces by Pendant Condensate Droplets. *ACS Nano*, **2020**, 14, 8024-8035	16.7	33
141	Photonic Microbricks: Fabrication of Photonic Microbricks via Crack Engineering of Colloidal Crystals (Adv. Funct. Mater. 26/2020). *Advanced Functional Materials*, **2020**, 30, 2070172	15.6	
140	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	11.5	6
139	Beyond biotemplating: multiscale porous inorganic materials with high catalytic efficiency. *Chemical Communications*, **2020**, 56, 3389-3392	5.8	3
138	Non-equilibrium signal integration in hydrogels. *Nature Communications*, **2020**, 11, 386	17.4	17
137	Metallic Liquid Gating Membranes. *ACS Nano*, **2020**, 14, 2465-2474	16.7	17
136	Twist again: Dynamically and reversibly controllable chirality in liquid crystalline elastomer microposts. *Science Advances*, **2020**, 6, eaay5349	14.3	12
135	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	13.1	36
134	New Role of Pd Hydride as a Sensor of Surface Pd Distributions in Pd□u Catalysts. *ChemCatChem*, **2020**, 12, 717-721	5.2	6

133	3D Printable and Reconfigurable Liquid Crystal Elastomers with Light-Induced Shape Memory via Dynamic Bond Exchange. *Advanced Materials*, **2020**, 32, e1905682	24	107
132	Viewpoint: Homeostasis as Inspiration-Toward Interactive Materials. *Advanced Materials*, **2020**, 32, e1905554	24	18
131	Silica–titania hybrids for structurally robust inverse opals with controllable refractive index. *Journal of Materials Chemistry C*, **2020**, 8, 109-116	7.1	4
130	Patterning non-equilibrium morphologies in stimuli-responsive gels through topographical confinement. *Soft Matter*, **2020**, 16, 1463-1472	3.6	4
129	Colorimetric Ethanol Indicator Based on Instantaneous, Localized Wetting of a Photonic Crystal. *ACS Applied Materials & Interfaces*, **2020**, 12, 1924-1929	9.5	14
128	Fabrication of Photonic Microbricks via Crack Engineering of Colloidal Crystals. *Advanced Functional Materials*, **2020**, 30, 1908242	15.6	10
127	Tunable infrared transmission for energy-efficient pneumatic building façades. *Energy and Buildings* , **2020**, 226, 110377	7	6
126	Enhancing catalytic performance of dilute metal alloy nanomaterials. *Communications Chemistry*, **2020**, 3,	6.3	20
125	Structurally assisted super black in colourful peacock spiders. *Proceedings of the Royal Society B: Biological Sciences*, **2019**, 286, 20190589	4.4	20
124	Dilute Pd/Au Alloy Nanoparticles Embedded in Colloid-Templated Porous SiO2: Stable Au-Based Oxidation Catalysts. *Chemistry of Materials*, **2019**, 31, 5759-5768	9.6	34
123	Effect of Surface Chemistry on Incorporation of Nanoparticles within Calcite Single Crystals. *Crystal Growth and Design*, **2019**, 19, 4429-4435	3.5	11
122	Wide-Angle Spectrally Selective Absorbers and Thermal Emitters Based on Inverse Opals. *ACS Photonics*, **2019**, 6, 2607-2611	6.3	10
121	Probing Atomic Distributions in Mono- and Bimetallic Nanoparticles by Supervised Machine Learning. *Nano Letters*, **2019**, 19, 520-529	11.5	54
120	Dynamic air/liquid pockets for guiding microscale flow. *Nature Communications*, **2018**, 9, 733	17.4	40
119	New Architectures for Designed Catalysts: Selective Oxidation using AgAu Nanoparticles on Colloid-Templated Silica. *Chemistry - A European Journal*, **2018**, 24, 1743-1743	4.8	
118	Dropwise condensation on hydrophobic bumps and dimples. *Applied Physics Letters*, **2018**, 112, 151605	3.4	29
117	Nanocrystalline Precursors for the Co-Assembly of Crack-Free Metal Oxide Inverse Opals. *Advanced Materials*, **2018**, 30, e1706329	24	26
116	Stable Liquid Jets Bouncing off Soft Gels. *Physical Review Letters*, **2018**, 120, 028006	7.4	2

115	Bioinspired Universal Flexible Elastomer-Based Microchannels. *Small*, **2018**, 14, e1702170	11	28
114	Inverting the Swelling Trends in Modular Self-Oscillating Gels Crosslinked by Redox-Active Metal Bipyridine Complexes. *Advanced Functional Materials*, **2018**, 28, 1704205	15.6	5
113	New Architectures for Designed Catalysts: Selective Oxidation using AgAu Nanoparticles on Colloid-Templated Silica. *Chemistry - A European Journal*, **2018**, 24, 1833-1837	4.8	18
112	Dynamically Actuated Liquid-Infused Poroelastic Film with Precise Control over Droplet Dynamics. *Advanced Functional Materials*, **2018**, 28, 1802632	15.6	33
111	Tunability of liquid-infused silicone materials for biointerfaces. *Biointerphases*, **2018**, 13, 06D401	1.8	20
110	Origins of Extreme Liquid Repellency on Structured, Flat, and Lubricated Hydrophobic Surfaces. *Physical Review Letters*, **2018**, 120, 244503	7.4	60
109	Delamination of a thin sheet from a soft adhesive Winkler substrate. *Physical Review E*, **2018**, 97, 062803	2.4	11
108	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	15.6	
107	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	11.5	61
106	Film Dynamics and Lubricant Depletion by Droplets Moving on Lubricated Surfaces. *Physical Review X*, **2018**, 8,	9.1	48
105	Designing Liquid-Infused Surfaces for Medical Applications: A Review. *Advanced Materials*, **2018**, 30, e1802724	24	141
104	Multifunctional ferrofluid-infused surfaces with reconfigurable multiscale topography. *Nature*, **2018**, 559, 77-82	50.4	146
103	Modular Design of Advanced Catalytic Materials Using Hybrid Organic–Inorganic Raspberry Particles. *Advanced Functional Materials*, **2018**, 28, 1704559	15.6	21
102	Harnessing structural instability and material instability in the hydrogel-actuated integrated responsive structures (HAIRS). *Extreme Mechanics Letters*, **2017**, 13, 84-90	3.9	8
101	Interplay between materials and microfluidics. *Nature Reviews Materials*, **2017**, 2,	73.3	179
100	Emerging Trends in Micro- and Nanoscale Technologies in Medicine: From Basic Discoveries to Translation. *ACS Nano*, **2017**, 11, 5195-5214	16.7	78
99	Controlled growth and form of precipitating microsculptures. *Science*, **2017**, 355, 1395-1399	33.3	55
98	Photothermally triggered actuation of hybrid materials as a new platform for in vitro cell manipulation. *Nature Communications*, **2017**, 8, 14700	17.4	69

97	Bacterial Interactions with Immobilized Liquid Layers. *Advanced Healthcare Materials*, **2017**, 6, 1600948	10.1	33
96	A Biologically Inspired, Functionally Graded End Effector for Soft Robotics Applications. *Soft Robotics*, **2017**, 4, 317-323	9.2	33
95	Preventing mussel adhesion using lubricant-infused materials. *Science*, **2017**, 357, 668-673	33.3	252
94	Oleoplaning droplets on lubricated surfaces. *Nature Physics*, **2017**, 13, 1020-1025	16.2	170
93	The Optical Janus Effect: Asymmetric Structural Color Reflection Materials. *Advanced Materials*, **2017**, 29, 1606876	24	32
92	An immobilized liquid interface prevents device associated bacterial infection in vivo. *Biomaterials*, **2017**, 113, 80-92	15.6	68
91	Harnessing Cooperative Interactions between Thermoresponsive Aptamers and Gels To Trap and Release Nanoparticles. *ACS Applied Materials & Interfaces*, **2016**, 8, 30475-30483	9.5	5
90	Infused polymers for cell sheet release. *Scientific Reports*, **2016**, 6, 26109	4.9	23
89	Design of anti-icing surfaces: smooth, textured or slippery?. *Nature Reviews Materials*, **2016**, 1,	73.3	728
88	Tuning and Freezing Disorder in Photonic Crystals using Percolation Lithography. *Scientific Reports*, **2016**, 6, 19542	4.9	8
87	Extremely Stretchable and Fast Self-Healing Hydrogels. *Advanced Materials*, **2016**, 28, 4678-83	24	315
86	Computational modeling of oscillating fins that "catch and release" targeted nanoparticles in bilayer flows. *Soft Matter*, **2016**, 12, 1374-84	3.6	7
85	Condensation on slippery asymmetric bumps. *Nature*, **2016**, 531, 78-82	50.4	481
84	Tailoring re-entrant geometry in inverse colloidal monolayers to control surface wettability. *Journal of Materials Chemistry A*, **2016**, 4, 6853-6859	13	49
83	A colloidoscope of colloid-based porous materials and their uses. *Chemical Society Reviews*, **2016**, 45, 281-322	58.5	211
82	Micropatterned Hydrogel Surface with High-Aspect-Ratio Features for Cell Guidance and Tissue Growth. *ACS Applied Materials & Interfaces*, **2016**, 8, 21939-45	9.5	41
81	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	11.5	83
80	Characterization of a Mechanically Tunable Gyroid Photonic Crystal Inspired by the Butterfly Parides Sesostris. *Advanced Optical Materials*, **2016**, 4, 99-105	8.1	29

79	Liquid-based gating mechanism with tunable multiphase selectivity and antifouling behaviour. *Nature*, **2015**, 519, 70-3	50.4	310
78	Dynamic polymer systems with self-regulated secretion for the control of surface properties and material healing. *Nature Materials*, **2015**, 14, 790-5	27	188
77	An aptamer-functionalized chemomechanically modulated biomolecule catch-and-release system. *Nature Chemistry*, **2015**, 7, 447-54	17.6	98
76	Role of Flagella in Adhesion of Escherichia coli to Abiotic Surfaces. *Langmuir*, **2015**, 31, 6137-44	4	62
75	New functional insights into the internal architecture of the laminated anchor spicules of Euplectella aspergillum. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 4976-81	11.5	33
74	Dynamics of evaporative colloidal patterning. *Physics of Fluids*, **2015**, 27, 092105	4.4	22
73	Extremely durable biofouling-resistant metallic surfaces based on electrodeposited nanoporous tungstite films on steel. *Nature Communications*, **2015**, 6, 8649	17.4	253
72	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, 10845-50	11.5	191
71	Designing a gel-fiber composite to extract nanoparticles from solution. *Soft Matter*, **2015**, 11, 8692-700	3.6	9
70	Multifunctionality of chiton biomineralized armor with an integrated visual system. *Science*, **2015**, 350, 952-6	33.3	51
69	Liquid-Infused Silicone As a Biofouling-Free Medical Material. *ACS Biomaterials Science and Engineering*, **2015**, 1, 43-51	5.5	185
68	Combining Bottom-Up Self-Assembly with Top-Down Microfabrication to Create Hierarchical Inverse Opals with High Structural Order. *Small*, **2015**, 11, 4334-40	11	56
67	A highly conspicuous mineralized composite photonic architecture in the translucent shell of the blue-rayed limpet. *Nature Communications*, **2015**, 6, 6322	17.4	59
66	Stability of Surface-Immobilized Lubricant Interfaces under Flow. *Chemistry of Materials*, **2015**, 27, 1792-1800	9.8	136
65	Fluorogel elastomers with tunable transparency, elasticity, shape-memory, and antifouling properties. *Angewandte Chemie - International Edition*, **2014**, 53, 4418-22	16.4	123
64	Fabrics coated with lubricated nanostructures display robust omniphobicity. *Nanotechnology*, **2014**, 25, 014019	3.4	83
63	Stimuli-responsive chemomechanical actuation: a hybrid materials approach. *Accounts of Chemical Research*, **2014**, 47, 530-9	24.3	72
62	Bioinspired micrograting arrays mimicking the reverse color diffraction elements evolved by the butterfly Pierella luna. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 15630-4	11.5	78

61	A bioinspired omniphobic surface coating on medical devices prevents thrombosis and biofouling. *Nature Biotechnology*, **2014**, 32, 1134-40	44.5	433
60	Photo-tuning of highly selective wetting in inverse opals. *Soft Matter*, **2014**, 10, 1325-8	3.6	18
59	Self-replenishing vascularized fouling-release surfaces. *ACS Applied Materials & Interfaces*, **2014**, 6, 13299-307	9.5	157
58	Tunable Anisotropy in Inverse Opals and Emerging Optical Properties. *Chemistry of Materials*, **2014**, 26, 1622-1628	9.6	67
57	Three-Phase Co-assembly: In Situ Incorporation of Nanoparticles into Tunable, Highly Ordered, Porous Silica Films. *ACS Photonics*, **2014**, 1, 53-60	6.3	41
56	Fluorogel Elastomers with Tunable Transparency, Elasticity, Shape-Memory, and Antifouling Properties. *Angewandte Chemie*, **2014**, 126, 4507-4511	3.6	8
55	The elemental composition of demospongiae from the Red Sea, Gulf of Aqaba. *PLoS ONE*, **2014**, 9, e95735	3.7	20
54	Hierarchical structural control of visual properties in self-assembled photonic-plasmonic pigments. *Optics Express*, **2014**, 22, 27750-68	3.3	24
53	Lubricant-Infused Nanoparticulate Coatings Assembled by Layer-by-Layer Deposition. *Advanced Functional Materials*, **2014**, 24, 6658-6667	15.6	173
52	An artificial vasculature for adaptive thermal control of windows. *Solar Energy Materials and Solar Cells*, **2013**, 117, 429-436	6.4	24
51	Structural colour in colourimetric sensors and indicators. *Journal of Materials Chemistry C*, **2013**, 1, 6075	7.1	90
50	Spatial Control of Condensation and Freezing on Superhydrophobic Surfaces with Hydrophilic Patches. *Advanced Functional Materials*, **2013**, 23, 4577-4584	15.6	90
49	Lubricant-infused micro/nano-structured surfaces with tunable dynamic omniphobicity at high temperatures. *Applied Physics Letters*, **2013**, 102, 231603	3.4	105
48	Hierarchical or not? Effect of the length scale and hierarchy of the surface roughness on omniphobicity of lubricant-infused substrates. *Nano Letters*, **2013**, 13, 1793-9	11.5	351
47	Chemo-Mechanically Regulated Oscillation of an Enzymatic Reaction. *Chemistry of Materials*, **2013**, 25, 521-523	9.6	17
46	Adaptive fluid-infused porous films with tunable transparency and wettability. *Nature Materials*, **2013**, 12, 529-34	27	400
45	Rational Design of Mechano-Responsive Optical Materials by Fine Tuning the Evolution of Strain-Dependent Wrinkling Patterns. *Advanced Optical Materials*, **2013**, 1, 381-388	8.1	103
44	Rationally designed complex, hierarchical microarchitectures. *Science*, **2013**, 340, 832-7	33.3	275

43	Interfacial materials with special wettability. *MRS Bulletin*, **2013**, 38, 366-371	3.2	118
42	Adaptive all the way down: building responsive materials from hierarchies of chemomechanical feedback. *Chemical Society Reviews*, **2013**, 42, 7072-85	58.5	77
41	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, 5624-9	11.5	188
40	Enhancement of absorption and color contrast in ultra-thin highly absorbing optical coatings. *Applied Physics Letters*, **2013**, 103, 101104	3.4	69
39	Buckling-induced reversible symmetry breaking and amplification of chirality using supported cellular structures. *Advanced Materials*, **2013**, 25, 3380-5	24	64
38	Combinatorial wetting in colour: an optofluidic nose. *Lab on A Chip*, **2012**, 12, 3666-9	7.2	31
37	Wetting in color: colorimetric differentiation of organic liquids with high selectivity. *ACS Nano*, **2012**, 6, 1427-37	16.7	106
36	Multifunctional actuation systems responding to chemical gradients. *Soft Matter*, **2012**, 8, 8289	3.6	11
35	Patterning hierarchy in direct and inverse opal crystals. *Small*, **2012**, 8, 1904-11	11	50
34	Opal Crystals: Patterning Hierarchy in Direct and Inverse Opal Crystals (Small 12/2012). *Small*, **2012**, 8, 1798-1798	11	1
33	Synthetic homeostatic materials with chemo-mechano-chemical self-regulation. *Nature*, **2012**, 487, 214-8	50.4	333
32	Liquid-infused nanostructured surfaces with extreme anti-ice and anti-frost performance. *ACS Nano* , **2012**, 6, 6569-77	16.7	907
31	Liquid-infused structured surfaces with exceptional anti-biofouling performance. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 13182-7	11.5	623
30	Encoding complex wettability patterns in chemically functionalized 3D photonic crystals. *Journal of the American Chemical Society*, **2011**, 133, 12430-2	16.4	209
29	Bioinspired self-repairing slippery surfaces with pressure-stable omniphobicity. *Nature*, **2011**, 477, 443-7	50.4	2401
28	Hydrogel-actuated integrated responsive systems (HAIRS): Moving towards adaptive materials. *Current Opinion in Solid State and Materials Science*, **2011**, 15, 236-245	12	60
27	Growth of polygonal rings and wires of CuS on structured surfaces. *CrystEngComm*, **2011**, 13, 1077-1080	3.3	11
26	Bio-inspired design of submerged hydrogel-actuated polymer microstructures operating in response to pH. *Advanced Materials*, **2011**, 23, 1442-6	24	124

25	Direct Writing and Actuation of Three-Dimensionally Patterned Hydrogel Pads on Micropillar Supports. *Angewandte Chemie*, **2011**, 123, 9528-9532	3.6	11
24	Controlling the stability and reversibility of micropillar assembly by surface chemistry. *Journal of the American Chemical Society*, **2011**, 133, 5545-53	16.4	26
23	Control of shape and size of nanopillar assembly by adhesion-mediated elastocapillary interaction. *ACS Nano*, **2010**, 4, 6323-31	16.7	57
22	Low-temperature synthesis of nanoscale silica multilayers atomic layer deposition in a test tube. *Journal of Materials Chemistry*, **2010**, 20, 6009		30
21	Unifying Design Strategies in Demosponge and Hexactinellid Skeletal Systems **2010**, 86, 72-95		28
20	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, 10354-9	11.5	390
19	Microbristle in gels: Toward all-polymer reconfigurable hybrid surfaces. *Soft Matter*, **2010**, 6, 750	3.6	31
18	Two-parameter sequential adsorption model applied to microfiber clustering. *Soft Matter*, **2010**, 6, 2421	3.6	10
17	Biomimetic Nanostructured Surfaces with Designer Mechanics and Geometry for Broad Applications. *Materials Research Society Symposia Proceedings*, **2009**, 1236, 1		4
16	Self-organization of a mesoscale bristle into ordered, hierarchical helical assemblies. *Science*, **2009**, 323, 237-40	33.3	323
15	Calcium Carbonate Storage in Amorphous Form and Its Template-Induced Crystallization *Chemistry of Materials*, **2008**, 20, 1064-1068	9.6	88
14	Controlled switching of the wetting behavior of biomimetic surfaces with hydrogel-supported nanostructures. *Journal of Materials Chemistry*, **2008**, 18, 3841		78
13	Effects of Laminate Architecture on Fracture Resistance of Sponge Biosilica: Lessons from Nature. *Advanced Functional Materials*, **2008**, 18, 1241-1248	15.6	99
12	Calcite shape modulation through the lattice mismatch between the self-assembled monolayer template and the nucleated crystal face. *CrystEngComm*, **2007**, 9, 1219	3.3	40
11	Reversible switching of hydrogel-actuated nanostructures into complex micropatterns. *Science*, **2007**, 315, 487-90	33.3	488
10	Micromechanical properties of biological silica in skeletons of deep-sea sponges. *Journal of Materials Research*, **2006**, 21, 2068-2078	2.5	139
9	Skeleton of Euplectella sp.: structural hierarchy from the nanoscale to the macroscale. *Science*, **2005**, 309, 275-8	33.3	871
8	Biological glass fibers: correlation between optical and structural properties. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 3358-63	11.5	196

List of Publications

7	Calcitic microlenses as part of the photoreceptor system in brittlestars. *Nature*, **2001**, 412, 819-22	50.4	509
6	Control of crystal nucleation by patterned self-assembled monolayers. *Nature*, **1999**, 398, 495-498	50.4	741
5	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	16.4	424
4	Controlling local disorder in self-assembled monolayers by patterning the topography of their metallic supports. *Nature*, **1998**, 394, 868-871	50.4	170
3	Maskless photolithography: Embossed photoresist as its own optical element. *Applied Physics Letters*, **1998**, 73, 2893-2895	3.4	49
2	Quantifying oxygen induced surface enrichment of a dilute PdAu alloy catalyst. *Catalysis Science and Technology*,	5.5	0
1	On the Origin of Sinter-Resistance and Catalyst Accessibility in Raspberry-Colloid-Templated Catalyst Design. *Advanced Functional Materials*,2106876	15.6	3