

Lauren D Zarzar

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3969668/publications.pdf>

Version: 2024-02-01

37
papers

2,055
citations

430874

18
h-index

377865

34
g-index

49
all docs

49
docs citations

49
times ranked

2769
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthetic homeostatic materials with chemo-mechano-chemical self-regulation. <i>Nature</i> , 2012, 487, 214-218.	27.8	418
2	Dynamically reconfigurable complex emulsions via tunable interfacial tensions. <i>Nature</i> , 2015, 518, 520-524.	27.8	325
3	Colouration by total internal reflection and interference at microscale concave interfaces. <i>Nature</i> , 2019, 566, 523-527.	27.8	151
4	Bio-inspired Design of Submerged Hydrogel-Actuated Polymer Microstructures Operating in Response to pH. <i>Advanced Materials</i> , 2011, 23, 1442-1446.	21.0	149
5	Reconfigurable and responsive droplet-based compound micro-lenses. <i>Nature Communications</i> , 2017, 8, 14673.	12.8	119
6	Predator-prey interactions between droplets driven by non-reciprocal oil exchange. <i>Nature Chemistry</i> , 2020, 12, 1136-1142.	13.6	108
7	Photothermally triggered actuation of hybrid materials as a new platform for in vitro cell manipulation. <i>Nature Communications</i> , 2017, 8, 14700.	12.8	88
8	Stimuli-Responsive Chemomechanical Actuation: A Hybrid Materials Approach. <i>Accounts of Chemical Research</i> , 2014, 47, 530-539.	15.6	81
9	Hydrogel-actuated integrated responsive systems (HAIRS): Moving towards adaptive materials. <i>Current Opinion in Solid State and Materials Science</i> , 2011, 15, 236-245.	11.5	66
10	Structural Transformation by Electrodeposition on Patterned Substrates (STEPS): A New Versatile Nanofabrication Method. <i>Nano Letters</i> , 2012, 12, 527-533.	9.1	55
11	Multiphoton Lithography of Nanocrystalline Platinum and Palladium for Site-Specific Catalysis in 3D Microenvironments. <i>Journal of the American Chemical Society</i> , 2012, 134, 4007-4010.	13.7	54
12	Optical visualization and quantification of enzyme activity using dynamic droplet lenses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 3821-3825.	7.1	48
13	Direct Writing and Actuation of Three-Dimensionally Patterned Hydrogel Pads on Micropillar Supports. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 9356-9360.	13.8	40
14	Reconfigurable complex emulsions: Design, properties, and applications. <i>Chemical Physics Reviews</i> , 2020, 1, 011301.	5.7	34
15	Microbristle in gels: Toward all-polymer reconfigurable hybrid surfaces. <i>Soft Matter</i> , 2010, 6, 750.	2.7	32
16	Chemical design of self-propelled Janus droplets. <i>Matter</i> , 2022, 5, 616-633.	10.0	32
17	Tunable and Responsive Structural Color from Polymeric Microstructured Surfaces Enabled by Interference of Totally Internally Reflected Light. , 2020, 2, 754-763.		26
18	Developmentally-Inspired Shrink-Wrap Polymers for Mechanical Induction of Tissue Differentiation. <i>Advanced Materials</i> , 2014, 26, 3253-3257.	21.0	25

#	ARTICLE	IF	CITATIONS
19	Using Laser-Induced Thermal Voxels to Pattern Diverse Materials at the Solid-Liquid Interface. ACS Applied Materials & Interfaces, 2016, 8, 21134-21139.	8.0	25
20	Interfacially-adsorbed particles enhance the self-propulsion of oil droplets in aqueous surfactant. Soft Matter, 2021, 17, 6742-6750.	2.7	19
21	Green synthesis of Zr-based metal-organic framework hydrogel composites and their enhanced adsorptive properties. Inorganic Chemistry Frontiers, 2020, 7, 4813-4821.	6.0	18
22	Chemo-Mechanically Regulated Oscillation of an Enzymatic Reaction. Chemistry of Materials, 2013, 25, 521-523.	6.7	17
23	Direct Laser Writing from Aqueous Precursors for Nano to Microscale Topographical Control, Integration, and Synthesis of Nanocrystalline Mixed Metal Oxides. ACS Applied Nano Materials, 2019, 2, 2581-2586.	5.0	17
24	Interfacial Polymerization on Dynamic Complex Colloids: Creating Stabilized Janus Droplets. ACS Applied Materials & Interfaces, 2017, 9, 7804-7811.	8.0	14
25	Chemically Tuning Attractive and Repulsive Interactions between Solubilizing Oil Droplets. Angewandte Chemie - International Edition, 2022, 61, .	13.8	14
26	Multifunctional actuation systems responding to chemical gradients. Soft Matter, 2012, 8, 8289.	2.7	12
27	Particle Stabilization of Oil-Fluorocarbon Interfaces and Effects on Multiphase Oil-in-Water Complex Emulsion Morphology and Reconfigurability. Langmuir, 2020, 36, 7083-7090.	3.5	11
28	Single-Step Direct Laser Writing of Multimetal Oxygen Evolution Catalysts from Liquid Precursors. ACS Nano, 2021, 15, 9796-9807.	14.6	11
29	Direct Laser Writing of Microscale Metal Oxide Gas Sensors from Liquid Precursors. ACS Applied Materials & Interfaces, 2022, 14, 28163-28173.	8.0	10
30	Direct Laser Writing of Graphitic Carbon from Liquid Precursors. Chemistry of Materials, 2022, 34, 4602-4612.	6.7	7
31	Environmentally responsive active optics based on hydrogel-actuated deformable mirror arrays. , 2011, , .		6
32	Polyelectrolyte hydrogel capsules as stabilizers for reconfigurable complex emulsions. Polymer Chemistry, 2020, 11, 281-286.	3.9	6
33	The Endless and Turbulent Frontier of Academic Entrepreneurship. ACS Nano, 2021, 15, 16947-16952.	14.6	1
34	35 challenges in materials science being tackled by PIs under 35(ish) in 2021. Matter, 2021, 4, 3804-3810.	10.0	1
35	Chemically Tuning Attractive and Repulsive Interactions between Solubilizing Oil Droplets. Angewandte Chemie, 2022, 134, .	2.0	1
36	Bi-phase emulsion droplets as dynamic fluid optical systems. EPJ Web of Conferences, 2019, 215, 13003.	0.3	0

#	ARTICLE	IF	CITATIONS
37	Structural Color due to Interference of Totally Internally Reflected Light in Bi-Phase Droplets. , 2019, , ·		0