Kerstin GÃ¶pfrich

List of Publications by Year
in descending order

44 papers	1,934 citations	361413 20 h-index	302126 39 g-index
54 all docs	54 docs citations	54 times ranked	1567 citing authors

#	Article	IF	Citations
1	Mastering Complexity: Towards Bottom-up Construction of Multifunctional Eukaryotic Synthetic Cells. Trends in Biotechnology, 2018, 36, 938-951.	9.3	205
2	Lipidâ€Bilayerâ€Spanning DNA Nanopores with a Bifunctional Porphyrin Anchor. Angewandte Chemie - International Edition, 2013, 52, 12069-12072.	13.8	190
3	Large-Conductance Transmembrane Porin Made from DNA Origami. ACS Nano, 2016, 10, 8207-8214.	14.6	171
4	DNA-Tile Structures Induce Ionic Currents through Lipid Membranes. Nano Letters, 2015, 15, 3134-3138.	9.1	125
5	Ion Channels Made from a Single Membrane-Spanning DNA Duplex. Nano Letters, 2016, 16, 4665-4669.	9.1	124
6	DNA Origami Nanopores for Controlling DNA Translocation. ACS Nano, 2013, 7, 6024-6030.	14.6	118
7	Bilayer-Spanning DNA Nanopores with Voltage-Switching between Open and Closed State. ACS Nano, 2015, 9, 1117-1126.	14.6	118
8	One-Pot Assembly of Complex Giant Unilamellar Vesicle-Based Synthetic Cells. ACS Synthetic Biology, 2019, 8, 937-947.	3.8	114
9	A synthetic enzyme built from DNA flips 107 lipids per second in biological membranes. Nature Communications, 2018, 9, 2426.	12.8	101
10	Division and Regrowth of Phaseâ€Separated Giant Unilamellar Vesicles**. Angewandte Chemie - International Edition, 2021, 60, 10661-10669.	13.8	66
11	Charge-controlled microfluidic formation of lipid-based single- and multicompartment systems. Lab on A Chip, 2018, 18, 2665-2674.	6.0	63
12	Controlling aggregation of cholesterol-modified DNA nanostructures. Nucleic Acids Research, 2019, 47, 11441-11451.	14.5	60
13	Functional DNA-based cytoskeletons for synthetic cells. Nature Chemistry, 2022, 14, 958-963.	13.6	55
14	Bottom-Up Assembly of Synthetic Cells with a DNA Cytoskeleton. ACS Nano, 2022, 16, 7233-7241.	14.6	38
15	Programmable Functionalization of Surfactantâ€Stabilized Microfluidic Droplets via DNAâ€Tags. Advanced Functional Materials, 2019, 29, 1808647.	14.9	34
16	Proton gradients from light-harvesting E. coli control DNA assemblies for synthetic cells. Nature Communications, 2021, 12, 3967.	12.8	32
17	Lipidâ€Bilayerâ€Spanning DNA Nanopores with a Bifunctional Porphyrin Anchor. Angewandte Chemie, 2013, 125, 12291-12294.	2.0	28
18	Building a community to engineer synthetic cells and organelles from the bottom-up. ELife, 2021, 10, .	6.0	27

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19	Dynamic Actuation of DNA-Assembled Plasmonic Nanostructures in Microfluidic Cell-Sized Compartments. Nano Letters, 2020, 20, 1571-1577.	9.1	26
20	Twoâ€Photon 3D Laser Printing Inside Synthetic Cells. Advanced Materials, 2022, 34, e2106709.	21.0	25
21	Lipid Nanobilayers to Host Biological Nanopores for DNA Translocations. Langmuir, 2013, 29, 355-364.	3.5	24
22	Light-Triggered Cargo Loading and Division of DNA-Containing Giant Unilamellar Lipid Vesicles. Nano Letters, 2021, 21, 5952-5957.	9.1	24
23	Choice of fluorophore affects dynamic DNA nanostructures. Nucleic Acids Research, 2021, 49, 4186-4195.	14.5	20
24	Functionalization of Cellular Membranes with DNA Nanotechnology. Trends in Biotechnology, 2021, 39, 1208-1220.	9.3	19
25	DNAâ€Based Assembly of Multiâ€Compartment Polymersome Networks. Advanced Functional Materials, 2020, 30, 2003480.	14.9	18
26	Engineering Lightâ€Responsive Contractile Actomyosin Networks with DNA Nanotechnology. Advanced Biology, 2020, 4, 2000102.	3.0	17
27	Evolution and Singleâ€Droplet Analysis of Fuelâ€Driven Compartments by Dropletâ€Based Microfluidics. Angewandte Chemie - International Edition, 2022, 61, .	13.8	15
28	Dropletâ€Based Combinatorial Assay for Cell Cytotoxicity and Cytokine Release Evaluation. Advanced Functional Materials, 2020, 30, 2003479.	14.9	12
29	Division and Regrowth of Phaseâ€Separated Giant Unilamellar Vesicles**. Angewandte Chemie, 2021, 133, 10756-10764.	2.0	10
30	Tuning Epithelial Cellâ€“Cell Adhesion and Collective Dynamics with Functional DNA-E-Cadherin Hybrid Linkers. Nano Letters, 2022, 22, 302-310.	9.1	9
31	Autonomous Directional Motion of Actinâ€Containing Cellâ€Sized Droplets. Advanced Intelligent Systems, 2021, 3, 2000190.	6.1	8
32	Electrocoalescence of Water-in-Oil Droplets with a Continuous Aqueous Phase: Implementation of Controlled Content Release. ACS Omega, 2020, 5, 7529-7536.	3.5	7
33	DNA Nanotechnology for Building Sensors, Nanopores and Ion-Channels. Advances in Experimental Medicine and Biology, 2019, 1174, 331-370.	1.6	6
34	Printing and Erasing of DNAâ€Based Photoresists Inside Synthetic Cells. Advanced Functional Materials, 2022, 32, .	14.9	6
35	Evolution and Singleâ€Droplet Analysis of Fuelâ€Driven Compartments by Dropletâ€Based Microfluidics. Angewandte Chemie, 2022, 134, .	2.0	6
36	Nondeterministic self-assembly with asymmetric interactions. Physical Review E, 2016, 94, 022404.	2.1	4

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37	Ring-a-Scientist â€" der direkte Draht ins Labor. BioSpektrum, 2018, 24, 463-463.	0.0	1
38	Design and Assembly of Membrane-Spanning DNA Nanopores. Methods in Molecular Biology, 2021, 2186, 33-48.	0.9	1
39	Actomyosin-Assisted Pulling of Lipid Nanotubes from Lipid Vesicles and Cells. Nano Letters, 2022, 22, 1145-1150.	9.1	1
40	Membrane-Spanning DNA Nanopores. Biomimetic Chemical Structures for Single-Molecule Research and Nanotechnology. Biophysical Journal, 2014, 106, 632a.	0.5	0
41	From Ion-Channels to Porins: Engineering DNA-Based Synthetic Counterparts. Biophysical Journal, 2016, 110, 351a.	0.5	0
42	Outperforming Nature: Synthetic Enzyme Built from DNA Flips Lipids of Biological Membranes at Record Rates. Biophysical Journal, 2018, 114, 15a.	0.5	0
43	Forschende im Klassenzimmer â€" live per Webcam. Biologie in Unserer Zeit, 2019, 49, 155-155.	0.2	0
44	DNA Nanotechnology: Engineering Lightâ€Responsive Contractile Actomyosin Networks with DNA Nanotechnology (Adv. Biosys. 9/2020). Advanced Biology, 2020, 4, 2070093.	3.0	0