Tom Robinson

List of Publications by Year
in descending order

52 papers	1,621 citations	304743 22 h-index	302126 39 g-index
57 all docs	57 docs citations	57 times ranked	1810 citing authors

#	Article	IF	Citations
1	Continuous-Flow Polymerase Chain Reaction of Single-Copy DNA in Microfluidic Microdroplets. Analytical Chemistry, 2009, 81, 302-306.	6.5	240
2	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. Angewandte Chemie - International Edition, 2018, 57, 13382-13392.	13.8	234
3	Reversible pHâ€Responsive Coacervate Formation in Lipid Vesicles Activates Dormant Enzymatic Reactions. Angewandte Chemie - International Edition, 2020, 59, 5950-5957.	13.8	139
4	Microfluidic trapping of giant unilamellar vesicles to study transport through a membrane pore. Biomicrofluidics, 2013, 7, 44105.	2.4	81
5	Optimization of the Inverted Emulsion Method for Highâ€Yield Production of Biomimetic Giant Unilamellar Vesicles. ChemBioChem, 2019, 20, 2674-2682.	2.6	77
6	Highly Efficient Protein-free Membrane Fusion: AÂGiant Vesicle Study. Biophysical Journal, 2019, 116, 79-91.	0.5	76
7	Freeze-thaw cycles induce content exchange between cell-sized lipid vesicles. New Journal of Physics, 2018, 20, 055008.	2.9	46
8	A facile protocol for the immobilisation of vesicles, virus particles, bacteria, and yeast cells. Integrative Biology (United Kingdom), 2012, 4, 1550.	1.3	43
9	Controllable electrofusion of lipid vesicles: initiation and analysis of reactions within biomimetic containers. Lab on A Chip, 2014, 14, 2852.	6.0	40
10	Ultra-high capacity microfluidic trapping of giant vesicles for high-throughput membrane studies. Lab on A Chip, 2019, 19, 626-633.	6.0	39
11	Microfluidic Handling and Analysis of Giant Vesicles for Use as Artificial Cells: A Review. Advanced Biology, 2019, 3, e1800318.	3.0	39
12	Cell-Free Gene Expression Dynamics in Synthetic Cell Populations. ACS Synthetic Biology, 2022, 11, 205-215.	3.8	38
13	Solution Asymmetry and Salt Expand Fluid-Fluid Coexistence Regions of Charged Membranes. Biophysical Journal, 2016, 110, 2581-2584.	0.5	34
14	Membranes under shear stress: visualization of non-equilibrium domain patterns and domain fusion in a microfluidic device. Soft Matter, 2016, 12, 5072-5076.	2.7	31
15	Surfactant-free production of biomimetic giant unilamellar vesicles using PDMS-based microfluidics. Communications Chemistry, 2021, 4, .	4.5	30
16	Reversible pHâ€Responsive Coacervate Formation in Lipid Vesicles Activates Dormant Enzymatic Reactions. Angewandte Chemie, 2020, 132, 6006-6013.	2.0	29
17	Removal of background signals from fluorescence thermometry measurements in PDMS microchannels using fluorescence lifetime imaging. Lab on A Chip, 2009, 9, 3437.	6.0	28
18	MaxSynBio: Wege zur Synthese einer Zelle aus nicht lebenden Komponenten. Angewandte Chemie, 2018, 130, 13566-13577.	2.0	27

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19	Directed Signaling Cascades in Monodisperse Artificial Eukaryotic Cells. ACS Nano, 2021, 15, 15656-15666.	14.6	27
20	Three-dimensional molecular mapping in a microfluidic mixing device using fluorescence lifetime imaging. Optics Letters, 2008, 33, 1887.	3.3	26
21	Enantiomeric and Diastereoisomeric (Mixed) <scp>L</scp>/â€‰<scp>D</scp>â€Octaarginine Derivatives â€“ A Simple Way of Modulating the Properties of Cellâ€Penetrating Peptides. Chemistry and Biodiversity, 2013, 10, 1165-1184.	2.1	26
22	Graphitic Carbon Nitride Stabilizers Meet Microfluidics: From Stable Emulsions to Photoinduced Synthesis of Hollow Polymer Spheres. Small, 2020, 16, e2001180.	10.0	25
23	Membrane permeability to water measured by microfluidic trapping of giant vesicles. Soft Matter, 2020, 16, 7359-7369.	2.7	19
24	Superâ€Resolution Imaging of Highly Curved Membrane Structures in Giant Vesicles Encapsulating Molecular Condensates. Advanced Materials, 2022, 34, e2106633.	21.0	19
25	Single-Virus Fusion Experiments Reveal Proton Influx into Vaccinia Virions and Hemifusion Lag Times. Biophysical Journal, 2013, 105, 420-431.	0.5	18
26	Interaction of Î²³/Î²²â€Peptides, Consisting of Valâ€Alaâ€Leu Segments, with POPC Giant Unilamellar Vesicles (GUVs) and White Blood Cancer Cells (U937) â€“ A New Type of Cellâ€Penetrating Peptides, and a Surprising Chainâ€Length Dependence of Their Vesicleâ€•and Cellâ€Lysing Activity. Chemistry and Biodiversity, 2015, 12, 697-732.	2.1	17
27	A simple low-cost method to enhance luminescence and fluorescence signals in PDMS-based microfluidic devices. RSC Advances, 2015, 5, 12511-12516.	3.6	17
28	Differential modes of DNA binding by mismatch uracil DNA glycosylase from Escherichia coli: implications for abasic lesion processing and enzyme communication in the base excision repair pathway. Nucleic Acids Research, 2011, 39, 2593-2603.	14.5	15
29	Phase Behavior of Charged Vesicles Under Symmetric and Asymmetric Solution Conditions Monitored with Fluorescence Microscopy. Journal of Visualized Experiments, 2017, , .	0.3	14
30	Poly(Ionic Liquid) Nanoparticles Selectively Disrupt Biomembranes. Advanced Science, 2019, 6, 1801602.	11.2	14
31	Minimal Pathway for the Regeneration of Redox Cofactors. Jacs Au, 2021, 1, 2280-2293.	7.9	14
32	Special Issue on Bottomâ€Up Synthetic Biology. ChemBioChem, 2019, 20, 2533-2534.	2.6	13
33	Analysis of DNA Binding and Nucleotide Flipping Kinetics Using Two-Color Two-Photon Fluorescence Lifetime Imaging Microscopy. Analytical Chemistry, 2014, 86, 10732-10740.	6.5	12
34	Comparison of free surface polarization of NiMnSb and Co2MnSi. Applied Physics Letters, 2006, 88, 142512.	3.3	10
35	Interaction of SNARE Mimetic Peptides with Lipid bilayers: Effects of Secondary Structure, Bilayer Composition and Lipid Anchoring. Scientific Reports, 2019, 9, 7708.	3.3	9
36	Observations of Membrane Domain Reorganization in Mechanically Compressed Artificial Cells. ChemBioChem, 2019, 20, 2666-2673.	2.6	9

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37	Study of the Interaction of a Novel Semi-Synthetic Peptide with Model Lipid Membranes. Membranes, 2020, 10, 294.	3.0	9
38	On-Chip Inverted Emulsion Method for Fast Giant Vesicle Production, Handling, and Analysis. Micromachines, 2020, 11, 285.	2.9	9
39	Microfluidic Technology for Molecular Diagnostics. Advances in Biochemical Engineering/Biotechnology, 2012, 133, 89-114.	1.1	8
40	Controlled adhesion, membrane pinning and vesicle transport by Janus particles. Chemical Communications, 2022, 58, 3055-3058.	4.1	6
41	Precipitation of Calcium Carbonate Inside Giant Unilamellar Vesicles Composed of Fluid-Phase Lipids. Langmuir, 2020, 36, 13244-13250.	3.5	5
42	Investigating fast enzyme-DNA kinetics using multidimensional fluorescence imaging and microfluidics. Proceedings of SPIE, 2010, , .	0.8	2
43	Microfluidics and giant vesicles: creation, capture, and applications for biomembranes. Advances in Biomembranes and Lipid Self-Assembly, 2019, , 271-315.	0.6	2
44	The Investigation of Lipid Membrane Deformation in Giant Unilamellar Vesicles using Microfluidic Technology. Biophysical Journal, 2012, 102, 33a.	0.5	1
45	Super Resolution Imaging of Highly Curved Membrane Structures in Giant Unilamellar Vesicles Encapsulating Polymer Solutions. Biophysical Journal, 2018, 114, 100a-101a.	0.5	1
46	Nanotubes Transform into Double-Membrane Sheets at the Interface between Two Aqueous Polymer Solutions. Biophysical Journal, 2019, 116, 226a.	0.5	1
47	Optical detection in microfluidics: From the small to the large. , 2009, , .		0
48	Membrane Fusion via Snare Mimetics Spatially Confined to Intramembrane Domains. Biophysical Journal, 2016, 110, 249a-250a.	0.5	0
49	Presence of Salt and Solution Asymmetry Across Charged Membranes Influences Their Phase State. Biophysical Journal, 2016, 110, 413a.	0.5	0
50	Phase Specific Membrane Fusion with SNARE Mimetics. Biophysical Journal, 2017, 112, 77a.	0.5	0
51	Interactions of Poly(Ionic Liquid) Nanoparticles with Giant Unilamellar Vesicles. Biophysical Journal, 2018, 114, 99a-100a.	0.5	0
52	Spatially Confined Membrane Fusion with SNARE Mimetics. Biophysical Journal, 2018, 114, 608a.	0.5	0