Khalid Salaita

List of Publications by Year in Descending Order

89	3,911	32	62
papers	citations	h-index	g-index
98	4,720	12.3	5.74
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
89	ST6Gal-I-mediated sialylation of the epidermal growth factor receptor modulates cell mechanics and enhances invasion.. *Journal of Biological Chemistry*, **2022**, 101726	5.4	3
88	The magnitude of LFA-1/ICAM-1 forces fine-tune TCR-triggered T cell activation.. *Science Advances*, **2022**, 8, eabg4485	14.3	1
87	Imaging vesicle formation dynamics supports the flexible model of clathrin-mediated endocytosis.. *Nature Communications*, **2022**, 13, 1732	17.4	0
86	Mechanically active integrins target lytic secretion at the immune synapse to facilitate cellular cytotoxicity. *Nature Communications*, **2022**, 13,	17.4	3
85	Massively Parallelized Molecular Force Manipulation with On-Demand Thermal and Optical Control. *Journal of the American Chemical Society*, **2021**, 143, 19466-19473	16.4	0
84	Supramolecular DNA Photonic Hydrogels for On-Demand Control of Coloration with High Spatial and Temporal Resolution. *Nano Letters*, **2021**, 21, 9958-9965	11.5	1
83	Conditional Antisense Oligonucleotides Triggered by miRNA. *ACS Chemical Biology*, **2021**, 16, 2255-2267	4.9	1
82	Multivalent molecular tension probes as anisotropic mechanosensors: concept and simulation. *Physical Biology*, **2021**, 18, 034001	3	3
81	DNA Tension Probes to Map the Transient Piconewton Receptor Forces by Immune Cells. *Journal of Visualized Experiments*, **2021**,	1.6	1
80	Smart Nucleic Acids as Future Therapeutics. *Trends in Biotechnology*, **2021**, 39, 1289-1307	15.1	5
79	DNA Gold Nanoparticle Motors Demonstrate Processive Motion with Bursts of Speed Up to 50 nm Per Second. *ACS Nano*, **2021**, 15, 8427-8438	16.7	8
78	DNA-Based Microparticle Tension Sensors (□TS) for Measuring Cell Mechanics in Non-planar Geometries and for High-Throughput Quantification. *Angewandte Chemie*, **2021**, 133, 18192-18198	3.6	0
77	DNA-Based Microparticle Tension Sensors (□TS) for Measuring Cell Mechanics in Non-planar Geometries and for High-Throughput Quantification. *Angewandte Chemie - International Edition*, **2021**, 60, 18044-18050	16.4	2
76	Mechanically Triggered Hybridization Chain Reaction. *Angewandte Chemie - International Edition*, **2021**, 60, 19974-19981	16.4	2
75	Spectroscopic Analysis of a Library of DNA Tension Probes for Mapping Cellular Forces at Fluid Interfaces. *ACS Applied Materials & Interfaces*, **2021**, 13, 2145-2164	9.5	4
74	Programmable Mechanically Active Hydrogel-Based Materials. *Advanced Materials*, **2021**, 33, e2006600	24	9
73	Mechanically Triggered Hybridization Chain Reaction. *Angewandte Chemie*, **2021**, 133, 20127-20134	3.6	0

72	An Outside-In Switch in Integrin Signaling Caused by Chemical and Mechanical Signals in Reactive Astrocytes. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 712627	5.7	1
71	Turn-key mapping of cell receptor force orientation and magnitude using a commercial structured illumination microscope. *Nature Communications*, **2021**, 12, 4693	17.4	1
70	Carfilzomib Treatment Causes Molecular and Functional Alterations of Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes. *Journal of the American Heart Association*, **2021**, e022247	6	1
69	Shape-Shifting Peptide Nanomaterials: Surface Asymmetry Enables pH-Dependent Formation and Interconversion of Collagen Tubes and Sheets. *Journal of the American Chemical Society*, **2020**, 142, 19956-19968	16.4	11
68	Optical Control of Cytokine Signaling via Bioinspired, Polymer-Induced Latency. *Biomacromolecules*, **2020**, 21, 2635-2644	6.9	3
67	EGFR activation attenuates the mechanical threshold for integrin tension and focal adhesion formation. *Journal of Cell Science*, **2020**, 133,	5.3	13
66	Mechanical Stimulation of Adhesion Receptors Using Light-Responsive Nanoparticle Actuators Enhances Myogenesis. *ACS Applied Materials & Interfaces*, **2020**, 12, 35903-35917	9.5	11
65	Tunable DNA Origami Motors Translocate Ballistically Over Distances at nm/s Speeds. *Angewandte Chemie*, **2020**, 132, 9601-9608	3.6	2
64	Tunable DNA Origami Motors Translocate Ballistically Over Distances at nm/s Speeds. *Angewandte Chemie - International Edition*, **2020**, 59, 9514-9521	16.4	29
63	Engineering DNA-Functionalized Nanostructures to Bind Nucleic Acid Targets Heteromultivalently with Enhanced Avidity. *Journal of the American Chemical Society*, **2020**, 142, 9653-9660	16.4	5
62	Variable incidence angle linear dichroism (VALiD): a technique for unique 3D orientation measurement of fluorescent ensembles. *Optics Express*, **2020**, 28, 10039-10061	3.3	4
61	Super-Resolution Fluorescence Imaging Reveals That Serine Incorporator Protein 5 Inhibits Human Immunodeficiency Virus Fusion by Disrupting Envelope Glycoprotein Clusters. *ACS Nano*, **2020**, 14, 10929-10943	16.7	36
60	Forces during cellular uptake of viruses and nanoparticles at the ventral side. *Nature Communications*, **2020**, 11, 32	17.4	15
59	Conditional Deoxyribozyme-Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. *ACS Applied Materials & Interfaces*, **2020**, 12, 37851-37861	9.5	4
58	Live-cell super-resolved PAINT imaging of piconewton cellular traction forces. *Nature Methods*, **2020**, 17, 1018-1024	21.6	35
57	Chameleon-Inspired Strain-Accommodating Smart Skin. *ACS Nano*, **2019**, 13, 9918-9926	16.7	46
56	Emerging uses of DNA mechanical devices. *Science*, **2019**, 365, 1080-1081	33.3	45
55	DNA Nanotechnology as an Emerging Tool to Study Mechanotransduction in Living Systems. *Small*, **2019**, 15, e1900961	11	44

54	Mechanical Proofreading: A General Mechanism to Enhance the Fidelity of Information Transfer Between Cells. *Frontiers in Physics*, **2019**, 7,	3.9	14
53	DNA probes that store mechanical information reveal transient piconewton forces applied by T cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 16949-16954	11.5	46
52	Fluorescence Polarization Microscopy Enables Spatial Mapping of the 3D Orientation of Piconewton Integrin Traction Forces. *Microscopy and Microanalysis*, **2019**, 25, 1244-1245	0.5	
51	Highly Polyvalent DNA Motors Generate 100+ pN of Force via Autochemophoresis. *Nano Letters*, **2019**, 19, 6977-6986	11.5	21
50	Macrophages exposed to HIV viral protein disrupt lung epithelial cell integrity and mitochondrial bioenergetics via exosomal microRNA shuttling. *Cell Death and Disease*, **2019**, 10, 580	9.8	17
49	2D Crystal Engineering of Nanosheets Assembled from Helical Peptide Building Blocks. *Angewandte Chemie*, **2019**, 131, 13641-13646	3.6	8
48	2D Crystal Engineering of Nanosheets Assembled from Helical Peptide Building Blocks. *Angewandte Chemie - International Edition*, **2019**, 58, 13507-13512	16.4	22
47	DNA mechanotechnology reveals that integrin receptors apply pN forces in podosomes on fluid substrates. *Nature Communications*, **2019**, 10, 4507	17.4	40
46	Seeded Heteroepitaxial Growth of Crystallizable Collagen Triple Helices: Engineering Multifunctional Two-Dimensional Core-Shell Nanostructures. *Journal of the American Chemical Society*, **2019**, 141, 20107-20117	16.4	19
45	Localized Nanoscale Heating Leads to Ultrafast Hydrogel Volume-Phase Transition. *ACS Nano*, **2019** , 13, 515-525	16.7	16
44	Platelet integrins exhibit anisotropic mechanosensing and harness piconewton forces to mediate platelet aggregation. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 325-330	11.5	72
43	Light-Responsive Polymer Particles as Force Clamps for the Mechanical Unfolding of Target Molecules. *Nano Letters*, **2018**, 18, 2630-2636	11.5	11
42	Location, Location, Location: EphB4:Ephrin-B2 Signaling Depends on Its Spatial Arrangement. *Biophysical Journal*, **2018**, 115, 754-756	2.9	
41	Molecular Tension Probes to Investigate the Mechanopharmacology of Single Cells: A Step toward Personalized Mechanomedicine. *Advanced Healthcare Materials*, **2018**, 7, e1800069	10.1	11
40	Programmable Multivalent DNA-Origami Tension Probes for Reporting Cellular Traction Forces. *Nano Letters*, **2018**, 18, 4803-4811	11.5	62
39	A brighter force gauge for cells. *ELife*, **2018**, 7,	8.9	4
38	Mapping the 3D orientation of piconewton integrin traction forces. *Nature Methods*, **2018**, 15, 115-118	21.6	65
37	Site-Selective RNA Splicing Nanozyme: DNAzyme and RtcB Conjugates on a Gold Nanoparticle. *ACS Chemical Biology*, **2018**, 13, 215-224	4.9	10

36	A TCR mechanotransduction signaling loop induces negative selection in the thymus. *Nature Immunology*, **2018**, 19, 1379-1390	19.1	64
35	Supported lipid bilayer platforms to probe cell mechanobiology. *Biochimica Et Biophysica Acta - Biomembranes*, **2017**, 1859, 1465-1482	3.8	53
34	Molecular Tension Probes for Imaging Forces at the Cell Surface. *Accounts of Chemical Research*, **2017**, 50, 2915-2924	24.3	84
33	Mechanically Induced Catalytic Amplification Reaction for Readout of Receptor-Mediated Cellular Forces. *Angewandte Chemie*, **2016**, 128, 5578-5582	3.6	8
32	Ratiometric Tension Probes for Mapping Receptor Forces and Clustering at Intermembrane Junctions. *Nano Letters*, **2016**, 16, 4552-9	11.5	47
31	Mechanically Induced Catalytic Amplification Reaction for Readout of Receptor-Mediated Cellular Forces. *Angewandte Chemie - International Edition*, **2016**, 55, 5488-92	16.4	29
30	Knockdown of TNF-α by DNAzyme gold nanoparticles as an anti-inflammatory therapy for myocardial infarction. *Biomaterials*, **2016**, 83, 12-22	15.6	62
29	Nanoscale optomechanical actuators for controlling mechanotransduction in living cells. *Nature Methods*, **2016**, 13, 143-6	21.6	89
28	Titin-Based Nanoparticle Tension Sensors Map High-Magnitude Integrin Forces within Focal Adhesions. *Nano Letters*, **2016**, 16, 341-8	11.5	56
27	A General Approach for Generating Fluorescent Probes to Visualize Piconewton Forces at the Cell Surface. *Journal of the American Chemical Society*, **2016**, 138, 2901-4	16.4	32
26	High-speed DNA-based rolling motors powered by RNase H. *Nature Nanotechnology*, **2016**, 11, 184-90	28.7	124
25	DNA-based nanoparticle tension sensors reveal that T-cell receptors transmit defined pN forces to their antigens for enhanced fidelity. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 5610-5	11.5	177
24	Real-time fluorescence imaging with 20 nm axial resolution. *Nature Communications*, **2015**, 6, 8307	17.4	16
23	DNA-based digital tension probes reveal integrin forces during early cell adhesion. *Nature Communications*, **2014**, 5, 5167	17.4	169
22	Structurally defined nanoscale sheets from self-assembly of collagen-mimetic peptides. *Journal of the American Chemical Society*, **2014**, 136, 4300-8	16.4	108
21	The modulation of cardiac progenitor cell function by hydrogel-dependent Notch1 activation. *Biomaterials*, **2014**, 35, 8103-12	15.6	44
20	Nanoparticle tension probes patterned at the nanoscale: impact of integrin clustering on force transmission. *Nano Letters*, **2014**, 14, 5539-46	11.5	101
19	Membrane tethered delta activates notch and reveals a role for spatio-mechanical regulation of the signaling pathway. *Biophysical Journal*, **2013**, 105, 2655-65	2.9	31

18	Tension sensing nanoparticles for mechano-imaging at the living/nonliving interface. *Journal of the American Chemical Society*, **2013**, 135, 5320-3	16.4	90
17	The Molecular Boat: A Hands-On Experiment To Demonstrate the Forces Applied to Self-Assembled Monolayers at Interfaces. *Journal of Chemical Education*, **2012**, 89, 1547-1550	2.4	4
16	Catalytic deoxyribozyme-modified nanoparticles for RNAi-independent gene regulation. *ACS Nano*, **2012**, 6, 9150-7	16.7	73
15	Using patterned supported lipid membranes to investigate the role of receptor organization in intercellular signaling. *Nature Protocols*, **2011**, 6, 523-39	18.8	78
14	L-Ala-D-Glu-meso-diaminopimelic acid (DAP) interacts directly with leucine-rich region domain of nucleotide-binding oligomerization domain 1, increasing phosphorylation activity of receptor-interacting serine/threonine-protein kinase 2 and its interaction with nucleotide-binding oligomerization domain 1. *Journal of Biological Chemistry*, **2011**, 286, 31003-31013	5.4	68
13	Roles of the cytoskeleton in regulating EphA2 signals. *Communicative and Integrative Biology*, **2010**, 3, 454-7	1.7	11
12	Restriction of receptor movement alters cellular response: physical force sensing by EphA2. *Science* , **2010**, 327, 1380-5	33.3	271
11	The effects of organic vapor on alkanethiol deposition via dip-pen nanolithography. *Scanning*, **2010**, 32, 9-14	1.6	8
10	Applications of dip-pen nanolithography **2009**, 297-307		2
9	Applications of dip-pen nanolithography. *Nature Nanotechnology*, **2007**, 2, 145-55	28.7	721
8	Massively parallel dip-pen nanolithography with 55 000-pen two-dimensional arrays. *Angewandte Chemie - International Edition*, **2006**, 45, 7220-3	16.4	256
7	Cover Picture: Massively Parallel Dip‐Pen Nanolithography with 55 000-Pen Two-Dimensional Arrays (Angew. Chem. Int. Ed. 43/2006). *Angewandte Chemie - International Edition*, **2006**, 45, 7099-7099	16.4	2
6	Massively Parallel Dip‐Pen Nanolithography with 55 000-Pen Two-Dimensional Arrays. *Angewandte Chemie*, **2006**, 118, 7378-7381	3.6	49
5	Titelbild: Massively Parallel Dip‐Pen Nanolithography with 55 000-Pen Two-Dimensional Arrays (Angew. Chem. 43/2006). *Angewandte Chemie*, **2006**, 118, 7257-7257	3.6	1
4	Spontaneous "phase separation" of patterned binary alkanethiol mixtures. *Journal of the American Chemical Society*, **2005**, 127, 11283-7	16.4	51
3	Sub-100 nm, centimeter-scale, parallel dip-pen nanolithography. *Small*, **2005**, 1, 940-5	11	109
2	Electrochemical Whittling of Organic Nanostructures. *Nano Letters*, **2002**, 2, 1389-1392	11.5	29
1	Bionanoarrays233-259		1