Simon Alberti

List of Publications by Year
in descending order

92 papers	21,588 citations	30070 54 h-index	43889 91 g-index
121 all docs	121 docs citations	121 times ranked	17026 citing authors

#	Article	IF	Citations
1	Surface Electrostatics Govern the Emulsion Stability of Biomolecular Condensates. Nano Letters, 2022, 22, 612-621.	9.1	49
2	Correlative all-optical quantification of mass density and mechanics of subcellular compartments with fluorescence specificity. ELife, 2022, 11, .	6.0	37
3	Phase-separating RNA-binding proteins form heterogeneous distributions of clusters in subsaturated solutions. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	107
4	Reentrant liquid condensate phase of proteins is stabilized by hydrophobic and non-ionic interactions. Nature Communications, 2021, 12, 1085.	12.8	245
5	Protein products of nonstop mRNA disrupt nucleolar homeostasis. Cell Stress and Chaperones, 2021, 26, 549-561.	2.9	7
6	Hsp90â€mediated regulation of DYRK3 couples stress granule disassembly and growth via mTORC1 signaling. EMBO Reports, 2021, 22, e51740.	4.5	41
7	Reciprocal regulation of cellular mechanics and metabolism. Nature Metabolism, 2021, 3, 456-468.	11.9	40
8	Small heat-shock protein HSPB3 promotes myogenesis by regulating the lamin B receptor. Cell Death and Disease, 2021, 12, 452.	6.3	16
9	Ubiquitin protein helps cells to recover from stress. Nature, 2021, 597, 183-184.	27.8	8
10	HspB8 prevents aberrant phase transitions of FUS by chaperoning its folded RNA-binding domain. ELife, 2021, 10, .	6.0	42
11	Quantitative proteomics identifies the universally conserved ATPase Ola1p as a positive regulator of heat shock response in Saccharomyces cerevisiae. Journal of Biological Chemistry, 2021, 297, 101050.	3.4	6
12	Biomolecular condensates at the nexus of cellular stress, protein aggregation disease and ageing. Nature Reviews Molecular Cell Biology, 2021, 22, 196-213.	37.0	535
13	Guidelines for the use and interpretation of assays for monitoring autophagy (4th) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 262 Td	9.1	1,430
14	Adaptable P body physical states differentially regulate bicoid mRNA storage during early Drosophila development. Developmental Cell, 2021, 56, 2886-2901.e6.	7.0	24
15	Mapping Tumor Spheroid Mechanics in Dependence of 3D Microenvironment Stiffness and Degradability by Brillouin Microscopy. Cancers, 2021, 13, 5549.	3.7	23
16	ALS and FTD: Where RNA metabolism meets protein quality control. Seminars in Cell and Developmental Biology, 2020, 99, 183-192.	5.0	39
17	BAG3 and BAG6 differentially affect the dynamics of stress granules by targeting distinct subsets of defective polypeptides released from ribosomes. Cell Stress and Chaperones, 2020, 25, 1045-1058.	2.9	7
18	Biomolecular condensates undergo a generic shear-mediated liquid-to-solid transition. Nature Nanotechnology, 2020, 15, 841-847.	31.5	101

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19	The Nuclear SUMO-Targeted Ubiquitin Quality Control Network Regulates the Dynamics of Cytoplasmic Stress Granules. Molecular Cell, 2020, 79, 54-67.e7.	9.7	73
20	Filament formation by the translation factor eIF2B regulates protein synthesis in starved cells. Biology Open, 2020, 9, .	1.2	18
21	Condensation of Ded1p Promotes a Translational Switch from Housekeeping to Stress Protein Production. Cell, 2020, 181, 818-831.e19.	28.9	130
22	Reorganization of budding yeast cytoplasm upon energy depletion. Molecular Biology of the Cell, 2020, 31, 1232-1245.	2.1	39
23	RNA-Induced Conformational Switching and Clustering of G3BP Drive Stress Granule Assembly by Condensation. Cell, 2020, 181, 346-361.e17.	28.9	557
24	The plant response to heat requires phase separation. Nature, 2020, 585, 191-192.	27.8	7
25	Protein phase separation and its role in tumorigenesis. ELife, 2020, 9, .	6.0	63
26	Prion-like low-complexity sequences: Key regulators of protein solubility and phase behavior. Journal of Biological Chemistry, 2019, 294, 7128-7136.	3.4	178
27	Defective ribosomal products challenge nuclear function by impairing nuclear condensate dynamics and immobilizing ubiquitin. EMBO Journal, 2019, 38, e101341.	7.8	58
28	Liquidâ€"Liquid Phase Separation in Disease. Annual Review of Genetics, 2019, 53, 171-194.	7.6	553
29	Nucleolus: A Liquid Droplet Compartment for Misbehaving Proteins. Current Biology, 2019, 29, R930-R932.	3.9	10
30	Nucleoli and Promyelocytic Leukemia Protein (PML) bodies are phase separated nuclear protein quality control compartments for misfolded proteins. Molecular and Cellular Oncology, 2019, 6, e1415624.	0.7	10
31	Considerations and Challenges in Studying Liquid-Liquid Phase Separation and Biomolecular Condensates. Cell, 2019, 176, 419-434.	28.9	1,739
32	The prion-like domain of Drosophila Imp promotes axonal transport of RNP granules in vivo. Nature Communications, 2019, 10, 2593.	12.8	29
33	ERÎ± condensates: chronic stimulation is hard to ignore. Nature Structural and Molecular Biology, 2019, 26, 153-154.	8.2	1
34	FUS pathology in ALS is linked to alterations in multiple ALS-associated proteins and rescued by drugs stimulating autophagy. Acta Neuropathologica, 2019, 138, 67-84.	7.7	94
35	Protein Phase Separation as a Stress Survival Strategy. Cold Spring Harbor Perspectives in Biology, 2019, 11, a034058.	5.5	112
36	Proteome-wide signatures of function in highly diverged intrinsically disordered regions. ELife, 2019, 8, .	6.0	131

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37	RNA buffers the phase separation behavior of prion-like RNA binding proteins. Science, 2018, 360, 918-921.	12.6	837
38	Guilty by Association: Mapping Out the Molecular Sociology of Droplet Compartments. Molecular Cell, 2018, 69, 349-351.	9.7	3
39	Isogenic FUS-eGFP iPSC Reporter Lines Enable Quantification of FUS Stress Granule Pathology that Is Rescued by Drugs Inducing Autophagy. Stem Cell Reports, 2018, 10, 375-389.	4.8	95
40	Non-invasive perturbations of intracellular flow reveal physical principles of cell organization. Nature Cell Biology, 2018, 20, 344-351.	10.3	130
41	Phase separation of a yeast prion protein promotes cellular fitness. Science, 2018, 359, .	12.6	534
42	Protein Phase Separation: A New Phase in Cell Biology. Trends in Cell Biology, 2018, 28, 420-435.	7.9	1,439
43	One domain fits all: Using disordered regions to sequester misfolded proteins. Journal of Cell Biology, 2018, 217, 1173-1175.	5.2	7
44	Phase shifts in protein folding space: links to stress adaptation and disease. Molecular Biology of the Cell, 2018, 29, 695-695.	2.1	1
45	Intracellular Mass Density Increase Is Accompanying but Not Sufficient for Stiffening and Growth Arrest of Yeast Cells. Frontiers in Physics, 2018, 6, .	2.1	23
46	Quality Control of Membraneless Organelles. Journal of Molecular Biology, 2018, 430, 4711-4729.	4.2	75
47	A Userâ€™s Guide for Phase Separation Assays with Purified Proteins. Journal of Molecular Biology, 2018, 430, 4806-4820.	4.2	195
48	A Molecular Grammar Governing the Driving Forces for Phase Separation of Prion-like RNA Binding Proteins. Cell, 2018, 174, 688-699.e16.	28.9	1,372
49	Molecular Chaperones Regulating the Dynamics, Composition and Functionality of RNP Granules: Implications for Age-Related Diseases. Heat Shock Proteins, 2018, , 205-222.	0.2	0
50	Phase changes in neurotransmission. Science, 2018, 361, 548-549.	12.6	6
51	Different Material States of Pub1 Condensates Define Distinct Modes of Stress Adaptation and Recovery. Cell Reports, 2018, 23, 3327-3339.	6.4	183
52	Gel or Die: Phase Separation as a Survival Strategy. Cell, 2017, 168, 947-948.	28.9	53
53	ATP as a biological hydrotrope. Science, 2017, 356, 753-756.	12.6	677
54	Cell adaptation upon stress: the emerging role of membrane-less compartments. Current Opinion in Cell Biology, 2017, 47, 34-42.	5.4	100

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55	An aberrant phase transition of stress granules triggered by misfolded protein and prevented by chaperone function. EMBO Journal, 2017, 36, 1669-1687.	7.8	370
56	The growing world of small heat shock proteins: from structure to functions. Cell Stress and Chaperones, 2017, 22, 601-611.	2.9	158
57	Phase separation in biology. Current Biology, 2017, 27, R1097-R1102.	3.9	323
58	Aberrant Compartment Formation by HSPB2 Mislocalizes Lamin A and Compromises Nuclear Integrity and Function. Cell Reports, 2017, 20, 2100-2115.	6.4	43
59	Features of the Chaperone Cellular Network Revealed through Systematic Interaction Mapping. Cell Reports, 2017, 20, 2735-2748.	6.4	47
60	Local Nucleation of Microtubule Bundles through Tubulin Concentration into a Condensed Tau Phase. Cell Reports, 2017, 20, 2304-2312.	6.4	278
61	The wisdom of crowds: regulating cell function through condensed states of living matter. Journal of Cell Science, 2017, 130, 2789-2796.	2.0	130
62	Granulostasis: Protein Quality Control of RNP Granules. Frontiers in Molecular Neuroscience, 2017, 10, 84.	2.9	108
63	Studying the Protein Quality Control System of D. discoideum Using Temperature-controlled Live Cell Imaging. Journal of Visualized Experiments, 2016, , .	0.3	0
64	Amyloid-like Self-Assembly of a Cellular Compartment. Cell, 2016, 166, 637-650.	28.9	294
65	A Surveillance Function of the HSPB8-BAG3-HSP70 Chaperone Complex Ensures Stress Granule Integrity and Dynamism. Molecular Cell, 2016, 63, 796-810.	9.7	244
66	Are aberrant phase transitions a driver of cellular aging?. BioEssays, 2016, 38, 959-968.	2.5	234
67	A pH-driven transition of the cytoplasm from a fluid- to a solid-like state promotes entry into dormancy. ELife, 2016, 5, .	6.0	355
68	Promiscuous interactions and protein disaggregases determine the material state of stress-inducible RNP granules. ELife, 2015, 4, e06807.	6.0	462
69	<i>Dictyostelium discoideum</i> has a highly Q/N-rich proteome and shows an unusual resilience to protein aggregation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2620-9.	7.1	87
70	Protein misfolding in Dictyostelium: Using a freak of nature to gain insight into a universal problem. Prion, 2015, 9, 339-346.	1.8	19
71	A Liquid-to-Solid Phase Transition of the ALS Protein FUS Accelerated by Disease Mutation. Cell, 2015, 162, 1066-1077.	28.9	2,182
72	Donâ€™t Go with the Cytoplasmic Flow. Developmental Cell, 2015, 34, 381-382.	7.0	2

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73	Filament formation by metabolic enzymes is a specific adaptation to an advanced state of cellular starvation. ELife, 2014, 3, .	6.0	188
74	Fusion of Protein Aggregates Facilitates Asymmetric Damage Segregation. PLoS Biology, 2014, 12, e1001886.	5.6	56
75	HSP70-binding protein HSPBP1 regulates chaperone expression at a posttranslational level and is essential for spermatogenesis. Molecular Biology of the Cell, 2014, 25, 2260-2271.	2.1	25
76	Harnessing the power of yeast to unravel the molecular basis of neurodegeneration. Journal of Neurochemistry, 2013, 127, 438-452.	3.9	82
77	A complete mass-spectrometric map of the yeast proteome applied to quantitative trait analysis. Nature, 2013, 494, 266-270.	27.8	307
78	Protein disorder, prion propensities, and self-organizing macromolecular collectives. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 918-931.	2.3	164
79	Aggregating the Message to Control the Cell Cycle. Developmental Cell, 2013, 25, 551-552.	7.0	1
80	Molecular mechanisms of spatial protein quality control. Prion, 2012, 6, 437-442.	1.8	19
81	Molecular chaperones and stress-inducible protein-sorting factors coordinate the spatiotemporal distribution of protein aggregates. Molecular Biology of the Cell, 2012, 23, 3041-3056.	2.1	191
82	Prion formation by a yeast GLFG nucleoporin. Prion, 2012, 6, 391-399.	1.8	74
83	Opposing Effects of Glutamine and Asparagine Govern Prion Formation by Intrinsically Disordered Proteins. Molecular Cell, 2011, 43, 72-84.	9.7	174
84	Prions, protein homeostasis, and phenotypic diversity. Trends in Cell Biology, 2010, 20, 125-133.	7.9	153
85	Biochemical, Cell Biological, and Genetic Assays to Analyze Amyloid and Prion Aggregation in Yeast. Methods in Enzymology, 2010, 470, 709-734.	1.0	68
86	A Systematic Survey Identifies Prions and Illuminates Sequence Features of Prionogenic Proteins. Cell, 2009, 137, 146-158.	28.9	901
87	A suite of GatewayÂ®cloning vectors for high-throughput genetic analysis inSaccharomyces cerevisiae. Yeast, 2007, 24, 913-919.	1.7	419
88	BAG-2 Acts as an Inhibitor of the Chaperone-associated Ubiquitin Ligase CHIP. Molecular Biology of the Cell, 2005, 16, 5891-5900.	2.1	170
89	The Cochaperone HspBP1 Inhibits the CHIP Ubiquitin Ligase and Stimulates the Maturation of the Cystic Fibrosis Transmembrane Conductance Regulator. Molecular Biology of the Cell, 2004, 15, 4003-4010.	2.1	170
90	Ubiquitylation of BAG-1 Suggests a Novel Regulatory Mechanism during the Sorting of Chaperone Substrates to the Proteasome. Journal of Biological Chemistry, 2002, 277, 45920-45927.	3.4	179

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91	Cooperation of a ubiquitin domain protein and an E3 ubiquitin ligase during chaperone/proteasome coupling. Current Biology, 2001, 11, 1569-1577.	3.9	365
92	How to apply FLUCS in single cells and living embryos. Protocol Exchange, 0, , .	0.3	2