Michael Jj Matunis

List of Publications by Year
in descending order

89 papers	11,969 citations	66343 42 h-index	62596 80 g-index
91 all docs	91 docs citations	91 times ranked	10754 citing authors

#	Article	IF	Citations
1	hnRNP PROTEINS AND THE BIOGENESIS OF mRNA. Annual Review of Biochemistry, 1993, 62, 289-321.	11.1	1,476
2	A novel ubiquitin-like modification modulates the partitioning of the Ran-GTPase-activating protein RanGAP1 between the cytosol and the nuclear pore complex.. Journal of Cell Biology, 1996, 135, 1457-1470.	5.2	1,047
3	Proteomic analysis of the mammalian nuclear pore complex. Journal of Cell Biology, 2002, 158, 915-927.	5.2	862
4	The C9orf72 repeat expansion disrupts nucleocytoplasmic transport. Nature, 2015, 525, 56-61.	27.8	835
5	Conjugation with the ubiquitin-related modifier SUMO-1 regulates the partitioning of PML within the nucleus. EMBO Journal, 1998, 17, 61-70.	7.8	609
6	The pre-mRNA binding K protein contains a novel evolutionary conserved motif. Nucleic Acids Research, 1993, 21, 1193-1198.	14.5	527
7	Structural Basis for E2-Mediated SUMO Conjugation Revealed by a Complex between Ubiquitin-Conjugating Enzyme Ubc9 and RanGAP1. Cell, 2002, 108, 345-356.	28.9	509
8	The Small Ubiquitin-like Modifier-1 (SUMO-1) Consensus Sequence Mediates Ubc9 Binding and Is Essential for SUMO-1 Modification. Journal of Biological Chemistry, 2001, 276, 21664-21669.	3.4	438
9	Nup358, a Cytoplasmically Exposed Nucleoporin with Peptide Repeats, Ran-GTP Binding Sites, Zinc Fingers, a Cyclophilin A Homologous Domain, and a Leucine-rich Region. Journal of Biological Chemistry, 1995, 270, 14209-14213.	3.4	432
10	SUMO-1 Modification and Its Role in Targeting the Ran GTPase-activating Protein, RanGAP1, to the Nuclear Pore Complex. Journal of Cell Biology, 1998, 140, 499-509.	5.2	425
11	Mapping Sites of O-GlcNAc Modification Using Affinity Tags for Serine and Threonine Post-translational Modifications. Molecular and Cellular Proteomics, 2002, 1, 791-804.	3.8	385
12	Enzymes of the SUMO Modification Pathway Localize to Filaments of the Nuclear Pore Complex. Molecular and Cellular Biology, 2002, 22, 6498-6508.	2.3	250
13	SUMO: A Multifaceted Modifier of Chromatin Structure and Function. Developmental Cell, 2013, 24, 1-12.	7.0	247
14	A Conserved Biogenesis Pathway for Nucleoporins: Proteolytic Processing of a 186-Kilodalton Precursor Generates Nup98 and the Novel Nucleoporin, Nup96. Journal of Cell Biology, 1999, 144, 1097-1112.	5.2	233
15	Regulation of Heat Shock Transcription Factor 1 by Stress-induced SUMO-1 Modification. Journal of Biological Chemistry, 2001, 276, 40263-40267.	3.4	215
16	SUMO-2/3 Modification and Binding Regulate theÂAssociation of CENP-E with Kinetochores andÂProgression through Mitosis. Molecular Cell, 2008, 29, 729-741.	9.7	212
17	The nuclear pore complex protein ALADIN is mislocalized in triple A syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 5823-5827.	7.1	174
18	A conserved catalytic residue in the ubiquitin-conjugating enzyme family. EMBO Journal, 2003, 22, 5241-5250.	7.8	162

#	Article	IF	Citations
19	RNF4-Dependent Hybrid SUMO-Ubiquitin Chains Are Signals for RAP80 and Thereby Mediate the Recruitment of BRCA1 to Sites of DNA Damage. Science Signaling, 2012, 5, ra88.	3.6	158
20	SUMO-1 Modification Regulates the DNA Binding Activity of Heat Shock Transcription Factor 2, a Promyelocytic Leukemia Nuclear Body Associated Transcription Factor. Journal of Biological Chemistry, 2001, 276, 18513-18518.	3.4	156
21	Intra-nuclear trafficking of the BLM helicase to DNA damage-induced foci is regulated by SUMO modification. Human Molecular Genetics, 2005, 14, 1351-1365.	2.9	147
22	SUMO Modification of STAT1 and Its Role in PIAS-mediated Inhibition of Gene Activation. Journal of Biological Chemistry, 2003, 278, 30091-30097.	3.4	138
23	The hnRNP F protein: unique primary structure, nucleic acid-binding properties, and subcellular localization. Nucleic Acids Research, 1994, 22, 1059-1067.	14.5	135
24	Modification of Ran GTPase-activating Protein by the Small Ubiquitin-related Modifier SUMO-1 Requires Ubc9, an E2-type Ubiquitin-conjugating Enzyme Homologue. Journal of Biological Chemistry, 1998, 273, 6503-6507.	3.4	132
25	Small Ubiquitin-related Modifier (SUMO) Binding Determines Substrate Recognition and Paralog-selective SUMO Modification. Journal of Biological Chemistry, 2008, 283, 29405-29415.	3.4	125
26	Automated identification of SUMOylation sites using mass spectrometry and SUMmOn pattern recognition software. Nature Methods, 2006, 3, 533-539.	19.0	111
27	SUMO Modification Regulates BLM and RAD51 Interaction at Damaged Replication Forks. PLoS Biology, 2009, 7, e1000252.	5.6	109
28	SUMO Modification of Heterogeneous Nuclear Ribonucleoproteins. Molecular and Cellular Biology, 2004, 24, 3623-3632.	2.3	98
29	SUMO modified proteins localize to the XY body of pachytene spermatocytes. Chromosoma, 2004, 113, 233-243.	2.2	98
30	E2 ubiquitin-conjugating enzymes regulate the deubiquitinating activity of OTUB1. Nature Structural and Molecular Biology, 2013, 20, 1033-1039.	8.2	97
31	The Defective Nuclear Lamina in Hutchinson-Gilford Progeria Syndrome Disrupts the Nucleocytoplasmic Ran Gradient and Inhibits Nuclear Localization of Ubc9. Molecular and Cellular Biology, 2011, 31, 3378-3395.	2.3	91
32	Evaluation of Interactions of Human Cytomegalovirus Immediate-Early IE2 Regulatory Protein with Small Ubiquitin-Like Modifiers and Their Conjugation Enzyme Ubc9. Journal of Virology, 2001, 75, 3859-3872.	3.4	89
33	The nuclear pore complex: disease associations and functional correlations. Trends in Endocrinology and Metabolism, 2004, 15, 34-39.	7.1	74
34	Proteasome-Independent Disruption of PML Oncogenic Domains (PODs), but Not Covalent Modification by SUMO-1, Is Required for Human Cytomegalovirus Immediate-Early Protein IE1 To Inhibit PML-Mediated Transcriptional Repression. Journal of Virology, 2001, 75, 10683-10695.	3.4	73
35	SUMO: The Glue that Binds. Developmental Cell, 2006, 11, 596-597.	7.0	73
36	Developmental control of sumoylation pathway proteins in mouse male germ cells. Developmental Biology, 2008, 321, 227-237.	2.0	66

#	Article	IF	Citations
37	Protection from Isopeptidase-Mediated Deconjugation Regulates Paralog-Selective Sumoylation of RanGAP1. Molecular Cell, 2009, 33, 570-580.	9.7	65
38	SUMO Binding by the Epstein-Barr Virus Protein Kinase BGLF4 Is Crucial for BGLF4 Function. Journal of Virology, 2012, 86, 5412-5421.	3.4	56
39	The SUMO-specific isopeptidase SENP2 associates dynamically with nuclear pore complexes through interactions with karyopherins and the Nup107-160 nucleoporin subcomplex. Molecular Biology of the Cell, 2011, 22, 4868-4882.	2.1	55
40	Identification of Biochemically Distinct Properties of the Small Ubiquitin-related Modifier (SUMO) Conjugation Pathway in Plasmodium falciparum. Journal of Biological Chemistry, 2013, 288, 27724-27736.	3.4	51
41	SENP1 and SENP2 affect spatial and temporal control of sumoylation in mitosis. Molecular Biology of the Cell, 2013, 24, 3483-3495.	2.1	46
42	On the Road to Repair. Molecular Cell, 2002, 10, 441-442.	9.7	44
43	Synthesis of Free and Proliferating Cell Nuclear Antigen-bound Polyubiquitin Chains by the RING E3 Ubiquitin Ligase Rad5. Journal of Biological Chemistry, 2009, 284, 29326-29334.	3.4	38
44	The L1 family of long interspersed repetitive DNA in rabbits: Sequence, copy number, conserved open reading frames, and similarity to keratin. Journal of Molecular Evolution, 1989, 29, 3-19.	1.8	35
45	SUMO-1 Modification of the Wilmsâ€™ Tumor Suppressor WT1. Cancer Research, 2004, 64, 7846-7851.	0.9	35
46	Isolation and fractionation of rat liver nuclear envelopes and nuclear pore complexes. Methods, 2006, 39, 277-283.	3.8	32
47	Identification of SUMO-2/3-modified proteins associated with mitotic chromosomes. Proteomics, 2015, 15, 763-772.	2.2	32
48	Expanding SUMO and ubiquitin-mediated signaling through hybrid SUMO-ubiquitin chains and their receptors. Cell Cycle, 2013, 12, 1015-1017.	2.6	30
49	BLM SUMOylation regulates ssDNA accumulation at stalled replication forks. Frontiers in Genetics, 2013, 4, 167.	2.3	29
50	An improved SUMmOn-based methodology for the identification of ubiquitin and ubiquitin-like protein conjugation sites identifies novel ubiquitin-like protein chain linkages. Proteomics, 2010, 10, 254-265.	2.2	27
51	Characterization of the SUMO-Binding Activity of the Myeloproliferative and Mental Retardation (MYM)-Type Zinc Fingers in ZNF261 and ZNF198. PLoS ONE, 2014, 9, e105271.	2.5	27
52	Purification and characterization of proteins of heterogeneous nuclear ribonucleoprotein complexes by affinity chromatography. Methods in Enzymology, 1990, 181, 326-331.	1.0	26
53	Sumoylation promotes optimal APC/C activation and timely anaphase. ELife, 2018, 7, .	6.0	26
54	Global Identification of Small Ubiquitin-related Modifier (SUMO) Substrates Reveals Crosstalk between SUMOylation and Phosphorylation Promotes Cell Migration. Molecular and Cellular Proteomics, 2018, 17, 871-888.	3.8	24

#	Article	IF	Citations
55	Beginning at the end with SUMO. Nature Structural and Molecular Biology, 2005, 12, 565-566.	8.2	21
56	SUMO paralogueâ€"specific functions revealed through systematic analysis of human knockout cell lines and gene expression data. Molecular Biology of the Cell, 2021, 32, 1849-1866.	2.1	21
57	RAP80, ubiquitin and SUMO in the DNA damage response. Journal of Molecular Medicine, 2017, 95, 799-807.	3.9	18
58	SUMO modification through rapamycin-mediated heterodimerization reveals a dual role for Ubc9 in targeting RanGAP1 to nuclear pore complexes. Experimental Cell Research, 2006, 312, 1042-1049.	2.6	17
59	E2-mediated Small Ubiquitin-like Modifier (SUMO) Modification of Thymine DNA Glycosylase Is Efficient but Not Selective for the Enzyme-Product Complex. Journal of Biological Chemistry, 2014, 289, 15810-15819.	3.4	17
60	A mediator methylation mystery: JMJD1C demethylates MDC1 to regulate DNA repair. Nature Structural and Molecular Biology, 2013, 20, 1346-1348.	8.2	16
61	Characterizing Requirements for Small Ubiquitin-like Modifier (SUMO) Modification and Binding on Base Excision Repair Activity of Thymine-DNA Glycosylase in Vivo. Journal of Biological Chemistry, 2016, 291, 9014-9024.	3.4	15
62	Characterization and Structural Insights into Selective E1-E2 Interactions in the Human and Plasmodium falciparum SUMO Conjugation Systems. Journal of Biological Chemistry, 2016, 291, 3860-3870.	3.4	15
63	Global Analysis of SUMO-Binding Proteins Identifies SUMOylation as a Key Regulator of the INO80 Chromatin Remodeling Complex. Molecular and Cellular Proteomics, 2017, 16, 812-823.	3.8	15
64	A high throughput mutagenic analysis of yeast sumo structure and function. PLoS Genetics, 2017, 13, e1006612.	3.5	15
65	Keratin 17 regulates nuclear morphology and chromatin organization. Journal of Cell Science, 2020, 133, .	2.0	14
66	Concepts and Methodologies to Study Protein SUMOylation: An Overview. Methods in Molecular Biology, 2016, 1475, 3-22.	0.9	13
67	Identification of SUMO E3 Ligase-Specific Substrates Using the HuProt Human Proteome Microarray. Methods in Molecular Biology, 2015, 1295, 455-463.	0.9	11
68	The SUMO-specific isopeptidase SENP2 is targeted to intracellular membranes via a predicted N-terminal amphipathic Î±-helix. Molecular Biology of the Cell, 2018, 29, 1878-1890.	2.1	11
69	RNF4 Regulates the BLM Helicase in Recovery From Replication Fork Collapse. Frontiers in Genetics, 2021, 12, 753535.	2.3	10
70	Ub in charge: Regulating E2 enzyme nuclear import. Nature Cell Biology, 2005, 7, 12-14.	10.3	9
71	A cellular and bioinformatics analysis of the SENP1 SUMO isopeptidase in pancreatic cancer. Journal of Gastrointestinal Oncology, 2019, 10, 821-830.	1.4	8
72	SUMmOning Daxx-Mediated Repression. Molecular Cell, 2011, 42, 4-5.	9.7	7

#	Article	IF	Citations
73	SUMOylation of mitofusins: A potential mechanism for perinuclear mitochondrial congression in cells treated with mitochondrial stressors. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2021, 1867, 166104.	3.8	7
74	Detection of SUMOylation in Plasmodium falciparum. Methods in Molecular Biology, 2016, 1475, 283-290.	0.9	6
75	Chapter 11 Isolation and Characterization of RNA-Binding Proteins from Drosophila melanogaster. Methods in Cell Biology, 1994, 44, 191-205.	1.1	5
76	SUMO, PTEN, and tumor suppression. Pigment Cell and Melanoma Research, 2012, 25, 718-720.	3.3	5
77	A Method for SUMO Modification of Proteins in vitro. Bio-protocol, 2018, 8, .	0.4	4
78	SUMO: The Glue that Binds. Developmental Cell, 2006, 11, 903.	7.0	1
79	A conserved catalytic residue in the ubiquitin-conjugating enzyme family. EMBO Journal, 2007, 26, 4051-4051.	7.8	1
80	Chromosome movement via multiple motors: Novel relationships between KIF18A and CENP-E revealed. Cell Cycle, 2009, 8, 3257-3260.	2.6	1
81	Recent studies on hnRNP complexes. Molecular Biology Reports, 1990, 14, 85-85.	2.3	0
82	Characterization of the Effects and Functions of Sumoylation Through Rapamycin-Mediated Heterodimerization. Methods in Molecular Biology, 2009, 497, 153-164.	0.9	0
83	Identification of Biochemically Distinct Properties of the Sumo Conjugation Pathway in Plasmodium Falciparum. Biophysical Journal, 2015, 108, 30a.	0.5	0
84	Resolving Chromatin Bridges With SIMs, SUMOs and PICH. Cell Cycle, 2016, 15, 2547-2548.	2.6	0
85	RNF4â€Dependent Hybrid SUMOâ€Ubiquitin Chains are Signals for RAP80 and thereby Mediate the Recruitment of BRCA1 to Sites of DNA Damage. FASEB Journal, 2013, 27, 782.7.	0.5	0
86	Targeting the SUMO E1â€E2 Enzyme Interaction in Plasmodium falciparum. FASEB Journal, 2015, 29, 717.20.	0.5	0
87	A SUMOâ€dependent Pathway for Cytosolic Protein Quality Control. FASEB Journal, 2022, 36, .	0.5	0
88	SUMO 2 the rescue: how SUMO2 regulates the mitochondria via Drp1 modification. FASEB Journal, 2022, 36, .	0.5	0
89	SUMO Regulates Histone mRNA Processing and Polyadenylation. FASEB Journal, 2022, 36, .	0.5	0