Alfred C O Vertegaal

List of Publications by Year
in descending order

81 papers	6,015 citations	81839 39 h-index	76872 74 g-index
91 all docs	91 docs citations	91 times ranked	6393 citing authors

#	Article	IF	Citations
1	Uncovering global SUMOylation signaling networks in a site-specific manner. Nature Structural and Molecular Biology, 2014, 21, 927-936.	3.6	408
2	A comprehensive compilation of SUMO proteomics. Nature Reviews Molecular Cell Biology, 2016, 17, 581-595.	16.1	383
3	Site-specific mapping of the human SUMO proteome reveals co-modification with phosphorylation. Nature Structural and Molecular Biology, 2017, 24, 325-336.	3.6	283
4	Distinct and Overlapping Sets of SUMO-1 and SUMO-2 Target Proteins Revealed by Quantitative Proteomics. Molecular and Cellular Proteomics, 2006, 5, 2298-2310.	2.5	274
5	Site-Specific Identification of SUMO-2 Targets in Cells Reveals an Inverted SUMOylation Motif and a Hydrophobic Cluster SUMOylation Motif. Molecular Cell, 2010, 39, 641-652.	4.5	255
6	In Vivo Identification of Human Small Ubiquitin-like Modifier Polymerization Sites by High Accuracy Mass Spectrometry and an in Vitro to in Vivo Strategy. Molecular and Cellular Proteomics, 2008, 7, 132-144.	2.5	251
7	SUMOylation-Mediated Regulation of Cell Cycle Progression and Cancer. Trends in Biochemical Sciences, 2015, 40, 779-793.	3.7	216
8	Ikappa Balpha is a target for the mitogen-activated 90kDa ribosomal S6 kinase. EMBO Journal, 1997, 16, 3133-3144.	3.5	214
9	PARP1 Links CHD2-Mediated Chromatin Expansion and H3.3 Deposition to DNA Repair by Non-homologous End-Joining. Molecular Cell, 2016, 61, 547-562.	4.5	214
10	A Proteomic Study of SUMO-2 Target Proteins. Journal of Biological Chemistry, 2004, 279, 33791-33798.	1.6	197
11	Uncovering SUMOylation Dynamics during Cell-Cycle Progression Reveals FoxM1 as a Key Mitotic SUMO Target Protein. Molecular Cell, 2014, 53, 1053-1066.	4.5	153
12	The Ubiquitin-Proteasome System Is a Key Component of the SUMO-2/3 Cycle. Molecular and Cellular Proteomics, 2008, 7, 2107-2122.	2.5	143
13	A cascading activity-based probe sequentially targets E1â€"E2â€"E3 ubiquitin enzymes. Nature Chemical Biology, 2016, 12, 523-530.	3.9	122
14	SUMO-2 Orchestrates Chromatin Modifiers in Response to DNA Damage. Cell Reports, 2015, 10, 1778-1791.	2.9	117
15	RNF4 is required for DNA double-strand break repair in vivo. Cell Death and Differentiation, 2013, 20, 490-502.	5.0	102
16	Signalling mechanisms and cellular functions of SUMO. Nature Reviews Molecular Cell Biology, 2022, 23, 715-731.	16.1	99
17	System-wide identification of wild-type SUMO-2 conjugation sites. Nature Communications, 2015, 6, 7289.	5.8	97
18	The N and C Termini of the Splice Variants of the Human Mitogen-Activated Protein Kinase-Interacting Kinase Mnk2 Determine Activity and Localization. Molecular and Cellular Biology, 2003, 23, 5692-5705.	1.1	96

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19	Deubiquitinase Activity Profiling Identifies UCHL1 as a Candidate Oncoprotein That Promotes TGFÎ²-Induced Breast Cancer Metastasis. Clinical Cancer Research, 2020, 26, 1460-1473.	3.2	92
20	Uncovering Ubiquitin and Ubiquitin-like Signaling Networks. Chemical Reviews, 2011, 111, 7923-7940.	23.0	91
21	The STUbL RNF4 regulates protein group SUMOylation by targeting the SUMO conjugation machinery. Nature Communications, 2017, 8, 1809.	5.8	91
22	The cooperative action of CSB, CSA, and UVSSA target TFIIH to DNA damage-stalled RNA polymerase II. Nature Communications, 2020, 11, 2104.	5.8	91
23	RNF12 Controls Embryonic Stem Cell Fate and Morphogenesis in Zebrafish Embryos by Targeting Smad7 for Degradation. Molecular Cell, 2012, 46, 650-661.	4.5	83
24	Protein kinase C-$alpha; is an upstream activator of the I$kappa;B kinase complex in the TPA signal transduction pathway to NF-$kappa;B in U2OS cells. Cellular Signalling, 2000, 12, 759-768.	1.7	81
25	RNF4 and VHL regulate the proteasomal degradation of SUMO-conjugated Hypoxia-Inducible Factor-2Î±. Nucleic Acids Research, 2010, 38, 1922-1931.	6.5	80
26	Ubiquitin-dependent and independent roles of SUMO in proteostasis. American Journal of Physiology - Cell Physiology, 2016, 311, C284-C296.	2.1	80
27	System-wide Analysis of SUMOylation Dynamics in Response to Replication Stress Reveals Novel Small Ubiquitin-like Modified Target Proteins and Acceptor Lysines Relevant for Genome Stability. Molecular and Cellular Proteomics, 2015, 14, 1419-1434.	2.5	79
28	The MN1-TEL Fusion Protein, Encoded by the Translocation (12;22)(p13;q11) in Myeloid Leukemia, Is a Transcription Factor with Transforming Activity. Molecular and Cellular Biology, 2000, 20, 9281-9293.	1.1	78
29	c-Myc is targeted to the proteasome for degradation in a SUMOylation-dependent manner, regulated by PIAS1, SENP7 and RNF4. Cell Cycle, 2015, 14, 1859-1872.	1.3	77
30	Mapping the <scp>SUMO</scp>ylated landscape. FEBS Journal, 2015, 282, 3669-3680.	2.2	71
31	WWP2 ubiquitylates RNA polymerase II for DNA-PK-dependent transcription arrest and repair at DNA breaks. Genes and Development, 2019, 33, 684-704.	2.7	71
32	SUMO chains: polymeric signals. Biochemical Society Transactions, 2010, 38, 46-49.	1.6	70
33	Targeting SUMO Signaling to Wrestle Cancer. Trends in Cancer, 2021, 7, 496-510.	3.8	62
34	A Chain of Events: Regulating Target Proteins by SUMO Polymers. Trends in Biochemical Sciences, 2021, 46, 113-123.	3.7	55
35	The poly-SUMO2/3 protease SENP6 enables assembly of the constitutive centromere-associated network by group deSUMOylation. Nature Communications, 2019, 10, 3987.	5.8	54
36	<scp>SUMO</scp> ylation and <scp>PAR</scp> ylation cooperate to recruit and stabilize <scp>SLX</scp> 4 at <scp>DNA</scp> damage sites. EMBO Reports, 2015, 16, 512-519.	2.0	51

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37	Remodeling and spacing factor 1 (RSF1) deposits centromere proteins at DNA double-strand breaks to promote non-homologous end-joining. Cell Cycle, 2013, 12, 3070-3082.	1.3	50
38	SUMOylation and the HSF1-Regulated Chaperone Network Converge to Promote Proteostasis in Response to Heat Shock. Cell Reports, 2019, 26, 236-249.e4.	2.9	44
39	Guiding Mitotic Progression by Crosstalk between Post-translational Modifications. Trends in Biochemical Sciences, 2018, 43, 251-268.	3.7	43
40	Total Chemical Synthesis of SUMO and SUMOâ€Based Probes for Profiling the Activity of SUMOâ€Specific Proteases. Angewandte Chemie - International Edition, 2018, 57, 8958-8962.	7.2	42
41	Small ubiquitin-related modifiers in chains. Biochemical Society Transactions, 2007, 35, 1422-1423.	1.6	41
42	SUMO targets the APC/C to regulate transition from metaphase to anaphase. Nature Communications, 2018, 9, 1119.	5.8	41
43	Global non-covalent SUMO interaction networks reveal SUMO-dependent stabilization of the non-homologous end joining complex. Cell Reports, 2021, 34, 108691.	2.9	41
44	ELOF1 is a transcription-coupled DNA repair factor that directs RNA polymerase II ubiquitylation. Nature Cell Biology, 2021, 23, 595-607.	4.6	38
45	Inhibiting ubiquitination causes an accumulation of SUMOylated newly synthesized nuclear proteins at PML bodies. Journal of Biological Chemistry, 2019, 294, 15218-15234.	1.6	37
46	Functional analyses of a human vascular tumor FOS variant identify a novel degradation mechanism and a link to tumorigenesis. Journal of Biological Chemistry, 2017, 292, 21282-21290.	1.6	35
47	Targeting pancreatic cancer by TAK-981: a SUMOylation inhibitor that activates the immune system and blocks cancer cell cycle progression in a preclinical model. Gut, 2022, 71, 2266-2283.	6.1	35
48	Ubiquitin-specific Protease 11 (USP11) Deubiquitinates Hybrid Small Ubiquitin-like Modifier (SUMO)-Ubiquitin Chains to Counteract RING Finger Protein 4 (RNF4). Journal of Biological Chemistry, 2015, 290, 15526-15537.	1.6	32
49	A CSB-PAF1C axis restores processive transcription elongation after DNA damage repair. Nature Communications, 2021, 12, 1342.	5.8	31
50	A high-yield double-purification proteomics strategy for the identification of SUMO sites. Nature Protocols, 2016, 11, 1630-1649.	5.5	29
51	Identification of a New Site of Sumoylation on Tel (ETV6) Uncovers a PIAS-Dependent Mode of Regulating Tel Function. Molecular and Cellular Biology, 2008, 28, 2342-2357.	1.1	28
52	CHD7 and 53BP1 regulate distinct pathways for the re-ligation of DNA double-strand breaks. Nature Communications, 2020, 11, 5775.	5.8	28
53	Telomeric DNA Mediates De Novo PML Body Formation. Molecular Biology of the Cell, 2009, 20, 4804-4815.	0.9	27
54	Identification of SUMO Target Proteins by Quantitative Proteomics. Methods in Molecular Biology, 2009, 497, 19-31.	0.4	27

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55	Loss of ZBTB24 impairs nonhomologous end-joining and class-switch recombination in patients with ICF syndrome. Journal of Experimental Medicine, 2020, 217, .	4.2	27
56	Identification of proximal SUMO-dependent interactors using SUMO-ID. Nature Communications, 2021, 12, 6671.	5.8	27
57	Label-Free Identification and Quantification of SUMO Target Proteins. Methods in Molecular Biology, 2016, 1475, 171-193.	0.4	23
58	Converging Small Ubiquitin-like Modifier (SUMO) and Ubiquitin Signaling: Improved Methodology Identifies Co-modified Target Proteins. Molecular and Cellular Proteomics, 2017, 16, 2281-2295.	2.5	22
59	The ER-embedded UBE2J1/RNF26 ubiquitylation complex exerts spatiotemporal control over the endolysosomal pathway. Cell Reports, 2021, 34, 108659.	2.9	22
60	Deubiquitinating enzymes and the proteasome regulate preferential sets of ubiquitin substrates. Nature Communications, 2022, 13, 2736.	5.8	22
61	Probing ubiquitin and SUMO conjugation and deconjugation. Biochemical Society Transactions, 2018, 46, 423-436.	1.6	20
62	Splicing factors control triple-negative breast cancer cell mitosis through SUN2 interaction and sororin intron retention. Journal of Experimental and Clinical Cancer Research, 2021, 40, 82.	3.5	20
63	SUMO in the DNA damage response. Oncotarget, 2015, 6, 15734-15735.	0.8	19
64	<i>ERCC1</i>mutations impede DNA damage repair and cause liver and kidney dysfunction in patients. Journal of Experimental Medicine, 2021, 218, .	4.2	18
65	Zinc finger protein ZNF384 is an adaptor of Ku to DNA during classical non-homologous end-joining. Nature Communications, 2021, 12, 6560.	5.8	17
66	Differential Expression of Tapasin and Immunoproteasome Subunits in Adenovirus Type 5- Versus Type 12-transformed Cells. Journal of Biological Chemistry, 2003, 278, 139-146.	1.6	16
67	USP7: combining tools towards selectivity. Chemical Communications, 2019, 55, 5075-5078.	2.2	16
68	Chemical Tools and Biochemical Assays for SUMO Specific Proteases (SENPs). ACS Chemical Biology, 2019, 14, 2389-2395.	1.6	14
69	cDNA micro array identification of a gene differentially expressed in adenovirus type 5- versus type 12-transformed cells. FEBS Letters, 2000, 487, 151-155.	1.3	13
70	Molecular mechanisms of APC/C release from spindle assembly checkpoint inhibition by APC/C SUMOylation. Cell Reports, 2021, 34, 108929.	2.9	12
71	Total Chemical Synthesis of SUMO and SUMOâ€Based Probes for Profiling the Activity of SUMOâ€Specific Proteases. Angewandte Chemie, 2018, 130, 9096-9100.	1.6	10
72	Transcription-coupled nucleotide excision repair is coordinated by ubiquitin and SUMO in response to ultraviolet irradiation. Nucleic Acids Research, 2020, 48, 231-248.	6.5	10

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73	Site-specific proteomic strategies to identify ubiquitin and SUMO modifications: Challenges and opportunities. Seminars in Cell and Developmental Biology, 2022, 132, 97-108.	2.3	10
74	Positively charged amino acids flanking a sumoylation consensus tetramer on the 110kDa tri-snRNP component SART1 enhance sumoylation efficiency. Journal of Proteomics, 2010, 73, 1523-1534.	1.2	8
75	Chromokinesin KIF4A teams up with stathmin 1 to regulate abscission in a SUMO-dependent manner. Journal of Cell Science, 2020, 133, .	1.2	7
76	SUMOylation Is Associated with Aggressive Behavior in Chondrosarcoma of Bone. Cancers, 2021, 13, 3823.	1.7	7
77	Proteomic strategies for characterizing ubiquitin-like modifications. Nature Reviews Methods Primers, 2021, 1, .	11.8	6
78	THO complex deficiency impairs DNA double-strand break repair via the RNA surveillance kinase SMG-1. Nucleic Acids Research, 2022, 50, 6235-6250.	6.5	5
79	A proteomics study identifying interactors of the FSHD2 gene product SMCHD1 reveals RUVBL1-dependent DUX4 repression. Scientific Reports, 2021, 11, 23642.	1.6	2
80	SALL1 Modulates CBX4 Stability, Nuclear Bodies, and Regulation of Target Genes. Frontiers in Cell and Developmental Biology, 2021, 9, 715868.	1.8	1
81	Small Ubiquitin-Like Modifiers and Other Ubiquitin-Like Proteins. , 2011, , 317-340.		0