Ivan Ahel

List of Publications by Year
in descending order

99 papers	9,605 citations	31976 53 h-index	39675 94 g-index
104 all docs	104 docs citations	104 times ranked	6982 citing authors

#	Article	IF	Citations
1	ADPâ€ribosyltransferases, an update on function and nomenclature. FEBS Journal, 2022, 289, 7399-7410.	4.7	150
2	Beyond protein modification: the rise of non-canonical ADP-ribosylation. Biochemical Journal, 2022, 479, 463-477.	3.7	19
3	Mimetics of ADP-Ribosylated Histidine through Copper(I)-Catalyzed Click Chemistry. Organic Letters, 2022, 24, 3776-3780.	4.6	7
4	Defective ALC1 nucleosome remodeling confers PARPi sensitization and synthetic lethality with HRD. Molecular Cell, 2021, 81, 767-783.e11.	9.7	72
5	Progress and outlook in studying the substrate specificities of PARPs and related enzymes. FEBS Journal, 2021, 288, 2131-2142.	4.7	44
6	Detecting ADP-Ribosylation in RNA. Methods in Molecular Biology, 2021, 2298, 231-243.	0.9	0
7	Behavioural Characterisation of Macrod1 and Macrod2 Knockout Mice. Cells, 2021, 10, 368.	4.1	9
8	CARM1 regulates replication fork speed and stress response by stimulating PARP1. Molecular Cell, 2021, 81, 784-800.e8.	9.7	61
9	Fragment binding to the Nsp3 macrodomain of SARS-CoV-2 identified through crystallographic screening and computational docking. Science Advances, 2021, 7, .	10.3	100
10	Exploring protein hotspots by optimized fragment pharmacophores. Nature Communications, 2021, 12, 3201.	12.8	28
11	Molecular Tools for the Study of ADPâ€Ribosylation: A Unified and Versatile Method to Synthesise Native Monoâ€ADPâ€Ribosylated Peptides. Chemistry - A European Journal, 2021, 27, 10621-10627.	3.3	20
12	Unrestrained poly-ADP-ribosylation provides insights into chromatin regulation and human disease. Molecular Cell, 2021, 81, 2640-2655.e8.	9.7	52
13	Mechanistic insights into the three steps of poly(ADP-ribosylation) reversal. Nature Communications, 2021, 12, 4581.	12.8	34
14	Serine-linked PARP1 auto-modification controls PARP inhibitor response. Nature Communications, 2021, 12, 4055.	12.8	51
15	Molecular basis for DarT ADP-ribosylation of a DNA base. Nature, 2021, 596, 597-602.	27.8	41
16	Noncanonical mono(ADP-ribosyl)ation of zinc finger SZF proteins counteracts ubiquitination for protein homeostasis in plant immunity. Molecular Cell, 2021, 81, 4591-4604.e8.	9.7	17
17	TARG1 protects against toxic DNA ADP-ribosylation. Nucleic Acids Research, 2021, 49, 10477-10492.	14.5	19
18	Biallelic <i>ADPRHL2</i> mutations in complex neuropathy affect ADP ribosylation and DNA damage response. Life Science Alliance, 2021, 4, e202101057.	2.8	11

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19	ADP-ribosylation of DNA and RNA. DNA Repair, 2021, 105, 103144.	2.8	49
20	Serine ADP-ribosylation in DNA-damage response regulation. Current Opinion in Genetics and Development, 2021, 71, 106-113.	3.3	19
21	ADP-ribosylation systems in bacteria and viruses. Computational and Structural Biotechnology Journal, 2021, 19, 2366-2383.	4.1	33
22	The regulatory landscape of the human HPF1- and ARH3-dependent ADP-ribosylome. Nature Communications, 2021, 12, 5893.	12.8	45
23	The Making and Breaking of Serine-ADP-Ribosylation in the DNA Damage Response. Frontiers in Cell and Developmental Biology, 2021, 9, 745922.	3.7	12
24	Bridging of DNA breaks activates PARP2â€“HPF1 to modify chromatin. Nature, 2020, 585, 609-613.	27.8	90
25	HPF1 completes the PARP active site for DNA damage-induced ADP-ribosylation. Nature, 2020, 579, 598-602.	27.8	172
26	Pathogenic ARH3 mutations result in ADP-ribose chromatin scars during DNA strand break repair. Nature Communications, 2020, 11, 3391.	12.8	25
27	(ADP-ribosyl)hydrolases: structure, function, and biology. Genes and Development, 2020, 34, 263-284.	5.9	124
28	DNA ADP-Ribosylation Stalls Replication and Is Reversed by RecF-Mediated Homologous Recombination and Nucleotide Excision Repair. Cell Reports, 2020, 30, 1373-1384.e4.	6.4	33
29	Viral macrodomains: a structural and evolutionary assessment of the pharmacological potential. Open Biology, 2020, 10, 200237.	3.6	60
30	Reversible ADP-ribosylation of RNA. Nucleic Acids Research, 2019, 47, 5658-5669.	14.5	106
31	ADP-ribosylation signalling and human disease. Open Biology, 2019, 9, 190041.	3.6	76
32	NR4A Nuclear Receptors Target Poly-ADP-Ribosylated DNA-PKcs Protein to Promote DNA Repair. Cell Reports, 2019, 26, 2028-2036.e6.	6.4	12
33	Viral Macrodomains: Unique Mediators of Viral Replication and Pathogenesis. Trends in Microbiology, 2018, 26, 598-610.	7.7	93
34	Discovery and Characterization of ZUFSP/ZUP1, a Distinct Deubiquitinase Class Important for Genome Stability. Molecular Cell, 2018, 70, 150-164.e6.	9.7	142
35	Specificity of reversible ADP-ribosylation and regulation of cellular processes. Critical Reviews in Biochemistry and Molecular Biology, 2018, 53, 64-82.	5.2	82
36	(ADP-ribosyl)hydrolases: Structural Basis for Differential Substrate Recognition and Inhibition. Cell Chemical Biology, 2018, 25, 1533-1546.e12.	5.2	52

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37	PARPs in genome stability and signal transduction: implications for cancer therapy. Biochemical Society Transactions, 2018, 46, 1681-1695.	3.4	56
38	Interplay of Histone Marks with Serine ADP-Ribosylation. Cell Reports, 2018, 24, 3488-3502.e5.	6.4	76
39	Monitoring Poly(ADP-ribosyl)glycohydrolase Activity with a Continuous Fluorescent Substrate. Cell Chemical Biology, 2018, 25, 1562-1570.e19.	5.2	16
40	Synthetic Î±- and Î²-Ser-ADP-ribosylated Peptides Reveal Î±-Ser-ADPr as the Native Epimer. Organic Letters, 2018, 20, 4140-4143.	4.6	42
41	Serine is the major residue for ADP-ribosylation upon DNA damage. ELife, 2018, 7, .	6.0	167
42	MacroD1 Is a Promiscuous ADP-Ribosyl Hydrolase Localized to Mitochondria. Frontiers in Microbiology, 2018, 9, 20.	3.5	42
43	Hydrolysis of ADP-Ribosylation by Macrodomains. Methods in Molecular Biology, 2018, 1813, 215-223.	0.9	0
44	Serine ADP-Ribosylation Depends on HPF1. Molecular Cell, 2017, 65, 932-940.e6.	9.7	249
45	<scp>ADP</scp>â€ribosylation: new facets of an ancient modification. FEBS Journal, 2017, 284, 2932-2946.	4.7	114
46	MacroH2A1.1 regulates mitochondrial respiration by limiting nuclear NAD+ consumption. Nature Structural and Molecular Biology, 2017, 24, 902-910.	8.2	54
47	Discovery of a Selective Allosteric Inhibitor Targeting Macrodomain 2 of Polyadenosine-Diphosphate-Ribose Polymerase 14. ACS Chemical Biology, 2017, 12, 2866-2874.	3.4	37
48	Reversible monoâ€ADPâ€ribosylation of DNA breaks. FEBS Journal, 2017, 284, 4002-4016.	4.7	121
49	Studying Catabolism of Protein ADP-Ribosylation. Methods in Molecular Biology, 2017, 1608, 415-430.	0.9	4
50	PARP, transcription and chromatin modeling. Seminars in Cell and Developmental Biology, 2017, 63, 102-113.	5.0	55
51	Serine ADP-ribosylation reversal by the hydrolase ARH3. ELife, 2017, 6, .	6.0	163
52	The Toxin-Antitoxin System DarTG Catalyzes Reversible ADP-Ribosylation of DNA. Molecular Cell, 2016, 64, 1109-1116.	9.7	137
53	The Conserved Coronavirus Macrodomain Promotes Virulence and Suppresses the Innate Immune Response during Severe Acute Respiratory Syndrome Coronavirus Infection. MBio, 2016, 7, .	4.1	198
54	Identifying Family-Member-Specific Targets of Mono-ARTDs by Using a Chemical Genetics Approach. Cell Reports, 2016, 14, 621-631.	6.4	75

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55	MRNIP/C5orf45 Interacts with the MRN Complex and Contributes to the DNA Damage Response. Cell Reports, 2016, 16, 2565-2575.	6.4	18
56	Serine is a new target residue for endogenous ADP-ribosylation on histones. Nature Chemical Biology, 2016, 12, 998-1000.	8.0	189
57	The role of ADP-ribosylation in regulating DNA interstrand crosslink repair. Journal of Cell Science, 2016, 129, 3845-3858.	2.0	15
58	Disruption of Macrodomain Protein SCO6735 Increases Antibiotic Production in Streptomyces coelicolor. Journal of Biological Chemistry, 2016, 291, 23175-23187.	3.4	16
59	Viral Macro Domains Reverse Protein ADP-Ribosylation. Journal of Virology, 2016, 90, 8478-8486.	3.4	140
60	<scp>ENPP</scp>1 processes protein <scp>ADP</scp>â€ribosylation <i>in vitro</i>. FEBS Journal, 2016, 283, 3371-3388.	4.7	63
61	HPF1/C4orf27 Is a PARP-1-Interacting Protein that Regulates PARP-1 ADP-Ribosylation Activity. Molecular Cell, 2016, 62, 432-442.	9.7	215
62	Macrodomains: Structure, Function, Evolution, and Catalytic Activities. Annual Review of Biochemistry, 2016, 85, 431-454.	11.1	177
63	Processing of protein ADP-ribosylation by Nudix hydrolases. Biochemical Journal, 2015, 468, 293-301.	3.7	113
64	Synthesis of Dimeric ADP-Ribose and Its Structure with Human Poly(ADP-ribose) Glycohydrolase. Journal of the American Chemical Society, 2015, 137, 3558-3564.	13.7	75
65	Structures and Mechanisms of Enzymes Employed in the Synthesis and Degradation of PARP-Dependent Protein ADP-Ribosylation. Molecular Cell, 2015, 58, 935-946.	9.7	205
66	Identification of a Class of Protein ADP-Ribosylating Sirtuins in Microbial Pathogens. Molecular Cell, 2015, 59, 309-320.	9.7	79
67	Poly(ADP-ribosyl)ation in regulation of chromatin structure and the DNA damage response. Chromosoma, 2014, 123, 79-90.	2.2	79
68	Family-wide analysis of poly(ADP-ribose) polymerase activity. Nature Communications, 2014, 5, 4426.	12.8	386
69	Distribution of protein poly(ADP-ribosyl)ation systems across all domains of life. DNA Repair, 2014, 23, 4-16.	2.8	143
70	Deficiency of terminal ADP-ribose protein glycohydrolase TARG1/C6orf130 in neurodegenerative disease. EMBO Journal, 2013, 32, 1225-1237.	7.8	263
71	The recognition and removal of cellular poly(<scp>ADP</scp>â€ribose) signals. FEBS Journal, 2013, 280, 3491-3507.	4.7	102
72	Visualization of poly(ADP-ribose) bound to PARG reveals inherent balance between exo- and endo-glycohydrolase activities. Nature Communications, 2013, 4, 2164.	12.8	116

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73	Molecular Insights into Poly(ADP-ribose) Recognition and Processing. Biomolecules, 2013, 3, 1-17.	4.0	36
74	Reanalysis of phosphoproteomics data uncovers ADP-ribosylation sites. Nature Methods, 2012, 9, 771-772.	19.0	79
75	Structure and mechanism of a canonical poly(ADP-ribose) glycohydrolase. Nature Communications, 2012, 3, 878.	12.8	74
76	DNA Repair Factor APLF Is a Histone Chaperone. Molecular Cell, 2011, 41, 46-55.	9.7	138
77	Structure of an aprataxinâ€“DNA complex with insights into AOA1 neurodegenerative disease. Nature Structural and Molecular Biology, 2011, 18, 1189-1195.	8.2	36
78	The structure and catalytic mechanism of a poly(ADP-ribose) glycohydrolase. Nature, 2011, 477, 616-620.	27.8	295
79	Identification of Macrodomain Proteins as Novel O-Acetyl-ADP-ribose Deacetylases. Journal of Biological Chemistry, 2011, 286, 13261-13271.	3.4	146
80	Orphan Macrodomain Protein (Human C6orf130) Is an O-Acyl-ADP-ribose Deacylase. Journal of Biological Chemistry, 2011, 286, 35955-35965.	3.4	65
81	Solution structures of the two PBZ domains from human APLF and their interaction with poly(ADP-ribose). Nature Structural and Molecular Biology, 2010, 17, 241-243.	8.2	89
82	Poly(ADP-ribose)â€“Dependent Regulation of DNA Repair by the Chromatin Remodeling Enzyme ALC1. Science, 2009, 325, 1240-1243.	12.6	504
83	Poly(ADP-ribose)-binding zinc finger motifs in DNA repair/checkpoint proteins. Nature, 2008, 451, 81-85.	27.8	367
84	Molecular Mechanism of DNA Deadenylation by the Neurological Disease Protein Aprataxin. Journal of Biological Chemistry, 2008, 283, 33994-34001.	3.4	33
85	Actions of Aprataxin in Multiple DNA Repair Pathways. Journal of Biological Chemistry, 2007, 282, 9469-9474.	3.4	78
86	Defective DNA Repair and Neurodegenerative Disease. Cell, 2007, 130, 991-1004.	28.9	295
87	The neurodegenerative disease protein aprataxin resolves abortive DNA ligation intermediates. Nature, 2006, 443, 713-716.	27.8	348
88	recAgene expression in a streptomycete is mediated by the unusual C-terminus of RecA protein. FEMS Microbiology Letters, 2005, 248, 119-124.	1.8	2
89	A freestanding proofreading domain is required for protein synthesis quality control in Archaea. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 10260-10265.	7.1	102
90	Identification of a promoter motif regulating the major DNA damage response mechanism ofMycobacterium tuberculosis. FEMS Microbiology Letters, 2004, 238, 57-63.	1.8	40

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91	Identification of a promoter motif regulating the major DNA damage response mechanism of. FEMS Microbiology Letters, 2004, 238, 57-63.	1.8	42
92	Coevolution of an aminoacyl-tRNA synthetase with its tRNA substrates. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13863-13868.	7.1	81
93	The genome of Nanoarchaeum equitans: Insights into early archaeal evolution and derived parasitism. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 12984-12988.	7.1	488
94	Trans-editing of mischarged tRNAs. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 15422-15427.	7.1	167
95	Methanocaldococcus jannaschii Prolyl-tRNA Synthetase Charges tRNAPro with Cysteine. Journal of Biological Chemistry, 2002, 277, 34749-34754.	3.4	20
96	Cysteine Activation Is an Inherent in Vitro Property of Prolyl-tRNA Synthetases. Journal of Biological Chemistry, 2002, 277, 34743-34748.	3.4	61
97	Cysteinyl-tRNA formation and prolyl-tRNA synthetase. FEBS Letters, 2002, 514, 34-36.	2.8	8
98	Aminoacyl-tRNA formation in the extreme thermophile Thermus thermophilus. Extremophiles, 2002, 6, 167-174.	2.3	4
99	Transcriptional analysis of therecAgene inStreptomyces rimosus: identification of the new type of promoter. FEMS Microbiology Letters, 2002, 209, 133-137.	1.8	14