John M Pascal

List of Publications by Year
in descending order

79 papers	6,879 citations	71102 41 h-index	71685 76 g-index
83 all docs	83 docs citations	83 times ranked	7697 citing authors

#	Article	IF	Citations
1	Structural Basis for DNA Damageâ€"Dependent Poly(ADP-ribosyl)ation by Human PARP-1. Science, 2012, 336, 728-732.	12.6	525
2	Dual Roles of PARP-1 Promote Cancer Growth and Progression. Cancer Discovery, 2012, 2, 1134-1149.	9.4	354
3	Human DNA ligase I completely encircles and partially unwinds nicked DNA. Nature, 2004, 432, 473-478.	27.8	293
4	Use of quantitative molecular diagnostic methods to investigate the effect of enteropathogen infections on linear growth in children in low-resource settings: longitudinal analysis of results from the MAL-ED cohort study. The Lancet Global Health, 2018, 6, e1319-e1328.	6.3	280
5	Use of quantitative molecular diagnostic methods to assess the aetiology, burden, and clinical characteristics of diarrhoea in children in low-resource settings: a reanalysis of the MAL-ED cohort study. The Lancet Global Health, 2018, 6, e1309-e1318.	6.3	251
6	DNA Ligases:â€‰ Structure, Reaction Mechanism, and Function. Chemical Reviews, 2006, 106, 687-699.	47.7	246
7	Structural Basis of Detection and Signaling of DNA Single-Strand Breaks by Human PARP-1. Molecular Cell, 2015, 60, 742-754.	9.7	245
8	PARP-1 Activation Requires Local Unfolding of an Autoinhibitory Domain. Molecular Cell, 2015, 60, 755-768.	9.7	244
9	The comings and goings of PARP-1 in response to DNA damage. DNA Repair, 2018, 71, 177-182.	2.8	236
10	PARP-2 and PARP-3 are selectively activated by 5â€² phosphorylated DNA breaks through an allosteric regulatory mechanism shared with PARP-1. Nucleic Acids Research, 2014, 42, 7762-7775.	14.5	207
11	Crystal Structures of Poly(ADP-ribose) Polymerase-1 (PARP-1) Zinc Fingers Bound to DNA. Journal of Biological Chemistry, 2011, 286, 10690-10701.	3.4	199
12	Structural basis for allosteric PARP-1 retention on DNA breaks. Science, 2020, 368, .	12.6	191
13	Causal Pathways from Enteropathogens to Environmental Enteropathy: Findings from the MAL-ED Birth Cohort Study. EBioMedicine, 2017, 18, 109-117.	6.1	183
14	PARP-1 mechanism for coupling DNA damage detection to poly(ADP-ribose) synthesis. Current Opinion in Structural Biology, 2013, 23, 134-143.	5.7	169
15	A Third Zinc-binding Domain of Human Poly(ADP-ribose) Polymerase-1 Coordinates DNA-dependent Enzyme Activation. Journal of Biological Chemistry, 2008, 283, 4105-4114.	3.4	166
16	Epidemiology and Impact of<i>Campylobacter</i>Infection in Children in 8 Low-Resource Settings: Results From the MAL-ED Study. Clinical Infectious Diseases, 2016, 63, ciw542.	5.8	163
17	NAD+ analog reveals PARP-1 substrate-blocking mechanism and allosteric communication from catalytic center to DNA-binding domains. Nature Communications, 2018, 9, 844.	12.8	163
18	ADPâ€ribosyltransferases, an update on function and nomenclature. FEBS Journal, 2022, 289, 7399-7410.	4.7	150

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19	A Flexible Interface between DNA Ligase and PCNA Supports Conformational Switching and Efficient Ligation of DNA. Molecular Cell, 2006, 24, 279-291.	9.7	142
20	The Zn3 Domain of Human Poly(ADP-ribose) Polymerase-1 (PARP-1) Functions in Both DNA-dependent Poly(ADP-ribose) Synthesis Activity and Chromatin Compaction. Journal of Biological Chemistry, 2010, 285, 18877-18887.	3.4	140
21	PARP family enzymes: regulation and catalysis of the poly(ADP-ribose) posttranslational modification. Current Opinion in Structural Biology, 2018, 53, 187-198.	5.7	128
22	Poly(ADP-ribose) polymerase-1 antagonizes DNA resection at double-strand breaks. Nature Communications, 2019, 10, 2954.	12.8	122
23	Structural Implications for Selective Targeting of PARPs. Frontiers in Oncology, 2013, 3, 301.	2.8	121
24	Tail and Kinase Modules Differently Regulate Core Mediator Recruitment and Function InÂVivo. Molecular Cell, 2016, 64, 455-466.	9.7	117
25	Structural Basis for Calmodulin as a Dynamic Calcium Sensor. Structure, 2012, 20, 911-923.	3.3	106
26	The rise and fall of poly(ADP-ribose): An enzymatic perspective. DNA Repair, 2015, 32, 10-16.	2.8	88
27	DNA and RNA ligases: structural variations and shared mechanisms. Current Opinion in Structural Biology, 2008, 18, 96-105.	5.7	85
28	2.8-Ã… crystal structure of a nontoxic type-II ribosome-inactivating protein, ebulin l. Proteins: Structure, Function and Bioinformatics, 2001, 43, 319-326.	2.6	84
29	Purification of Human PARP-1 and PARP-1 Domains from Escherichia coli for Structural and Biochemical Analysis. Methods in Molecular Biology, 2011, 780, 209-226.	0.9	81
30	Resistance of Akt kinases to dephosphorylation through ATP-dependent conformational plasticity. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E1120-7.	7.1	74
31	PARP-2 domain requirements for DNA damage-dependent activation and localization to sites of DNA damage. Nucleic Acids Research, 2016, 44, 1691-1702.	14.5	72
32	Poly(ADP-ribose) polymerase enzymes and the maintenance of genome integrity. Cellular and Molecular Life Sciences, 2020, 77, 19-33.	5.4	65
33	CARM1 regulates replication fork speed and stress response by stimulating PARP1. Molecular Cell, 2021, 81, 784-800.e8.	9.7	61
34	Selective phosphorylation modulates the PIP2 sensitivity of the CaMâ€“SK channel complex. Nature Chemical Biology, 2014, 10, 753-759.	8.0	59
35	Posttranscriptional Regulation of <i>PARG</i> mRNA by HuR Facilitates DNA Repair and Resistance to PARP Inhibitors. Cancer Research, 2017, 77, 5011-5025.	0.9	59
36	Structural biology of the writers, readers, and erasers in mono- and poly(ADP-ribose) mediated signaling. Molecular Aspects of Medicine, 2013, 34, 1088-1108.	6.4	58

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37	Unstructured to structured transition of an intrinsically disordered protein peptide in coupling Ca ²⁺ -sensing and SK channel activation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4828-4833.	7.1	58
38	Quantitative site-specific ADP-ribosylation profiling of DNA-dependent PARPs. DNA Repair, 2015, 30, 68-79.	2.8	56
39	Tankyrase-1 Ankyrin Repeats Form an Adaptable Binding Platform for Targets of ADP-Ribose Modification. Structure, 2016, 24, 1679-1692.	3.3	52
40	Clinical PARP inhibitors do not abrogate PARP1 exchange at DNA damage sites in vivo. Nucleic Acids Research, 2020, 48, 9694-9709.	14.5	51
41	Targeting PARP-1 Allosteric Regulation Offers Therapeutic Potential against Cancer. Cancer Research, 2014, 74, 31-37.	0.9	47
42	Discovery and Structureâ€"Activity Relationship of Novel 2,3-Dihydrobenzofuran-7-carboxamide and 2,3-Dihydrobenzofuran-3(2H)-one-7-carboxamide Derivatives as Poly(ADP-ribose)polymerase-1 Inhibitors. Journal of Medicinal Chemistry, 2014, 57, 5579-5601.	6.4	43
43	Age and Sex Normalization of Intestinal Permeability Measures for the Improved Assessment of Enteropathy in Infancy and Early Childhood. Journal of Pediatric Gastroenterology and Nutrition, 2017, 65, 31-39.	1.8	41
44	Tankyrase Sterile Î± Motif Domain Polymerization Is Required for Its Role in Wnt Signaling. Structure, 2016, 24, 1573-1581.	3.3	40
45	The nucleosomal surface is the main target of histone ADP-ribosylation in response to DNA damage. Molecular BioSystems, 2017, 13, 2660-2671.	2.9	34
46	HPF1 dynamically controls the PARP1/2 balance between initiating and elongating ADP-ribose modifications. Nature Communications, 2021, 12, 6675.	12.8	34
47	Human DNA Ligases I, III, and IVâ€"Purification and New Specific Assays for These Enzymes. Methods in Enzymology, 2006, 409, 39-52.	1.0	32
48	Fluorescent sensors of PARP-1 structural dynamics and allosteric regulation in response to DNA damage. Nucleic Acids Research, 2016, 44, gkw710.	14.5	30
49	Dynamics of the HD regulatory subdomain of PARP-1; substrate access and allostery in PARP activation and inhibition. Nucleic Acids Research, 2021, 49, 2266-2288.	14.5	30
50	Unfolding of core nucleosomes by PARP-1 revealed by spFRET microscopy. AIMS Genetics, 2017, 04, 021-031.	1.9	30
51	A Comparison of Diarrheal Severity Scores in the MALâ€ED Multisite Communityâ€Based Cohort Study. Journal of Pediatric Gastroenterology and Nutrition, 2016, 63, 466-473.	1.8	27
52	Purification of DNA Damage-Dependent PARPs from E. coli for Structural and Biochemical Analysis. Methods in Molecular Biology, 2017, 1608, 431-444.	0.9	27
53	Crystal Structure of TB-RBP, a Novel RNA-binding and Regulating Protein. Journal of Molecular Biology, 2002, 319, 1049-1057.	4.2	26
54	Design and Synthesis of Poly(ADP-ribose) Polymerase Inhibitors: Impact of Adenosine Pocket-Binding Motif Appendage to the 3-Oxo-2,3-dihydrobenzofuran-7-carboxamide on Potency and Selectivity. Journal of Medicinal Chemistry, 2019, 62, 5330-5357.	6.4	26

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55	PARylation prevents the proteasomal degradation of topoisomerase I DNA-protein crosslinks and induces their deubiquitylation. Nature Communications, 2021, 12, 5010.	12.8	26
56	Captured snapshots of PARP1 in the active state reveal the mechanics of PARP1 allostery. Molecular Cell, 2022, 82, 2939-2951.e5.	9.7	22
57	The DNA binding domain of human DNA ligase I interacts with both nicked DNA and the DNA sliding clamps, PCNA and hRad9-hRad1-hHus1. DNA Repair, 2009, 8, 912-919.	2.8	21
58	An atypical BRCTâ€“BRCT interaction with the XRCC1 scaffold protein compacts human DNA Ligase IIIÎ± within a flexible DNA repair complex. Nucleic Acids Research, 2021, 49, 306-321.	14.5	21
59	Early Life Child Micronutrient Status, Maternal Reasoning, and a Nurturing Household Environment have Persistent Influences on Child Cognitive Development at Age 5 years: Results from MAL-ED. Journal of Nutrition, 2019, 149, 1460-1469.	2.9	20
60	Structural and functional analysis of parameters governing tankyrase-1 interaction with telomeric repeat-binding factor 1 and GDP-mannose 4,6-dehydratase. Journal of Biological Chemistry, 2019, 294, 14574-14590.	3.4	17
61	Hydrofluoric Acid-Based Derivatization Strategy To Profile PARP-1 ADP-Ribosylation by LCâ€“MS/MS. Journal of Proteome Research, 2018, 17, 2542-2551.	3.7	15
62	Signal-induced PARP1-Erk synergism mediates IEG expression. Signal Transduction and Targeted Therapy, 2019, 4, 8.	17.1	13
63	Mechanisms of Nucleosome Reorganization by PARP1. International Journal of Molecular Sciences, 2021, 22, 12127.	4.1	13
64	Adaptation to tRNA acceptor stem structure by flexible adjustment in the catalytic domain of class I tRNA synthetases. Rna, 2012, 18, 213-221.	3.5	11
65	New players to the field of ADP-ribosylation make the final cut. EMBO Journal, 2013, 32, 1205-1207.	7.8	11
66	Dynamic DNA-bound PCNA complexes co-ordinate Okazaki fragment synthesis, processing and ligation. Journal of Molecular Biology, 2020, 432, 166698.	4.2	11
67	Autoregulation of kinase dephosphorylation by ATP binding in AGC protein kinases. Cell Cycle, 2012, 11, 475-478.	2.6	9
68	Structural analyses of the Group A flavin-dependent monooxygenase PieE reveal a sliding FAD cofactor conformation bridging OUT and IN conformations. Journal of Biological Chemistry, 2020, 295, 4709-4722.	3.4	9
69	Mouse testisâ€“brain RNA-binding protein (TB-RBP): expression, purification and crystal X-ray diffraction. Acta Crystallographica Section D: Biological Crystallography, 2001, 57, 1692-1694.	2.5	8
70	Human PARP1 Facilitates Transcription through a Nucleosome and Histone Displacement by Pol II In Vitro. International Journal of Molecular Sciences, 2022, 23, 7107.	4.1	8
71	Akt kinase C-terminal modifications control activation loop dephosphorylation and enhance insulin response. Biochemical Journal, 2015, 471, 37-51.	3.7	7
72	Tissue-Specific Regulation of the Wnt/Î²-Catenin Pathway by PAGE4 Inhibition of Tankyrase. Cell Reports, 2020, 32, 107922.	6.4	7

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73	Direct interaction of DNA repair protein tyrosyl DNA phosphodiesterase 1 and the DNA ligase III catalytic domain is regulated by phosphorylation of its flexible N-terminus. Journal of Biological Chemistry, 2021, 297, 100921.	3.4	6
74	Cryo-EM structures and biochemical insights into heterotrimeric PCNA regulation of DNA ligase. Structure, 2022, 30, 371-385.e5.	3.3	5
75	RNA ligase does the AMP shuffle. Nature Structural and Molecular Biology, 2006, 13, 950-951.	8.2	2
76	Bridging a DNA Break to Leave a Poly(ADP-Ribose) Mark on Chromatin. Molecular Cell, 2020, 80, 560-561.	9.7	2
77	An evaluation of a new chemotherapeutic strategy: Exogenous mutant PARP-1 expression sensitizes pancreatic cancer cells to clinically available platinum-based agents. Journal of the American College of Surgeons, 2009, 209, S53.	0.5	0
78	Targeting the Channel-Calmodulin Interface of Small-Conductance Ca2+-Activated Potassium Channels. Biophysical Journal, 2013, 104, 367a.	0.5	0
79	Purification and Characterization of Human DNA Ligase IIIÎ± Complexes After Expression in Insect Cells. Methods in Molecular Biology, 2022, 2444, 243-269.	0.9	0