

Rakhi Rajan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6567985/publications.pdf>

Version: 2024-02-01

28
papers

860
citations

759190

12
h-index

580810

25
g-index

29
all docs

29
docs citations

29
times ranked

1281
citing authors

#	ARTICLE	IF	CITATIONS
1	The Revolution Continues: Newly Discovered Systems Expand the CRISPR-Cas Toolkit. <i>Molecular Cell</i> , 2017, 68, 15-25.	9.7	178
2	Structural studies of type I topoisomerases. <i>Nucleic Acids Research</i> , 2009, 37, 693-701.	14.5	102
3	Design and Synthesis of Substrate and Intermediate Analogue Inhibitors of S-Ribosylhomocysteinase. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 3003-3011.	6.4	82
4	RNA-Independent DNA Cleavage Activities of Cas9 and Cas12a. <i>Cell Reports</i> , 2017, 21, 3728-3739.	6.4	75
5	Crystal Structure of RecA from <i>Deinococcus radiodurans</i> : Insights into the Structural Basis of Extreme Radioresistance. <i>Journal of Molecular Biology</i> , 2004, 344, 951-963.	4.2	61
6	DNase H Activity of <i>Neisseria meningitidis</i> Cas9. <i>Molecular Cell</i> , 2015, 60, 242-255.	9.7	54
7	Crystal Structure of S-Ribosylhomocysteinase (LuxS) in Complex with a Catalytic 2-Ketone Intermediate. <i>Biochemistry</i> , 2005, 44, 3745-3753.	2.5	45
8	Probing the Catalytic Mechanism of S-Ribosylhomocysteinase (LuxS) with Catalytic Intermediates and Substrate Analogues. <i>Journal of the American Chemical Society</i> , 2009, 131, 1243-1250.	13.7	40
9	The CRISPR-Cas Mechanism for Adaptive Immunity and Alternate Bacterial Functions Fuels Diverse Biotechnologies. <i>Frontiers in Cellular and Infection Microbiology</i> , 2020, 10, 619763.	3.9	35
10	Bridge Helix of Cas9 Modulates Target DNA Cleavage and Mismatch Tolerance. <i>Biochemistry</i> , 2019, 58, 1905-1917.	2.5	26
11	Structural and functional insights into the bona fide catalytic state of <i>Streptococcus pyogenes</i> Cas9 HNH nuclease domain. <i>ELife</i> , 2019, 8, .	6.0	25
12	Crystal structures of an unmodified bacterial tRNA reveal intrinsic structural flexibility and plasticity as general properties of unbound tRNAs. <i>Rna</i> , 2020, 26, 278-289.	3.5	18
13	CRISPR-Cas12a Nucleases Bind Flexible DNA Duplexes without RNA/DNA Complementarity. <i>ACS Omega</i> , 2019, 4, 17140-17147.	3.5	14
14	Nucleic Acid-Dependent Conformational Changes in CRISPR-Cas9 Revealed by Site-Directed Spin Labeling. <i>Cell Biochemistry and Biophysics</i> , 2017, 75, 203-210.	1.8	13
15	Probing the DNA sequence specificity of <i>Escherichia coli</i> RECA protein. <i>Nucleic Acids Research</i> , 2006, 34, 2463-2471.	14.5	11
16	Structures of Minimal Catalytic Fragments of Topoisomerase V Reveals Conformational Changes Relevant for DNA Binding. <i>Structure</i> , 2010, 18, 829-838.	3.3	11
17	Coordinated Actions of Cas9 HNH and RuvC Nuclease Domains Are Regulated by the Bridge Helix and the Target DNA Sequence. <i>Biochemistry</i> , 2021, , .	2.5	11
18	Primary processing of CRISPR RNA by the endonuclease Cas6 in <i>Staphylococcus epidermidis</i> . <i>FEBS Letters</i> , 2015, 589, 3197-3204.	2.8	10

#	ARTICLE	IF	CITATIONS
19	<i>Methanopyrus kandleri</i> topoisomerase V contains three distinct AP lyase active sites in addition to the topoisomerase active site. <i>Nucleic Acids Research</i> , 2016, 44, 3464-3474.	14.5	9
20	The bridge helix of Cas12a imparts selectivity in cis DNA cleavage and regulates trans DNA cleavage. <i>FEBS Letters</i> , 2021, 595, 892-912.	2.8	9
21	Rational Engineering of CRISPR-Cas9 Nuclease to Attenuate Position-Dependent Off-Target Effects. <i>CRISPR Journal</i> , 2022, 5, 329-340.	2.9	9
22	Identification of one of the apurinic/apyrimidinic lyase active sites of topoisomerase V by structural and functional studies. <i>Nucleic Acids Research</i> , 2013, 41, 657-666.	14.5	8
23	Biochemical Characterization of the Topoisomerase Domain of <i>Methanopyrus kandleri</i> Topoisomerase V. <i>Journal of Biological Chemistry</i> , 2014, 289, 28898-28909.	3.4	6
24	CRISPR type II-A subgroups exhibit phylogenetically distinct mechanisms for prespacer insertion. <i>Journal of Biological Chemistry</i> , 2020, 295, 10956-10968.	3.4	4
25	Conserved DNA motifs in the type II-A CRISPR leader region. <i>PeerJ</i> , 2017, 5, e3161.	2.0	4
26	Topoisomerases. , 2013, , 2616-2622.		0
27	CRISPR-Cas12a Nucleases Bind Flexible DNA Duplexes Without RNA-DNA Complementarity. <i>Biophysical Journal</i> , 2020, 118, 223a.	0.5	0
28	Role Of Bridge Helix In Mediating DNA Recognition And Efficient Cleavage By CRISPR-Cas12a. <i>FASEB Journal</i> , 2021, 35, .	0.5	0