Rakhi Rajan

List of Publications by Year
in descending order

28	860	759233 12	580821 25
papers	citations	h-index	g-index

29	29	29	1281
all docs	docs citations	times ranked	citing authors

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

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