Stephen C Kowalczykowski

List of Publications by Year
in descending order

33	3,446	218677	454955
papers	citations	26 h-index	30 g-index

37	37	37	3203
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An Overview of the Molecular Mechanisms of Recombinational DNA Repair. Cold Spring Harbor Perspectives in Biology, 2015, 7, a016410.	5.5	381
2	RecFOR Proteins Load RecA Protein onto Gapped DNA to Accelerate DNA Strand Exchange. Molecular Cell, 2003, 11, 1337-1347.	9.7	379
3	Interactions of bacteriophage T4-coded gene 32 protein with nucleic acids. Journal of Molecular Biology, 1981, 145, 75-104.	4.2	329
4	A Dominant Mutation in Human RAD51 Reveals Its Function in DNA Interstrand Crosslink Repair Independent of Homologous Recombination. Molecular Cell, 2015, 59, 478-490.	9.7	227
5	Single-molecule imaging of DNA pairing by RecA reveals a three-dimensional homology search. Nature, 2012, 482, 423-427.	27.8	192
6	RecA: Regulation and Mechanism of a Molecular Search Engine. Trends in Biochemical Sciences, 2016, 41, 491-507.	7.5	185
7	Interactions of bacteriophage T4-coded gene 32 protein with nucleic acids. Journal of Molecular Biology, 1981, 145, 105-121.	4.2	160
8	Direct imaging of RecA nucleation and growth on single molecules of SSB-coated ssDNA. Nature, 2012, 491, 274-278.	27.8	148
9	Reconstitution of initial steps of dsDNA break repair by the RecF pathway of E. coli. Genes and Development, 2009, 23, 1234-1245.	5.9	138
10	Independent and Stochastic Action of DNA Polymerases in the Replisome. Cell, 2017, 169, 1201-1213.e17.	28.9	136
11	Nonlinear partial differential equations and applications: Escherichia coli RecO protein anneals ssDNA complexed with its cognate ssDNA-binding protein: A common step in genetic recombination. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15327-15332.	7.1	123
12	Top3-Rmi1 Dissolve Rad51-Mediated D Loops by a Topoisomerase-Based Mechanism. Molecular Cell, 2015, 57, 595-606.	9.7	103
13	MCM8-9 complex promotes resection of double-strand break ends by MRE11-RAD50-NBS1 complex. Nature Communications, 2015, 6, 7744.	12.8	86
14	Mechanics and Single-Molecule Interrogation of DNA Recombination. Annual Review of Biochemistry, 2016, 85, 193-226.	11.1	78
15	BRCA2 regulates DMC1-mediated recombination through the BRC repeats. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3515-3520.	7.1	77
16	Structural and mechanistic insight into Holliday-junction dissolution by Topoisomerase IIIÎ± and RMI1. Nature Structural and Molecular Biology, 2014, 21, 261-268.	8.2	71
17	Single-molecule imaging brings Rad51 nucleoprotein filaments into focus. Trends in Cell Biology, 2010, 20, 269-276.	7.9	67
18	DNA Annealing Mediated by Rad52 and Rad59 Proteins. Journal of Biological Chemistry, 2006, 281, 15441-15449.	3.4	64

#	Article	IF	Citations
19	Fluorescent Single-Stranded DNA Binding Protein as a Probe for Sensitive, Real-Time Assays of Helicase Activity. Biophysical Journal, 2008, 95, 3330-3339.	0.5	63
20	RecQ helicase and RecJ nuclease provide complementary functions to resect DNA for homologous recombination. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5133-42.	7.1	63
21	RecFOR Proteins Target RecA Protein to a DNA Gap with Either DNA or RNA at the 5â€² Terminus. Journal of Biological Chemistry, 2012, 287, 35621-35630.	3.4	61
22	Chi-activated RecBCD enzyme possesses 5'3' nucleolytic activity, but RecBC enzyme does not: evidence suggesting that the alteration induced by Chi is not simply ejection of the RecD subunit. Genes To Cells, 1997, 2, 117-128.	1.2	59
23	Imaging and energetics of single SSB-ssDNA molecules reveal intramolecular condensation and insight into RecOR function. ELife, 2015, 4, e08646.	6.0	57
24	Sae2 promotes DNA damage resistance by removing the Mre11â€“Rad50â€“Xrs2 complex from DNA and attenuating Rad53 signaling. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1880-7.	7.1	44
25	Watching Individual Proteins Acting on Single Molecules of DNA. Methods in Enzymology, 2010, 472, 261-291.	1.0	41
26	Homologous Recombination by the RecBCD and RecF Pathways. , 0, , 389-403.		40
27	Single-molecule visualization of RecQ helicase reveals DNA melting, nucleation, and assembly are required for processive DNA unwinding. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6852-61.	7.1	39
28	Enhanced monomer-monomer interactions can suppress the recombination deficiency of the recA142 allele. Molecular Microbiology, 1999, 34, 1-9.	2.5	21
29	Essential monomerâ€“monomer contacts define the minimal length for the Nâ€terminus of RecA protein. Molecular Microbiology, 1998, 29, 1317-1318.	2.5	9
30	Role of the Srs2â€“Rad51 Interaction Domain in Crossover Control in Saccharomyces cerevisiae. Genetics, 2019, 212, 1133-1145.	2.9	4
31	Charles M. Radding: A love of science and art. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2025935118.	7.1	1
32	1P259 Direct visualization of a chromatin-remodeling protein, Rad54, translocating along single-molecules of double-stranded DNA(9. Molecular motor (I),Poster Session,Abstract,Meeting) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.1	0
33	1PS045 RAD54, A CHROMATIN REMODELER, TRANSLOCATES ALONG DNA BY TRACKING THE DNA HELIX(The) Tj ETQq1 1 0.784314 r	0.1	0