Hiroshi Iwasaki

List of Publications by Year
in descending order

116 papers	5,456 citations	70961 41 h-index	91712 69 g-index
124 all docs	124 docs citations	124 times ranked	3555 citing authors

#	Article	IF	Citations
1	A conserved Ctp1/CtIP C-terminal peptide stimulates Mre11 endonuclease activity. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	13
2	Rrp1 translocase and ubiquitin ligase activities restrict the genome destabilising effects of Rad51 in fission yeast. Nucleic Acids Research, 2021, 49, 6832-6848.	6.5	5
3	Homology length dictates the requirement for Rad51 and Rad52 in gene targeting in the Basidiomycota yeast Naganishia liquefaciens. Current Genetics, 2021, 67, 919-936.	0.8	3
4	Post-translational modification of factors involved in homologous recombination. DNA Repair, 2021, 104, 103114.	1.3	8
5	Biochemical properties of fission yeast homologous recombination enzymes. Current Opinion in Genetics and Development, 2021, 71, 19-26.	1.5	6
6	A novel motif of Rad51 serves as an interaction hub for recombination auxiliary factors. ELife, 2021, 10, .	2.8	12
7	DNA replication machinery prevents Rad52-dependent single-strand annealing that leads to gross chromosomal rearrangements at centromeres. Communications Biology, 2020, 3, 202.	2.0	13
8	Two auxiliary factors promote Dmc1-driven DNA strand exchange via stepwise mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12062-12070.	3.3	15
9	Real-time tracking reveals catalytic roles for the two DNA binding sites of Rad51. Nature Communications, 2020, 11, 2950.	5.8	15
10	Draft Genome Sequence of Naganishia liquefaciens Strain N6, Isolated from the Japan Trench. Microbiology Resource Announcements, 2020, 9, .	0.3	7
11	Cooperative interactions facilitate stimulation of Rad51 by the Swi5-Sfr1 auxiliary factor complex. ELife, 2020, 9, .	2.8	10
12	Real-time Observation of the DNA Strand Exchange Reaction Mediated by Rad51. Journal of Visualized Experiments, 2019, , .	0.2	2
13	Mating-type switching by homology-directed recombinational repair: a matter of choice. Current Genetics, 2019, 65, 351-362.	0.8	24
14	Establishment of DNA-DNA Interactions by the Cohesin Ring. Cell, 2018, 172, 465-477.e15.	13.5	116
15	RecA requires two molecules of Mg2+ ions for its optimal strand exchange activity in vitro. Nucleic Acids Research, 2018, 46, 2548-2559.	6.5	12
16	Two three-strand intermediates are processed during Rad51-driven DNA strand exchange. Nature Structural and Molecular Biology, 2018, 25, 29-36.	3.6	34
17	Swi5â€"Sfr1 stimulates Rad51 recombinase filament assembly by modulating Rad51 dissociation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E10059-E10068.	3.3	27
18	New insights into donor directionality of mating-type switching in Schizosaccharomyces pombe. PLoS Genetics, 2018, 14, e1007424.	1.5	14

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19	The differentiated and conserved roles of Swi5â€Sfr1 in homologous recombination. FEBS Letters, 2017, 591, 2035-2047.	1.3	24
20	Holliday junction resolvases mediate chloroplast nucleoid segregation. Science, 2017, 356, 631-634.	6.0	44
21	<i>In vitro</i> siteâ€specific recombination mediated by the tyrosine recombinase XerA of <i>Thermoplasma acidophilum</i>. Genes To Cells, 2017, 22, 646-661.	0.5	2
22	Fundamental cell cycle kinases collaborate to ensure timely destruction of the synaptonemal complex during meiosis. EMBO Journal, 2017, 36, 2488-2509.	3.5	50
23	Recruitment and delivery of the fission yeast Rst2 transcription factor via a local genome structure counteracts repression by Tup1-family corepressors. Nucleic Acids Research, 2017, 45, 9361-9371.	6.5	13
24	Large-scale growth of sharp gold nano-cones for single-molecule SERS detection. RSC Advances, 2016, 6, 2882-2887.	1.7	36
25	Swi5-Sfr1 protein stimulates Rad51-mediated DNA strand exchange reaction through organization of DNA bases in the presynaptic filament. Nucleic Acids Research, 2014, 42, 2358-2365.	6.5	13
26	Multiple Regulation of Rad51-Mediated Homologous Recombination by Fission Yeast Fbh1. PLoS Genetics, 2014, 10, e1004542.	1.5	31
27	Dual regulation of Dmc1-driven DNA strand exchange by Swi5â€"Sfr1 activation and Rad22 inhibition. Genes and Development, 2013, 27, 2299-2304.	2.7	15
28	Characterisation of an intrinsically disordered protein complex of Swi5â€"Sfr1 by ion mobility mass spectrometry and small-angle X-ray scattering. Analyst, The, 2013, 138, 1441-1449.	1.7	31
29	Mechanistic Insights into the Activation of Rad51-Mediated Strand Exchange from the Structure of a Recombination Activator, the Swi5-Sfr1 Complex. Structure, 2012, 20, 440-449.	1.6	35
30	Opposing role of condensin hinge against replication protein A in mitosis and interphase through promoting DNA annealing. Open Biology, 2011, 1, 110023.	1.5	46
31	The fission yeast meiosis-specific Dmc1 recombinase mediates formation and branch migration of Holliday junctions by preferentially promoting strand exchange in a direction opposite to that of Rad51. Genes and Development, 2011, 25, 516-527.	2.7	14
32	Cell Polarity in Saccharomyces cerevisiae Depends on Proper Localization of the Bud9 Landmark Protein by the EKC/KEOPS Complex. Genetics, 2011, 188, 871-882.	1.2	7
33	Fission Yeast Swi5-Sfr1 Protein Complex, an Activator of Rad51 Recombinase, Forms an Extremely Elongated Dogleg-shaped Structure. Journal of Biological Chemistry, 2011, 286, 43569-43576.	1.6	22
34	An In Vitro Assay for Monitoring the Formation and Branch Migration of Holliday Junctions Mediated by a Eukaryotic Recombinase. Methods in Molecular Biology, 2011, 745, 385-405.	0.4	2
35	1P125 Fixed interaction between the Escherichia coli RuvA and RuvB proteins during branch migration of Holliday junction(Nucleic acid binding proteins,The 48th Annual Meeting of the Biophysical Society) Tj ETQq1 1 0.784314 rgBT /Overl	0.0	0
36	Expression, purification and crystallization of Swi5 and the Swi5â€"Sfr1 complex from fission yeast. Acta Crystallographica Section F: Structural Biology Communications, 2010, 66, 1124-1126.	0.7	11

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37	Srs2 Plays a Critical Role in Reversible G₂ Arrest upon Chronic and Low Doses of UV Irradiation via Two Distinct Homologous Recombination-Dependent Mechanisms in Postreplication Repair-Deficient Cells. Molecular and Cellular Biology, 2010, 30, 4840-4850.	1.1	17
38	Biochemical Analysis of RuvA-RuvB Complex Formation During Branch Migration of Holliday Junction DNA. Biophysical Journal, 2010, 98, 65a.	0.2	0
39	RAD6â€“RAD18â€“RAD5-pathway-dependent tolerance to chronic low-dose ultraviolet light. Nature, 2009, 457, 612-615.	13.7	73
40	Nbs1 Flexibly Tethers Ctp1 and Mre11-Rad50 to Coordinate DNA Double-Strand Break Processing and Repair. Cell, 2009, 139, 87-99.	13.5	293
41	Mus81 is essential for sister chromatid recombination at broken replication forks. EMBO Journal, 2008, 27, 1378-1387.	3.5	101
42	Formation and branch migration of Holliday junctions mediated by eukaryotic recombinases. Nature, 2008, 451, 1018-1021.	13.7	52
43	Fission yeast Swi5 protein, a novel DNA recombination mediator. DNA Repair, 2008, 7, 1-9.	1.3	23
44	Reconstitution of DNA Strand Exchange Mediated by Rhp51 Recombinase and Two Mediators. PLoS Biology, 2008, 6, e88.	2.6	58
45	Molecular Characterization of the Role of the <i>Schizosaccharomyces pombe nip1</i>⁺/<i>ctp1</i>⁺ Gene in DNA Double-Strand Break Repair in Association with the Mre11-Rad50-Nbs1 Complex. Molecular and Cellular Biology, 2008, 28, 3639-3651.	1.1	45
46	A DNA Polymerase Î± Accessory Protein, Mcl1, Is Required for Propagation of Centromere Structures in Fission Yeast. PLoS ONE, 2008, 3, e2221.	1.1	20
47	Fission yeast Swi5/Sfr1 and Rhp55/Rhp57 differentially regulate Rhp51-dependent recombination outcomes. EMBO Journal, 2007, 26, 1352-1362.	3.5	75
48	The Swi5â€“Sfr1 complex stimulates Rhp51/Rad51 - and Dmc1-mediated DNA strand exchange in vitro. Nature Structural and Molecular Biology, 2006, 13, 823-830.	3.6	106
49	Direct observation of DNA rotation during branch migration of Holliday junction DNA by Escherichia coli RuvA-RuvB protein complex. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11544-11548.	3.3	28
50	Functional overlap between RecA and MgsA (RarA) in the rescue of stalled replication forks inEscherichia coli. Genes To Cells, 2005, 10, 181-191.	0.5	39
51	Genetic and physical interactions between Schizosaccharomyces pombe Mcl1 and Rad2, Dna2 and DNA polymerase Î±: evidence for a multifunctional role of Mcl1 in DNA replication and repair. Current Genetics, 2005, 48, 34-43.	0.8	31
52	Structure-Function Analysis of the Three Domains of RuvB DNA Motor Protein. Journal of Biological Chemistry, 2005, 280, 30504-30510.	1.6	15
53	Role of the Schizosaccharomyces pombe F-Box DNA Helicase in Processing Recombination Intermediates. Molecular and Cellular Biology, 2005, 25, 8074-8083.	1.1	78
54	Rad62 Protein Functionally and Physically Associates with the Smc5/Smc6 Protein Complex and Is Required for Chromosome Integrity and Recombination Repair in Fission Yeast. Molecular and Cellular Biology, 2004, 24, 9401-9413.	1.1	63

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55	Direct evidence that a conserved arginine in RuvB AAA+ ATPase acts as an allosteric effector for the ATPase activity of the adjacent subunit in a hexamer. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 9573-9577.	3.3	37
56	Role of the Escherichia coli RecQ DNA helicase in SOS signaling and genome stabilization at stalled replication forks. Genes and Development, 2004, 18, 1886-1897.	2.7	116
57	Role of the RuvAB protein in avoiding spontaneous formation of deletion mutations in the Escherichia coli K-12 endogenous tonB gene. Biochemical and Biophysical Research Communications, 2004, 323, 197-203.	1.0	8
58	Uncoupling of the ATPase activity from the branch migration activity of RuvAB protein complexes containing both wild-type and ATPase-defective RuvB proteins. Genes To Cells, 2003, 8, 721-730.	0.5	7
59	Two different Swi5-containing protein complexes are involved in mating-type switching and recombination repair in fission yeast. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 15770-15775.	3.3	124
60	Competition between the Rad50 Complex and the Ku Heterodimer Reveals a Role for Exo1 in Processing Double-Strand Breaks but Not Telomeres. Molecular and Cellular Biology, 2003, 23, 5186-5197.	1.1	131
61	Molecular Characterization of the Schizosaccharomyces pombe nbs1+ Gene Involved in DNA Repair and Telomere Maintenance. Molecular and Cellular Biology, 2003, 23, 6553-6563.	1.1	50
62	The Schizosaccharomyces pombe rad60 Gene Is Essential for Repairing Double-Strand DNA Breaks Spontaneously Occurring during Replication and Induced by DNA-Damaging Agents. Molecular and Cellular Biology, 2002, 22, 3537-3548.	1.1	62
63	Parallel Symmetric Immobile DNA Junctions as Substrates forE. coliRuvC Holliday Junction Resolvaseâ€. Biochemistry, 2002, 41, 10985-10993.	1.2	8
64	p53 blocks RuvAB promoted branch migration and modulates resolution of Holliday junctions by RuvC. Journal of Molecular Biology, 2002, 316, 1023-1032.	2.0	10
65	Crystal Structure of the RuvA-RuvB Complex. Molecular Cell, 2002, 10, 671-681.	4.5	97
66	Mutational analysis of the functional motifs of RuvB, an AAA+ class helicase and motor protein for Holliday junction branch migration. Molecular Microbiology, 2002, 36, 528-538.	1.2	43
67	1-Methyl-4-phenylpyridinium ion, a toxin that can cause parkinsonism, alters branched structures of DNA. Journal of Neurochemistry, 2002, 82, 30-37.	2.1	7
68	Saccharomyces cerevisiae MGS1 is essential in strains deficient in the RAD6-dependent DNA damage tolerance pathway. EMBO Journal, 2002, 21, 2019-2029.	3.5	76
69	A yeast gene, MGS1, encoding a DNA-dependent AAA+ ATPase is required to maintain genome stability. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 8283-8289.	3.3	79
70	A Unique Î²-Hairpin Protruding from AAA+ATPase Domain of RuvB Motor Protein Is Involved in the Interaction with RuvA DNA Recognition Protein for Branch Migration of Holliday Junctions. Journal of Biological Chemistry, 2001, 276, 35024-35028.	1.6	35
71	Crystal structure of the Holliday junction migration motor protein RuvB from <i>Thermus thermophilus</i> HB8. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 1442-1447.	3.3	88
72	Evidence that Phenylalanine 69 in Escherichia coliRuvC Resolvase Forms a Stacking Interaction during Binding and Destabilization of a Holliday Junction DNA Substrate. Journal of Biological Chemistry, 2001, 276, 10432-10436.	1.6	23

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73	Mutagenic and Nonmutagenic Bypass of DNA Lesions byDrosophila DNA Polymerases dpolÎ· and dpolÎ¹. Journal of Biological Chemistry, 2001, 276, 15155-15163.	1.6	35
74	Crystal structure of the Holliday junction migration motor protein RuvB from Thermus thermophilus HB8. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 1442-7.	3.3	54
75	Multiple Interactions Among the Components of the Recombinational DNA Repair System inSchizosaccharomyces pombe. Genetics, 2001, 159, 91-105.	1.2	40
76	Identification and characterization of Thermus thermophilus HB8 RuvA protein, the subunit of the RuvAB protein complex that promotes branch migration of Holliday junctions.. Genes and Genetic Systems, 2000, 75, 233-243.	0.2	9
77	Two basic residues, Lys-107 and Lys-118, of RuvC resolvase are involved in critical contacts with the Holliday junction for its resolution. Genes To Cells, 2000, 5, 803-813.	0.5	13
78	Crystal structure of the Holliday junction DNA in complex with a single RuvA tetramer. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 8257-8262.	3.3	121
79	Modulation of RuvB function by the mobile domain III of the holliday junction recognition protein RuvA. Journal of Molecular Biology, 2000, 298, 407-416.	2.0	30
80	Two Different Oligomeric States of the RuvB Branch Migration Motor Protein as Revealed by Electron Microscopy. Journal of Structural Biology, 2000, 131, 83-89.	1.3	55
81	Cleavage of Symmetric Immobile DNA Junctions byEscherichia coliRuvCâ€. Biochemistry, 2000, 39, 11982-11988.	1.2	18
82	A Recombination Repair Gene of Schizosaccharomyces pombe, rhp57, Is a Functional Homolog of the Saccharomyces cerevisiae RAD57 Gene and Is Phylogenetically Related to the Human XRCC3 Gene. Genetics, 2000, 154, 1451-1461.	1.2	61
83	Role of Walker Motif A of RuvB Protein in Promoting Branch Migration of Holliday Junctions. Journal of Biological Chemistry, 1999, 274, 25335-25342.	1.6	56
84	Novel properties of the Thermus thermophilus RuvB protein, which promotes branch migration of Holliday junctions. Molecular Genetics and Genomics, 1999, 261, 1001-1011.	2.4	15
85	No braiding of holliday junctions in positively supercoiled DNA molecules 1 1Edited by I. Tinoco. Journal of Molecular Biology, 1999, 294, 683-699.	2.0	13
86	Functional analyses of the domain structure in the Holliday junction binding protein RuvA. Structure, 1998, 6, 11-21.	1.6	57
87	Abortive recombination inEscherichia coli ruvmutants blocks chromosome partitioning. Genes To Cells, 1998, 3, 209-220.	0.5	43
88	Mutational analysis on structure-function relationship of a Holliday junction specific endonuclease RuvC. Genes To Cells, 1998, 3, 575-586.	0.5	19
89	Reconstitution, morphology and crystallization of a fatty acid Î²-oxidation multienzyme complex from Pseudomonas fragi. Biochemical Journal, 1997, 328, 815-820.	1.7	22
90	Roles of the recG gene product of Escherichia coli in recombination repair: Effects of the .DELTA.recG mutation on cell division and chromosome partition.. Genes and Genetic Systems, 1997, 72, 91-99.	0.2	52

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91	ATP-dependent resolution of R-loops at the ColE1 replication origin by Escherichia coli RecG protein, a Holliday junction-specific helicase. EMBO Journal, 1997, 16, 203-209.	3.5	71
92	Molecular analysis of the Pseudomonas aeruginosa genes, ruvA, ruvB and ruvC, involved in processing of homologous recombination intermediates. Gene, 1996, 182, 63-70.	1.0	23
93	Characterization and Comparison of Synthetic Immobile and Mobile Holliday Junctions. Journal of Biochemistry, 1996, 119, 653-658.	0.9	12
94	Processing the holliday junction in homologous recombination. Trends in Biochemical Sciences, 1996, 21, 107-111.	3.7	114
95	Analysis of Substrate Specificity of the RuvC Holliday Junction Resolvase with Synthetic Holliday Junctions. Journal of Biological Chemistry, 1996, 271, 26105-26109.	1.6	47
96	Identification of four acidic amino acids that constitute the catalytic center of the RuvC Holliday junction resolvase.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 7470-7474.	3.3	92
97	Molecular mechanisms of holliday junction processing in Escherichia coli. Advances in Biophysics, 1995, 31, 49-65.	0.6	20
98	Atomic structure of the RuvC resolvase: A holliday junction-specific endonuclease from E. coli. Cell, 1994, 78, 1063-1072.	13.5	300
99	Preliminary Crystallographic Study of Escherichia coli RuvC Protein.. Journal of Molecular Biology, 1994, 241, 281-282.	2.0	8
100	Escherichia coli RuvA and RuvB proteins involved in recombination repair: physical properties and interactions with DNA. Molecular Genetics and Genomics, 1993, 237, 395-399.	2.4	46
101	Escherichia coli RuvA and RuvB proteins specifically interact with Holliday junctions and promote branch migration.. Genes and Development, 1992, 6, 2214-2220.	2.7	174
102	Aphidicolin inhibits DNA polymerizing activity but not nucleolytic activity of Escherichia coli DNA polymerase II. Biochimie, 1992, 74, 131-136.	1.3	15
103	SOS-inducible DNA polymerase II of E coli is homologous to replicative DNA polymerase of eukaryotes. Biochimie, 1991, 73, 433-435.	1.3	13
104	Properties of the Escherichia coli RuvA and RuvB proteins involved in DNA repair, recombination and mutagenesis. Biochimie, 1991, 73, 505-507.	1.3	17
105	Molecular analysis of the Escherichia coli ruvC gene, which encodes a Holliday junction-specific endonuclease. Journal of Bacteriology, 1991, 173, 5747-5753.	1.0	83
106	SOS-inducible DNA repair proteins, RuvA and RuvB, of Escherichia coli: functional interactions between RuvA and RuvB for ATP hydrolysis and renaturation of the cruciform structure in supercoiled DNA.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 8445-8449.	3.3	117
107	Escherichia coli DNA polymerase II is homologous to Î±-like DNA polymerases. Molecular Genetics and Genomics, 1991, 226-226, 24-33.	2.4	42
108	Overproduction of Human Immunodeficiency Virus Type I Reverse Transcriptase in <i>Escherichia coli</i> and Purification of the Enzyme. Microbiology and Immunology, 1990, 34, 509-521.	0.7	28

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109	Proteolytic processing of MucA protein in SOS mutagenesis: Both processed and unprocessed MucA may be active in the mutagenesis. Molecular Genetics and Genomics, 1990, 224, 169-176.	2.4	26
110	The Escherichia coli polB gene, which encodes DNA polymerase II, is regulated by the SOS system. Journal of Bacteriology, 1990, 172, 6268-6273.	1.0	96
111	Proteolytic Activation of UmuD and MucA Proteins for SOS Mutagenesis. , 1990, 52, 351-354.		0
112	Overproduction, purification, and ATPase activity of the Escherichia coli RuvB protein involved in DNA repair. Journal of Bacteriology, 1989, 171, 5276-5280.	1.0	76
113	Involvement in DNA repair of the ruvA gene of Escherichia coli. Molecular Genetics and Genomics, 1989, 219, 328-331.	2.4	36
114	RecA protein-dependent cleavage of UmuD protein and SOS mutagenesis.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 1806-1810.	3.3	319
115	Structure and regulation of the Escherichia coli ruv operon involved in DNA repair and recombination. Journal of Bacteriology, 1988, 170, 4322-4329.	1.0	114
116	Human CtIP and Its Homologs: Team Players in DSB Resection Games. , 0, , .		0