Akira Shinohara

List of Publications by Year
in descending order

85 papers	10,835 citations	66315 42 h-index	54882 84 g-index
106 all docs	106 docs citations	106 times ranked	6142 citing authors

#	Article	IF	Citations
1	Rad51 protein involved in repair and recombination in S. cerevisiae is a RecA-like protein. Cell, 1992, 69, 457-470.	13.5	1,249
2	Homologous recombination and non-homologous end-joining pathways of DNA double-strand break repair have overlapping roles in the maintenance of chromosomal integrity in vertebrate cells. EMBO Journal, 1998, 17, 5497-5508.	3.5	1,076
3	Rad51-deficient vertebrate cells accumulate chromosomal breaks prior to cell death. EMBO Journal, 1998, 17, 598-608.	3.5	743
4	Similarity of the yeast RAD51 filament to the bacterial RecA filament. Science, 1993, 259, 1896-1899.	6.0	658
5	Cloning of human, mouse and fission yeast recombination genes homologous to RAD51 and recA. Nature Genetics, 1993, 4, 239-243.	9.4	506
6	Stimulation by Rad52 of yeast Rad51- mediated recombination. Nature, 1998, 391, 404-407.	13.7	460
7	Rad52 forms ring structures and coâ€operates with RPA in singleâ€strand DNA annealing. Genes To Cells, 1998, 3, 145-156.	0.5	295
8	The controlling role of ATM in homologous recombinational repair of DNA damage. EMBO Journal, 2000, 19, 463-471.	3.5	271
9	Rad52 associates with RPA and functions with Rad55 and Rad57 to assemble meiotic recombinationâ€‰complexes. Genes and Development, 1998, 12, 2208-2221.	2.7	245
10	Xrcc3 Is Required for Assembly of Rad51 Complexes in Vivo. Journal of Biological Chemistry, 1998, 273, 21482-21488.	1.6	237
11	RAB22 and RAB163/mouse BRCA2: Proteins that specifically interact with the RAD51 protein. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 6927-6932.	3.3	231
12	Homologous Recombination, but Not DNA Repair, Is Reduced in Vertebrate Cells Deficient in RAD52. Molecular and Cellular Biology, 1998, 18, 6430-6435.	1.1	224
13	Homologous recombination and the roles of double-strand breaks. Trends in Biochemical Sciences, 1995, 20, 387-391.	3.7	223
14	Rapid Telomere Movement in Meiotic Prophase Is Promoted By NDJ1, MPS3, and CSM4 and Is Modulated by Recombination. Cell, 2008, 133, 1175-1187.	13.5	206
15	Crossover assurance and crossover interference are distinctly regulated by the ZMM proteins during yeast meiosis. Nature Genetics, 2008, 40, 299-309.	9.4	197
16	Tid1/Rdh54 promotes colocalization of Rad51 and Dmc1 during meiotic recombination. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 10814-10819.	3.3	192
17	Rad51 Accumulation at Sites of DNA Damage and in Postreplicative Chromatin. Journal of Cell Biology, 2000, 150, 283-292.	2.3	192
18	Characterization of the Roles of the Saccharomyces cerevisiae RAD54 Gene and a Homologue of RAD54, RDH54/TID1, in Mitosis and Meiosis. Genetics, 1997, 147, 1545-1556.	1.2	185

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19	Regulation of Rad51 Function by c-Abl in Response to DNA Damage. Journal of Biological Chemistry, 1998, 273, 3799-3802.	1.6	184
20	Saccharomyces cerevisiae recA homologues RAD51 and DMC1â€ƒhave both distinct and overlapping roles in meiotic recombination. Genes To Cells, 2003, 2, 615-629.	0.5	183
21	Localization of RecA-like recombination proteins on chromosomes of the lily at various meiotic stages.. Genes and Development, 1995, 9, 925-934.	2.7	149
22	Collaborative Action of Brca1 and CtIP in Elimination of Covalent Modifications from Double-Strand Breaks to Facilitate Subsequent Break Repair. PLoS Genetics, 2010, 6, e1000828.	1.5	133
23	Saccharomyces cerevisiae Dmc1 Protein Promotes Renaturation of Single-strand DNA (ssDNA) and Assimilation of ssDNA into Homologous Super-coiled Duplex DNA. Journal of Biological Chemistry, 2001, 276, 41906-41912.	1.6	129
24	A chicken RAD51 homologue is expressed at high levels in lymphoid and reproductive organs. Nucleic Acids Research, 1993, 21, 1577-1580.	6.5	127
25	A Protein Complex Containing Mei5 and Sae3 Promotes the Assembly of the Meiosis-Specific RecA Homolog Dmc1. Cell, 2004, 119, 927-940.	13.5	125
26	Rad52 Promotes Postinvasion Steps of Meiotic Double-Strand-Break Repair. Molecular Cell, 2008, 29, 517-524.	4.5	117
27	Roles of RecA homologues Rad51 and Dmc1 during meiotic recombination. Cytogenetic and Genome Research, 2004, 107, 201-207.	0.6	112
28	RecA-like Recombination Proteins in Eukaryotes: Functions and Structures of RAD51 Genes. Cold Spring Harbor Symposia on Quantitative Biology, 1993, 58, 567-576.	2.0	112
29	In vivo assembly and disassembly of Rad51 and Rad52 complexes during double-strand break repair. EMBO Journal, 2004, 23, 939-949.	3.5	110
30	The Essential Functions of Human Rad51 Are Independent of ATP Hydrolysis. Molecular and Cellular Biology, 1999, 19, 6891-6897.	1.1	108
31	Rad6-Bre1-mediated histone H2B ubiquitylation modulates the formation of double-strand breaks during meiosis. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 11380-11385.	3.3	106
32	Chromosome Synapsis Alleviates Mek1-Dependent Suppression of Meiotic DNA Repair. PLoS Biology, 2016, 14, e1002369.	2.6	95
33	Mnd1 Is Required for Meiotic Interhomolog Repair. Current Biology, 2004, 14, 752-762.	1.8	92
34	A new protein complex promoting the assembly of Rad51 filaments. Nature Communications, 2013, 4, 1676.	5.8	91
35	ATM and SIRT6/SNF2H Mediate Transient H2AX Stabilization When DSBs Form by Blocking HUWE1 to Allow Efficient Î³H2AX Foci Formation. Cell Reports, 2015, 13, 2728-2740.	2.9	87
36	Base pair switching by interconversion of sugar puckers in DNA extended by proteins of RecA-family: A model for homology search in homologous genetic recombination. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 11071-11076.	3.3	82

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37	Csm4-Dependent Telomere Movement on Nuclear Envelope Promotes Meiotic Recombination. PLoS Genetics, 2008, 4, e1000196.	1.5	79
38	Crossover Interference in Saccharomyces cerevisiae Requires a TID1/RDH54- and DMC1-Dependent Pathway. Genetics, 2003, 163, 1273-1286.	1.2	75
39	The Mitotic DNA Damage Checkpoint Proteins Rad17 and Rad24 Are Required for Repair of Double-Strand Breaks During Meiosis in Yeast. Genetics, 2003, 164, 855-865.	1.2	74
40	Genetic Analysis of Baker's Yeast Msh4-Msh5 Reveals a Threshold Crossover Level for Meiotic Viability. PLoS Genetics, 2010, 6, e1001083.	1.5	68
41	Canonical Non-Homologous End Joining in Mitosis Induces Genome Instability and Is Suppressed by M-phase-Specific Phosphorylation of XRCC4. PLoS Genetics, 2014, 10, e1004563.	1.5	68
42	Rad51/RecA protein families and the associated proteins in eukaryotes. Mutation Research DNA Repair, 1999, 435, 13-21.	3.8	60
43	Human RAD51 paralogue SWSAP1 fosters RAD51 filament by regulating the anti-recombinase FIGNL1 AAA+ ATPase. Nature Communications, 2019, 10, 1407.	5.8	49
44	Forkhead-Associated Domain of Yeast Xrs2, a Homolog of Human Nbs1, Promotes Nonhomologous End Joining Through Interaction With a Ligase IV Partner Protein, Lif1. Genetics, 2008, 179, 213-225.	1.2	43
45	Rad61/Wpl1 (Wapl), a cohesin regulator, controls chromosome compaction during meiosis. Nucleic Acids Research, 2016, 44, 3190-3203.	6.5	42
46	RAD51 homologues in Xenopus laevis: two distinct genes are highly expressed in ovary and testis. Gene, 1995, 160, 195-200.	1.0	40
47	c-Abl Tyrosine Kinase Is Not Essential for Ataxia Telangiectasia Mutated Functions in Chromosomal Maintenance. Journal of Biological Chemistry, 2000, 275, 725-728.	1.6	38
48	Functional structures of the RecA protein found by chimera analysis. Journal of Molecular Biology, 1992, 226, 651-660.	2.0	37
49	DNA damage response clamp 9-1-1 promotes assembly of ZMM proteins for formation of crossovers and synaptonemal complex. Journal of Cell Science, 2015, 128, 1494-506.	1.2	37
50	Multiple possible sites of BRAC2 interacting with DNA repair protein RAD51. , 1998, 21, 217-222.		33
51	Remodeling of the Rad51 DNA Strand-Exchange Protein by the Srs2 Helicase. Genetics, 2013, 194, 859-872.	1.2	33
52	Mps3 SUN domain is important for chromosome motion and juxtaposition of homologous chromosomes during meiosis. Genes To Cells, 2011, 16, 1081-1096.	0.5	32
53	Meiosis-specific prophase-like pathway controls cleavage-independent release of cohesin by Wapl phosphorylation. PLoS Genetics, 2019, 15, e1007851.	1.5	32
54	Cyclinâ€dependent kinase promotes formation of the synaptonemal complex in yeast meiosis. Genes To Cells, 2010, 15, 1036-1050.	0.5	27

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55	Modulating Crossover Frequency and Interference for Obligate Crossovers inSaccharomyces cerevisiaeMeiosis. G3: Genes, Genomes, Genetics, 2017, 7, 1511-1524.	0.8	27
56	Localization of mouse Rad51 and Lim15 proteins on meiotic chromosomes at late stages of prophase 1. Genes To Cells, 1996, 1, 379-389.	0.5	25
57	Molecular Camouflage of Plasmodium falciparum Merozoites by Binding of Host Vitronectin to P47 Fragment of SERA5. Scientific Reports, 2018, 8, 5052.	1.6	25
58	Rad50 zinc hook functions as a constitutive dimerization module interchangeable with SMC hinge. Nature Communications, 2020, 11, 370.	5.8	24
59	The synaptonemal complex central region modulates crossover pathways and feedback control of meiotic double-strand break formation. Nucleic Acids Research, 2021, 49, 7537-7553.	6.5	23
60	Functional interactions between BLM and XRCC3 in the cell. Journal of Cell Biology, 2007, 179, 53-63.	2.3	20
61	The N-Terminal DNA-Binding Domain of Rad52 Promotes RAD51-Independent Recombination in Saccharomyces cerevisiae. Genetics, 2003, 165, 1703-1715.	1.2	20
62	Dot1-Dependent Histone H3K79 Methylation Promotes the Formation of Meiotic Double-Strand Breaks in the Absence of Histone H3K4 Methylation in Budding Yeast. PLoS ONE, 2014, 9, e96648.	1.1	20
63	Multiple Pathways Suppress Non-Allelic Homologous Recombination during Meiosis in Saccharomyces cerevisiae. PLoS ONE, 2013, 8, e63144.	1.1	19
64	Gammaâ€irradiated quiescent cells repair directly induced doubleâ€strand breaks but accumulate persistent doubleâ€strand breaks during subsequent DNA replication. Genes To Cells, 2016, 21, 789-797.	0.5	19
65	Enhanced processivity of Dnmt1 by monoubiquitinated histone H3. Genes To Cells, 2020, 25, 22-32.	0.5	18
66	Doubleâ€strand break repairâ€adox: Restoration of suppressed doubleâ€strand break repair during mitosis induces genomic instability. Cancer Science, 2014, 105, 1519-1525.	1.7	17
67	A species-specific interaction of Rad51 and Rad52 proteins in eukaryotes. Advances in Biophysics, 1995, 31, 93-100.	0.6	14
68	Dual roles of yeast Rad51 N-terminal domain in repairing DNA double-strand breaks. Nucleic Acids Research, 2020, 48, 8474-8489.	6.5	14
69	Meiotic prophase-like pathway for cleavage-independent removal of cohesin for chromosome morphogenesis. Current Genetics, 2019, 65, 817-827.	0.8	13
70	Distinct Functions in Regulation of Meiotic Crossovers for DNA Damage Response Clamp Loader Rad24(Rad17) and Mec1(ATR) Kinase. Genetics, 2019, 213, 1255-1269.	1.2	13
71	SCF^{Cdc4}ubiquitin ligase regulates synaptonemal complex formation during meiosis. Life Science Alliance, 2021, 4, e202000933.	1.3	12
72	Meiosisâ€specific cohesin component, Rec8, promotes the localization of Mps3 SUN domain protein on the nuclear envelope. Genes To Cells, 2018, 24, 94-106.	0.5	11

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73	The Double-Strand Break Landscape of Meiotic Chromosomes Is Shaped by the Paf1 Transcription Elongation Complex in Saccharomyces cerevisiae. Genetics, 2016, 202, 497-512.	1.2	10
74	Srs2 helicase prevents the formation of toxic DNA damage during late prophase I of yeast meiosis. Chromosoma, 2019, 128, 453-471.	1.0	10
75	Phosphorylation of luminal region of the SUN-domain protein Mps3 promotes nuclear envelope localization during meiosis. ELife, 2021, 10, .	2.8	9
76	Effect of Ions and Nucleotides on the Interactions of Yeast Rad51 Protein with Single-Stranded Oligonucleotides. Journal of Biochemistry, 2001, 129, 469-475.	0.9	8
77	<scp>RFTS</scp>â€dependent negative regulation of Dnmt1 by nucleosome structure and histone tails. FEBS Journal, 2017, 284, 3455-3469.	2.2	8
78	Rad9, a 53BP1 Ortholog of Budding Yeast, Is Insensitive to Spo11-Induced Double-Strand Breaks During Meiosis. Frontiers in Cell and Developmental Biology, 2021, 9, 635383.	1.8	8
79	Regulation of Msh4-Msh5 association with meiotic chromosomes in budding yeast. Genetics, 2021, 219, .	1.2	8
80	Ultrastructural analysis in yeast reveals a meiosis-specific actin-containing nuclear bundle. Communications Biology, 2021, 4, 1009.	2.0	8
81	Genetic Interactions of Histone Modification Machinery Set1 and PAF1C with the Recombination Complex Rec114-Mer2-Mei4 in the Formation of Meiotic DNA Double-Strand Breaks. International Journal of Molecular Sciences, 2020, 21, 2679.	1.8	7
82	Toward global standardization of conducting fair investigations of allegations of research misconduct. Accountability in Research, 2020, 27, 327-346.	1.6	6
83	The small GTPase Rab5 homologue Ypt5 regulates cell morphology, sexual development, ion-stress response and vacuolar formation in fission yeast. Biochemical and Biophysical Research Communications, 2013, 441, 867-872.	1.0	5
84	Report from the Working Group of the Molecular Biology Society of Japan for the investigation of fraud in research papers. Genes To Cells, 2009, 14, 903-908.	0.5	2
85	Structural dynamics of the chromo-shadow domain and chromodomain of HP1 bound to histone H3K9 methylated peptide, as measured by site-directed spin-labeling EPR spectroscopy. Biochemical and Biophysical Research Communications, 2021, 567, 42-48.	1.0	2