Yoichi Shinkai

List of Publications by Year
in descending order

129 papers	19,906 citations	23567 58 h-index	13771 129 g-index
135 all docs	135 docs citations	135 times ranked	18346 citing authors

#	ARTICLE	IF	CITATIONS
1	Mammalian HEMK1 methylates glutamine residue of the GGQ motif of mitochondrial release factors. Scientific Reports, 2022, 12, 4104.	3.3	2
2	Inhibition of histone methyltransferase G9a attenuates liver cancer initiation by sensitizing DNA-damaged hepatocytes to p53-induced apoptosis. Cell Death and Disease, 2021, 12, 99.	6.3	19
3	The methyltransferase METTL9 mediates pervasive 1-methylhistidine modification in mammalian proteomes. Nature Communications, 2021, 12, 891.	12.8	54
4	Regulation of mammalian 3D genome organization and histone H3K9 dimethylation by H3K9 methyltransferases. Communications Biology, 2021, 4, 571.	4.4	12
5	Derepression of inflammation-related genes link to microglia activation and neural maturation defect in a mouse model of Kleefstra syndrome. IScience, 2021, 24, 102741.	4.1	5
6	A loss-of-function variant in SUV39H2 identified in autism-spectrum disorder causes altered H3K9 trimethylation and dysregulation of protocadherin Î²-cluster genes in the developing brain. Molecular Psychiatry, 2021, 26, 7550-7559.	7.9	11
7	Propargylic <i>Se</i>-adenosyl-<scp>l</scp>-selenomethionine: A Chemical Tool for Methylome Analysis. Accounts of Chemical Research, 2021, 54, 3818-3827.	15.6	15
8	The fibronectin type-III (FNIII) domain of ATF7IP contributes to efficient transcriptional silencing mediated by the SETDB1 complex. Epigenetics and Chromatin, 2020, 13, 52.	3.9	13
9	H3K9 Demethylases JMJD1A and JMJD1B Control Prospermatogonia to Spermatogonia Transition in Mouse Germline. Stem Cell Reports, 2020, 15, 424-438.	4.8	13
10	Deletion of Histone Methyltransferase G9a Suppresses Mutant Kras-driven Pancreatic Carcinogenesis. Cancer Genomics and Proteomics, 2020, 17, 695-705.	2.0	9
11	SETDB1-Mediated Silencing of Retroelements. Viruses, 2020, 12, 596.	3.3	55
12	G9a is involved in the regulation of cranial bone formation through activation of Runx2 function during development. Bone, 2020, 137, 115332.	2.9	15
13	G9a-dependent histone methylation can be induced in G1 phase of cell cycle. Scientific Reports, 2019, 9, 956.	3.3	6
14	Histone H1 quantity determines the efficiency of chromatin condensation in both apoptotic and live cells. Biochemical and Biophysical Research Communications, 2019, 512, 202-207.	2.1	4
15	Histone H3K9 Methyltransferase G9a in Oocytes Is Essential for Preimplantation Development but Dispensable for CG Methylation Protection. Cell Reports, 2019, 27, 282-293.e4.	6.4	62
16	ATF7IP regulates SETDB1 nuclear localization and increases its ubiquitination. EMBO Reports, 2019, 20, e48297.	4.5	46
17	Structure of the UHRF1 Tandem Tudor Domain Bound to a Methylated Non-histone Protein, LIG1, Reveals Rules for Binding and Regulation. Structure, 2019, 27, 485-496.e7.	3.3	41
18	Biochemical validation of EHMT1 missense mutations in Kleefstra syndrome. Journal of Human Genetics, 2018, 63, 555-562.	2.3	10

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19	Role of METTL20 in regulating Î²-oxidation and heat production in mice under fasting or ketogenic conditions. Scientific Reports, 2018, 8, 1179.	3.3	18
20	Cutting Edge: The Histone Methyltransferase G9a Is Required for Silencing of Helper T Lineageâ€“Associated Genes in Proliferating CD8 T Cells. Journal of Immunology, 2018, 200, 3891-3896.	0.8	14
21	A CRISPR knockout screen identifies SETDB1-target retroelement silencing factors in embryonic stem cells. Genome Research, 2018, 28, 846-858.	5.5	54
22	A somatic role for the histone methyltransferase Setdb1 in endogenous retrovirus silencing. Nature Communications, 2018, 9, 1683.	12.8	67
23	Combined Loss of JMJD1A and JMJD1B Reveals Critical Roles for H3K9 Demethylation in the Maintenance of Embryonic Stem Cells and Early Embryogenesis. Stem Cell Reports, 2018, 10, 1340-1354.	4.8	23
24	Tri-methylation of ATF7IP by G9a/GLP recruits the chromodomain protein MPP8. Epigenetics and Chromatin, 2018, 11, 56.	3.9	43
25	Unveiling epidithiodiketopiperazine as a non-histone arginine methyltransferase inhibitor by chemical protein methylome analyses. Chemical Communications, 2018, 54, 9202-9205.	4.1	12
26	A Simple Method for Visualization of Locus-Specific H4K20me1 Modifications in Living Caenorhabditis elegans Single Cells. G3: Genes, Genomes, Genetics, 2018, 8, 2249-2255.	1.8	2
27	Essential roles of G9a in cell proliferation and differentiation during tooth development. Experimental Cell Research, 2017, 357, 202-210.	2.6	11
28	Histone H3 Methylated at Arginine 17 Is Essential for Reprogramming the Paternal Genome in Zygotes. Cell Reports, 2017, 20, 2756-2765.	6.4	35
29	Methylation of DNA Ligase 1 by G9a/GLP Recruits UHRF1 to Replicating DNA and Regulates DNA Methylation. Molecular Cell, 2017, 67, 550-565.e5.	9.7	151
30	Impact of nucleic acid and methylated H3K9 binding activities of Suv39h1 on its heterochromatin assembly. ELife, 2017, 6, .	6.0	61
31	Knockout mouse production assisted by <i>Blm</i> knockdown. Journal of Reproduction and Development, 2016, 62, 121-125.	1.4	2
32	Activation of Endogenous Retroviruses in Dnmt1 âˆ’/âˆ’ ESCs Involves Disruption of SETDB1-Mediated Repression by NP95 Binding to Hemimethylated DNA. Cell Stem Cell, 2016, 19, 81-94.	11.1	77
33	Setdb1 maintains hematopoietic stem and progenitor cells by restricting the ectopic activation of nonhematopoietic genes. Blood, 2016, 128, 638-649.	1.4	61
34	A Histone Methyltransferase ESET Is Critical for T Cell Development. Journal of Immunology, 2016, 197, 2269-2279.	0.8	33
35	Pericentric H3K9me3 Formation by HP1 Interaction-defective Histone Methyltransferase Suv39h1. Cell Structure and Function, 2016, 41, 145-152.	1.1	15
36	The histone methyltransferase SETDB1 represses endogenous and exogenous retroviruses in B lymphocytes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8367-8372.	7.1	78

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37	H3K9MTase G9a is essential for the differentiation and growth of tenocytes in vitro. Histochemistry and Cell Biology, 2015, 144, 13-20.	1.7	14
38	Prdm8 Regulates the Morphological Transition at Multipolar Phase during Neocortical Development. PLoS ONE, 2014, 9, e86356.	2.5	32
39	Selenium-Based S-Adenosylmethionine Analog Reveals the Mammalian Seven-Beta-Strand Methyltransferase METTL10 to Be an EF1A1 Lysine Methyltransferase. PLoS ONE, 2014, 9, e105394.	2.5	80
40	Exon resequencing of H3K9 methyltransferase complex genes, EHMT1, EHTM2 and WIZ, in Japanese autism subjects. Molecular Autism, 2014, 5, 49.	4.9	26
41	<i>Setdb1</i> is required for germline development and silencing of H3K9me3-marked endogenous retroviruses in primordial germ cells. Genes and Development, 2014, 28, 2041-2055.	5.9	228
42	The Hypoxia-Inducible Epigenetic Regulators Jmjd1a and G9a Provide a Mechanistic Link between Angiogenesis and Tumor Growth. Molecular and Cellular Biology, 2014, 34, 3702-3720.	2.3	47
43	Pericentric Heterochromatin Generated by HP1 Protein Interaction-defective Histone Methyltransferase Suv39h1. Journal of Biological Chemistry, 2013, 288, 25285-25296.	3.4	28
44	Epigenetic Regulation of Mouse Sex Determination by the Histone Demethylase Jmjd1a. Science, 2013, 341, 1106-1109.	12.6	217
45	Hippocampal dysfunction in the Euchromatin histone methyltransferase 1 heterozygous knockout mouse model for Kleefstra syndrome. Human Molecular Genetics, 2013, 22, 852-866.	2.9	68
46	Histone H3 lysine 9 methyltransferases, G9a and GLP are essential for cardiac morphogenesis. Mechanisms of Development, 2013, 130, 519-531.	1.7	39
47	Posttranscriptional Regulation of Histone Lysine Methyltransferase GLP in Embryonic Male Mouse Germ Cells1. Biology of Reproduction, 2013, 88, 36.	2.7	10
48	Mammalian epigenetics in biology and medicine. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120386.	4.0	3
49	Is there a role for endogenous retroviruses to mediate long-term adaptive phenotypic response upon environmental inputs?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20110340.	4.0	30
50	JMJD1C, a JmjC Domain-Containing Protein, Is Required for Long-Term Maintenance of Male Germ Cells in Mice1. Biology of Reproduction, 2013, 89, 93.	2.7	62
51	Prdm12 Is Induced by Retinoic Acid and Exhibits Anti-proliferative Properties through the Cell Cycle Modulation of P19 Embryonic Carcinoma Cells. Cell Structure and Function, 2013, 38, 197-206.	1.1	36
52	Essential roles of the histone methyltransferase ESET in the epigenetic control of neural progenitor cells during development. Development (Cambridge), 2012, 139, 3806-3816.	2.5	121
53	DNA Damage Signaling Triggers Degradation of Histone Methyltransferases through APC/CCdh1 in Senescent Cells. Molecular Cell, 2012, 45, 123-131.	9.7	159
54	Inhibition of histone H3K9 methyltransferases by gliotoxin and related epipolythiodioxopiperazines. Journal of Antibiotics, 2012, 65, 263-265.	2.0	31

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55	PGC7 binds histone H3K9me2 to protect against conversion of 5mC to 5hmC in early embryos. Nature, 2012, 486, 415-419.	27.8	397
56	MPP8 mediates the interactions between DNA methyltransferase Dnmt3a and H3K9 methyltransferase GLP/G9a. Nature Communications, 2011, 2, 533.	12.8	132
57	H3K9 methyltransferase G9a and the related molecule GLP. Genes and Development, 2011, 25, 781-788.	5.9	473
58	DNA Methylation and SETDB1/H3K9me3 Regulate Predominantly Distinct Sets of Genes, Retroelements, and Chimeric Transcripts in mESCs. Cell Stem Cell, 2011, 8, 676-687.	11.1	427
59	Tracking epigenetic histone modifications in single cells using Fab-based live endogenous modification labeling. Nucleic Acids Research, 2011, 39, 6475-6488.	14.5	219
60	Lysine methyltransferase G9a is required for de novo DNA methylation and the establishment, but not the maintenance, of proviral silencing. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5718-5723.	7.1	105
61	Proviral silencing in embryonic stem cells requires the histone methyltransferase ESET. Nature, 2010, 464, 927-931.	27.8	681
62	Reply to â€œReassessing the abundance of H3K9me2 chromatin domains in embryonic stem cellsâ€• Nature Genetics, 2010, 42, 5-6.	21.4	32
63	Histone H1 null vertebrate cells exhibit altered nucleosome architecture. Nucleic Acids Research, 2010, 38, 3533-3545.	14.5	47
64	Adding a Lysine Mimic in the Design of Potent Inhibitors of Histone Lysine Methyltransferases. Journal of Molecular Biology, 2010, 400, 1-7.	4.2	108
65	Reduced exploration, increased anxiety, and altered social behavior: Autistic-like features of euchromatin histone methyltransferase 1 heterozygous knockout mice. Behavioural Brain Research, 2010, 208, 47-55.	2.2	126
66	A Jumonji (Jarid2) Protein Complex Represses cyclin D1 Expression by Methylation of Histone H3-K9. Journal of Biological Chemistry, 2009, 284, 733-739.	3.4	68
67	G9a selectively represses a class of late-replicating genes at the nuclear periphery. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19363-19368.	7.1	134
68	Distinct Roles for Histone Methyltransferases G9a and GLP in Cancer Germ-Line Antigen Gene Regulation in Human Cancer Cells and Murine Embryonic Stem Cells. Molecular Cancer Research, 2009, 7, 851-862.	3.4	50
69	Expression of the mouse PR domain protein Prdm8 in the developing central nervous system. Gene Expression Patterns, 2009, 9, 503-514.	0.8	29
70	Obesity and metabolic syndrome in histone demethylase JHDM2aâ€deficient mice. Genes To Cells, 2009, 14, 991-1001.	1.2	167
71	Large histone H3 lysine 9 dimethylated chromatin blocks distinguish differentiated from embryonic stem cells. Nature Genetics, 2009, 41, 246-250.	21.4	540
72	G9a/GLP complexes independently mediate H3K9 and DNA methylation to silence transcription. EMBO Journal, 2008, 27, 2681-2690.	7.8	342

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73	DNA methylation in ES cells requires the lysine methyltransferase G9a but not its catalytic activity. EMBO Journal, 2008, 27, 2691-2701.	7.8	207
74	De novo DNA methylation promoted by G9a prevents reprogramming of embryonically silenced genes. Nature Structural and Molecular Biology, 2008, 15, 1176-1183.	8.2	396
75	Protein lysine methyltransferase G9a acts on non-histone targets. Nature Chemical Biology, 2008, 4, 344-346.	8.0	309
76	Characterization of <i>Drosophila</i> G9a <i>in vivo</i> and identification of genetic interactants. Genes To Cells, 2008, 13, 703-722.	1.2	21
77	Distinct Roles of TRF1 in the Regulation of Telomere Structure and Lengthening. Journal of Biological Chemistry, 2008, 283, 23981-23988.	3.4	48
78	Functional Analysis of Histone Methyltransferase G9a in B and T Lymphocytes. Journal of Immunology, 2008, 181, 485-493.	0.8	61
79	Regulation And Function Of H3K9 Methylation. , 2007, , 341-354.		7
80	Functional dynamics of H3K9 methylation during meiotic prophase progression. EMBO Journal, 2007, 26, 3346-3359.	7.8	263
81	Genome-wide and locus-specific DNA hypomethylation in G9a deficient mouse embryonic stem cells. Genes To Cells, 2007, 12, 1-11.	1.2	79
82	Identification of ZNF200 as a novel binding partner of histone H3 methyltransferase G9a. Genes To Cells, 2007, 12, 877-888.	1.2	16
83	Histone H1 variant, H1R is involved in DNA damage response. DNA Repair, 2007, 6, 1584-1595.	2.8	38
84	Cellular dynamics associated with the genome-wide epigenetic reprogramming in migrating primordial germ cells in mice. Development (Cambridge), 2007, 134, 2627-2638.	2.5	388
85	Regulation and function of H3K9 methylation. Sub-Cellular Biochemistry, 2007, 41, 337-50.	2.4	7
86	Î±1,3-Galactosyltransferase-Gene Knockout in Cattle using a Single Targeting Vector with loxP Sequences and Cre-Expressing Adenovirus. Transplantation, 2006, 81, 760-766.	1.0	19
87	Rad54 is dispensable for the ALT pathway. Genes To Cells, 2006, 11, 1305-1315.	1.2	7
88	G9a-mediated irreversible epigenetic inactivation of Oct-3/4 during early embryogenesis. Nature Cell Biology, 2006, 8, 188-194.	10.3	581
89	Hypoxic Stress Induces Dimethylated Histone H3 Lysine 9 through Histone Methyltransferase G9a in Mammalian Cells. Cancer Research, 2006, 66, 9009-9016.	0.9	200
90	Zinc Finger Protein Wiz Links G9a/GLP Histone Methyltransferases to the Co-repressor Molecule CtBP*. Journal of Biological Chemistry, 2006, 281, 20120-20128.	3.4	108

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91	Histone methyltransferases G9a and GLP form heteromeric complexes and are both crucial for methylation of euchromatin at H3-K9. Genes and Development, 2005, 19, 815-826.	5.9	689
92	In Vitro and in Vivo Analyses of a Phe/Tyr Switch Controlling Product Specificity of Histone Lysine Methyltransferases. Journal of Biological Chemistry, 2005, 280, 5563-5570.	3.4	166
93	The Wntâ€"NLK Signaling Pathway Inhibits A-Myb Activity by Inhibiting the Association with Coactivator CBP and Methylating Histone H3. Molecular Biology of the Cell, 2005, 16, 4705-4713.	2.1	38
94	Genetic and epigenetic properties of mouse male germline stem cells during long-term culture. Development (Cambridge), 2005, 132, 4155-4163.	2.5	210
95	Importance of TRF1 for Functional Telomere Structure. Journal of Biological Chemistry, 2004, 279, 1442-1448.	3.4	91
96	Targeted inhibition of V(D)J recombination by a histone methyltransferase. Nature Immunology, 2004, 5, 309-316.	14.5	101
97	Crucial functions of the Rap1 effector molecule RAPL in lymphocyte and dendritic cell trafficking. Nature Immunology, 2004, 5, 1045-1051.	14.5	184
98	X-inactivation is stably maintained in mouse embryos deficient for histone methyl transferase G9a. Genesis, 2004, 40, 151-156.	1.6	24
99	The absence of DNA polymerase Îº does not affect somatic hypermutation of the mouse immunoglobulin heavy chain gene. Immunology Letters, 2003, 86, 265-270.	2.5	41
100	Partitioning and Plasticity of Repressive Histone Methylation States in Mammalian Chromatin. Molecular Cell, 2003, 12, 1577-1589.	9.7	1,010
101	Histone Methyltransferases Direct Different Degrees of Methylation to Define Distinct Chromatin Domains. Molecular Cell, 2003, 12, 1591-1598.	9.7	706
102	Methyl-CpG Binding Domain 1 (MBD1) Interacts with the Suv39h1-HP1 Heterochromatic Complex for DNA Methylation-based Transcriptional Repression. Journal of Biological Chemistry, 2003, 278, 24132-24138.	3.4	237
103	Increase of TCR VÎ² Accessibility within EÎ² Regulatory Region Influences its Recombination Frequency But Not Allelic Exclusion. Journal of Immunology, 2003, 171, 829-835.	0.8	25
104	Role of Histone Methyltransferase G9a in CpG Methylation of the Prader-Willi Syndrome Imprinting Center. Journal of Biological Chemistry, 2003, 278, 14996-15000.	3.4	149
105	Activation of Heat Shock Genes Is Not Necessary for Protection by Heat Shock Transcription Factor 1 against Cell Death Due to a Single Exposure to High Temperatures. Molecular and Cellular Biology, 2003, 23, 5882-5895.	2.3	84
106	Heterozygous disruption of the ??1,3-galactosyltransferase gene in cattle. Transplantation, 2003, 76, 900-902.	1.0	3
107	Effect of a null mutation of the oviduct-specific glycoprotein gene on mouse fertilization. Biochemical Journal, 2003, 374, 551-557.	3.7	50
108	Nonlinear partial differential equations and applications: PolÂ protects mammalian cells against the lethal and mutagenic effects of benzo[a]pyrene. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15548-15553.	7.1	222

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109	G9a histone methyltransferase plays a dominant role in euchromatic histone H3 lysine 9 methylation and is essential for early embryogenesis. Genes and Development, 2002, 16, 1779-1791.	5.9	1,084
110	A Testicular Germ Cell-Associated Serine-Threonine Kinase, MAK, Is Dispensable for Sperm Formation. Molecular and Cellular Biology, 2002, 22, 3276-3280.	2.3	42
111	Direct Production of Gene-targeted Mice from ES Cells by Nuclear Transfer and Gene Transmission to their Progeny.. Experimental Animals, 2002, 51, 375-381.	1.1	14
112	Abnormalities in cloned mice are not transmitted to the progeny. Genesis, 2002, 34, 203-207.	1.6	85
113	SET Domain-containing Protein, G9a, Is a Novel Lysine-preferring Mammalian Histone Methyltransferase with Hyperactivity and Specific Selectivity to Lysines 9 and 27 of Histone H3. Journal of Biological Chemistry, 2001, 276, 25309-25317.	3.4	679
114	Limited effect of chromatin remodeling on DÎ²-to-JÎ² recombination in CD4+CD8+ thymocyte: implications for a new aspect in the regulation of TCR Î² gene recombination. International Immunology, 2001, 13, 1405-1414.	4.0	17
115	Cloning of mice to six generations. Nature, 2000, 407, 318-319.	27.8	242
116	Telomere Maintenance in Telomerase-Deficient Mouse Embryonic Stem Cells: Characterization of an Amplified Telomeric DNA. Molecular and Cellular Biology, 2000, 20, 4115-4127.	2.3	129
117	Class Switch Recombination and Hypermutation Require Activation-Induced Cytidine Deaminase (AID), a Potential RNA Editing Enzyme. Cell, 2000, 102, 553-563.	28.9	3,089
118	Severe growth defect in mouse cells lacking the telomerase RNA component. Nature Genetics, 1998, 19, 203-206.	21.4	159
119	Commitment of Immature CD4+8+ Thymocytes to the CD4 Lineage Requires CD3 Signaling but Does Not Require Expression of Clonotypic T Cell Receptor (TCR) Chains. Journal of Experimental Medicine, 1997, 186, 17-23.	8.5	16
120	CD3Îµ-mediated signals rescue the development of CD4+CD8+ thymocytes in RAG-2âˆ'/âˆ' mice in the absence of TCR Î² chain expression. International Immunology, 1994, 6, 995-1001.	4.0	194
121	Two distinct pathways of specific killing revealed by perforin mutant cytotoxic T lymphocytes. Immunity, 1994, 1, 357-364.	14.3	294
122	Evidence of perforin-mediated cardiac myocyte injury in acute murine myocarditis caused by coxsackie virus B3. Journal of Pathology, 1993, 170, 53-58.	4.5	49
123	Expression of perforin and cytolytic potential of human peripheral blood lymphocyte subpopulations. International Immunology, 1992, 4, 1049-1054.	4.0	66
124	Role of Perforin in Lymphocyte-Mediated Cytolysis. Advances in Immunology, 1992, 51, 215-242.	2.2	83
125	Expression of perforin in murine natural killer cells and cytotoxic T lymphocytesin vivo. European Journal of Immunology, 1992, 22, 1215-1219.	2.9	31
126	Thy-1 -positive dendritic epidermal cells contain a killer protein perforin. International Immunology, 1990, 2, 1113-1116.	4.0	21

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127	Molecular cloning and chromosomal assignment of a human perforin (PFP) gene. Immunogenetics, 1989, 30, 452-457.	2.4	55
128	Homology of perforin to the ninth component of complement (C9). Nature, 1988, 334, 525-527.	27.8	260
129	METTL18-mediated histidine methylation of RPL3 modulates translation elongation for proteostasis maintenance. ELife, 0, 11, .	6.0	11