Liangxue Lai

List of Publications by Year
in descending order

112 papers	5,129 citations	126907 33 h-index	98798 67 g-index
114 all docs	114 docs citations	114 times ranked	5187 citing authors

#	Article	IF	Citations
1	Production of alpha -1,3-Galactosyltransferase Knockout Pigs by Nuclear Transfer Cloning. Science, 2002, 295, 1089-1092.	12.6	1,248
2	Establishment of porcine and human expanded potential stem cells. Nature Cell Biology, 2019, 21, 687-699.	10.3	261
3	A Huntingtin Knockin Pig Model Recapitulates Features of Selective Neurodegeneration in Huntingtonâ€™s Disease. Cell, 2018, 173, 989-1002.e13.	28.9	231
4	Generation of CRISPR/Cas9-mediated gene-targeted pigs via somatic cell nuclear transfer. Cellular and Molecular Life Sciences, 2015, 72, 1175-1184.	5.4	202
5	Effective gene targeting in rabbits using RNA-guided Cas9 nucleases. Journal of Molecular Cell Biology, 2014, 6, 97-99.	3.3	143
6	Expression of Huntington's disease protein results in apoptotic neurons in the brains of cloned transgenic pigs. Human Molecular Genetics, 2010, 19, 3983-3994.	2.9	140
7	Highly efficient RNA-guided base editing in rabbit. Nature Communications, 2018, 9, 2717.	12.8	119
8	Generation of gene-target dogs using CRISPR/Cas9 system. Journal of Molecular Cell Biology, 2015, 7, 580-583.	3.3	105
9	Efficient Generation of Myostatin Gene Mutated Rabbit by CRISPR/Cas9. Scientific Reports, 2016, 6, 25029.	3.3	102
10	Genetically Modified Pig Models for Human Diseases. Journal of Genetics and Genomics, 2013, 40, 67-73.	3.9	87
11	A novel N6-methyladenosine (m6A)-dependent fate decision for the lncRNA THOR. Cell Death and Disease, 2020, 11, 613.	6.3	86
12	Efficient dual sgRNA-directed large gene deletion in rabbit with CRISPR/Cas9 system. Cellular and Molecular Life Sciences, 2016, 73, 2959-2968.	5.4	83
13	RAG1/2 Knockout Pigs with Severe Combined Immunodeficiency. Journal of Immunology, 2014, 193, 1496-1503.	0.8	82
14	Efficient base editing for multiple genes and loci in pigs using base editors. Nature Communications, 2019, 10, 2852.	12.8	82
15	Generation of multi-gene knockout rabbits using the Cas9/gRNA system. Cell Regeneration, 2014, 3, 3:12.	2.6	81
16	Autophagy and mTORC1 regulate the stochastic phase of somatic cell reprogramming. Nature Cell Biology, 2015, 17, 715-725.	10.3	81
17	Rosa26-targeted swine models for stable gene over-expression and Cre-mediated lineage tracing. Cell Research, 2014, 24, 501-504.	12.0	77
18	Highly Efficient Generation of GGTA1 Biallelic Knockout Inbred Mini-Pigs with TALENs. PLoS ONE, 2013, 8, e84250.	2.5	76

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19	Generation of RAG 1- and 2-deficient rabbits by embryo microinjection of TALENs. Cell Research, 2013, 23, 1059-1062.	12.0	69
20	A novel rabbit model of Duchenne muscular dystrophy generated by CRISPR/Cas9. DMM Disease Models and Mechanisms, 2018, 11, .	2.4	63
21	Genome editing in large animals: current status and future prospects. National Science Review, 2019, 6, 402-420.	9.5	63
22	Genetically modified pigs are protected from classical swine fever virus. PLoS Pathogens, 2018, 14, e1007193.	4.7	60
23	CRISPR/Cas9-mediated GJA8 knockout in rabbits recapitulates human congenital cataracts. Scientific Reports, 2016, 6, 22024.	3.3	54
24	Cre-dependent Cas9-expressing pigs enable efficient in vivo genome editing. Genome Research, 2017, 27, 2061-2071.	5.5	54
25	XIST Derepression in Active X Chromosome Hinders Pig Somatic Cell Nuclear Transfer. Stem Cell Reports, 2018, 10, 494-508.	4.8	54
26	Large-Fragment Deletions Induced by Cas9 Cleavage while Not in the BEs System. Molecular Therapy - Nucleic Acids, 2020, 21, 523-526.	5.1	48
27	Cytoplasmic mislocalization of RNA splicing factors and aberrant neuronal gene splicing in TDP-43 transgenic pig brain. Molecular Neurodegeneration, 2015, 10, 42.	10.8	45
28	Species-dependent neuropathology in transgenic SOD1 pigs. Cell Research, 2014, 24, 464-481.	12.0	44
29	CRISPR/Cas9-mediated mutation ofPHEXin rabbit recapitulates human X-linked hypophosphatemia (XLH). Human Molecular Genetics, 2016, 25, ddw125.	2.9	42
30	Genetically humanized pigs exclusively expressing human insulin are generated through custom endonuclease-mediated seamless engineering. Journal of Molecular Cell Biology, 2016, 8, 174-177.	3.3	41
31	ACBE, a new base editor for simultaneous C-to-T and A-to-G substitutions in mammalian systems. BMC Biology, 2020, 18, 131.	3.8	41
32	CRISPR-induced exon skipping is dependent on premature termination codon mutations. Genome Biology, 2018, 19, 164.	8.8	39
33	ANGPTL7 regulates the expansion and repopulation of human hematopoietic stem and progenitor cells. Haematologica, 2015, 100, 585-594.	3.5	38
34	BMI1 enables interspecies chimerism with human pluripotent stem cells. Nature Communications, 2018, 9, 4649.	12.8	38
35	Generation of knockout rabbits using transcription activator-like effector nucleases. Cell Regeneration, 2014, 3, 3:3.	2.6	34
36	Engineering CRISPR/Cpf1 with tRNA promotes genome editing capability in mammalian systems. Cellular and Molecular Life Sciences, 2018, 75, 3593-3607.	5.4	33

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37	Generation of Knock-In Pigs Carrying Oct4-tdTomato Reporter through CRISPR/Cas9-Mediated Genome Engineering. PLoS ONE, 2016, 11, e0146562.	2.5	32
38	Development of muscular dystrophy in a CRISPR-engineered mutant rabbit model with frame-disrupting ANO5 mutations. Cell Death and Disease, 2018, 9, 609.	6.3	29
39	AGBE: a dual deaminase-mediated base editor by fusing CGBE with ABE for creating a saturated mutant population with multiple editing patterns. Nucleic Acids Research, 2022, 50, 5384-5399.	14.5	29
40	Conversion of embryonic stem cells into extraembryonic lineages by CRISPR-mediated activators. Scientific Reports, 2016, 6, 19648.	3.3	28
41	Precise base editing with CC context-specificity using engineered human APOBEC3G-nCas9 fusions. BMC Biology, 2020, 18, 111.	3.8	28
42	Generation of Human Liver Chimeric Mice with Hepatocytes from Familial Hypercholesterolemia Induced Pluripotent Stem Cells. Stem Cell Reports, 2017, 8, 605-618.	4.8	27
43	CRISPR/Cas9â€“Mediated Mutation of Î±A-Crystallin Gene Induces Congenital Cataracts in Rabbits. , 2017, 58, BIO34.		26
44	Improved base editor for efficient editing in GC contexts in rabbits with an optimized AIDâ€Cas9 fusion. FASEB Journal, 2019, 33, 9210-9219.	0.5	26
45	Efficient and high-fidelity base editor with expanded PAM compatibility for cytidine dinucleotide. Science China Life Sciences, 2021, 64, 1355-1367.	4.9	26
46	DMP1 Ablation in the Rabbit Results in Mineralization Defects and Abnormalities in Haversian Canal/Osteon Microarchitecture. Journal of Bone and Mineral Research, 2019, 34, 1115-1128.	2.8	25
47	Efficient base editing with high precision in rabbits using YFE-BE4max. Cell Death and Disease, 2020, 11, 36.	6.3	25
48	D-repeat in theXISTgene is required for X chromosome inactivation. RNA Biology, 2016, 13, 172-176.	3.1	24
49	AcrIIA5 Suppresses Base Editors and Reduces Their Off-Target Effects. Cells, 2020, 9, 1786.	4.1	24
50	Generation of ApoE deficient dogs via combination of embryo injection of CRISPR/Cas9 with somatic cell nuclear transfer. Journal of Genetics and Genomics, 2018, 45, 47-50.	3.9	23
51	Mutation of the Sp1 binding site in the 5â€² flanking region of SRY causes sex reversal in rabbits. Oncotarget, 2017, 8, 38176-38183.	1.8	23
52	Generation of Hoxc13 knockout pigs recapitulates human ectodermal dysplasiaâ€“9. Human Molecular Genetics, 2016, 26, ddw378.	2.9	22
53	Efficient and precise base editing in rabbits using human APOBEC3A-nCas9 fusions. Cell Discovery, 2019, 5, 31.	6.7	22
54	Loss of Angiopoietin-like 7 diminishes the regeneration capacity of hematopoietic stem and progenitor cells. Journal of Hematology and Oncology, 2015, 8, 7.	17.0	21

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55	CRISPR/Cas9-mediated mutation of tyrosinase (Tyr) 3â€² UTR induce graying in rabbit. Scientific Reports, 2017, 7, 1569.	3.3	19
56	Functional validation of the albinism-associated tyrosinase T373K SNP by CRISPR/Cas9-mediated homology-directed repair (HDR) in rabbits. EBioMedicine, 2018, 36, 517-525.	6.1	19
57	Corrigendum. G3: Genes, Genomes, Genetics, 2018, 8, 2833-2840.	1.8	19
58	Efficient and precise generation of Tayâ€“Sachs disease model in rabbit by prime editing system. Cell Discovery, 2021, 7, 50.	6.7	19
59	Generation of rat blood vasculature and hematopoietic cells in rat-mouse chimeras by blastocyst complementation. Journal of Genetics and Genomics, 2020, 47, 249-261.	3.9	19
60	Truncated C-terminus of fibrillin-1 induces Marfanoid-progeroid-lipodystrophy (MPL) syndrome in rabbit. DMM Disease Models and Mechanisms, 2018, 11, .	2.4	18
61	The disrupted balance between hair follicles and sebaceous glands in Hoxc13 â€ablated rabbits. FASEB Journal, 2019, 33, 1226-1234.	0.5	18
62	Highly efficient base editing with expanded targeting scope using SpCas9â€NG in rabbits. FASEB Journal, 2020, 34, 588-596.	0.5	18
63	CRISPR Start-Loss: A Novel and Practical Alternative for Gene Silencing through Base-Editing-Induced Start Codon Mutations. Molecular Therapy - Nucleic Acids, 2020, 21, 1062-1073.	5.1	16
64	Versatile and efficient inÂvivo genome editing with compact Streptococcus pasteurianus Cas9. Molecular Therapy, 2022, 30, 256-267.	8.2	16
65	Fumarylacetoacetate Hydrolase Knock-out Rabbit Model for Hereditary Tyrosinemia Type 1. Journal of Biological Chemistry, 2017, 292, 4755-4763.	3.4	15
66	LMNA-mutated Rabbits: A Model of Premature Aging Syndrome with Muscular Dystrophy and Dilated Cardiomyopathy. , 2019, 10, 102.		15
67	Compact Cje3Cas9 for Efficient In Vivo Genome Editing and Adenine Base Editing. CRISPR Journal, 2022, 5, 472-486.	2.9	15
68	Efficient base editing with expanded targeting scope using an engineered Spy-mac Cas9 variant. Cell Discovery, 2019, 5, 58.	6.7	14
69	Genetic deletion of a short fragment of glucokinase in rabbit by CRISPR/Cas9 leading to hyperglycemia and other typical features seen in MODY-2. Cellular and Molecular Life Sciences, 2020, 77, 3265-3277.	5.4	14
70	CRISPR/Cas9-Mediated Gene Correction in Newborn Rabbits with Hereditary Tyrosinemia Type I. Molecular Therapy, 2021, 29, 1001-1015.	8.2	14
71	Disruption of imprinted gene expression and DNA methylation status in porcine parthenogenetic fetuses and placentas. Gene, 2014, 547, 351-358.	2.2	13
72	Establishment of geneâ€edited pigs expressing human bloodâ€coagulation factor VII and albumin for bioartificial liver use. Journal of Gastroenterology and Hepatology (Australia), 2019, 34, 1851-1859.	2.8	13

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73	CRISPR/Cas9-Mediated Deletion of Foxn1 in NOD/SCID/IL2rgâ^'/â^' Mice Results in Severe Immunodeficiency. Scientific Reports, 2017, 7, 7720.	3.3	12
74	Efficient C-to-G Base Editing with Improved Target Compatibility Using Engineered Deaminaseâ€"nCas9 Fusions. CRISPR Journal, 2022, 5, 389-396.	2.9	12
75	Mutations of GADD45G in rabbits cause cleft lip by the disorder of proliferation, apoptosis and epithelial-mesenchymal transition (EMT). Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2019, 1865, 2356-2367.	3.8	11
76	CRISPR/Cas9-mediated Disruption of Fibroblast Growth Factor 5 in Rabbits Results in a Systemic Long Hair Phenotype by Prolonging Anagen. Genes, 2020, 11, 297.	2.4	11
77	In vivo genome editing in mouse restores dystrophin expression in Duchenne muscular dystrophy patient muscle fibers. Genome Medicine, 2021, 13, 57.	8.2	11
78	Live imaging of RNA and RNA splicing in mammalian cells via the dcas13a-SunTag-BiFC system. Biosensors and Bioelectronics, 2022, 204, 114074.	10.1	10
79	Aberrant Expression of Xist in Aborted Porcine Fetuses Derived from Somatic Cell Nuclear Transfer Embryos. International Journal of Molecular Sciences, 2014, 15, 21631-21643.	4.1	9
80	Large-scale genomic deletions mediated by CRISPR/Cas9 system. Oncotarget, 2017, 8, 5647-5647.	1.8	9
81	Establishment of a Rabbit Oct4 Promoter-Based EGFP Reporter System. PLoS ONE, 2014, 9, e109728.	2.5	8
82	Circular RNA profile in liver tissue of EpCAM knockout mice. International Journal of Molecular Medicine, 2019, 44, 1063-1077.	4.0	8
83	Engineered Pigs Carrying a Gain-of-Function NLRP3 Homozygous Mutation Can Survive to Adulthood and Accurately Recapitulate Human Systemic Spontaneous Inflammatory Responses. Journal of Immunology, 2020, 205, 2532-2544.	0.8	8
84	Inducible caspase-9 suicide gene under control of endogenous oct4 to safeguard mouse and human pluripotent stem cell therapy. Molecular Therapy - Methods and Clinical Development, 2022, 24, 332-341.	4.1	8
85	Scriptaid affects histone acetylation and the expression of development-related genes at different stages of porcine somatic cell nuclear transfer embryo during early development. Science Bulletin, 2013, 58, 2044-2052.	1.7	7
86	Expanded targeting scope and enhanced base editing efficiency in rabbit using optimized xCas9(3.7). Cellular and Molecular Life Sciences, 2019, 76, 4155-4164.	5.4	7
87	CRISPR/Cas9-mediated Î²-globin gene knockout in rabbits recapitulates human Î²-thalassemia. Journal of Biological Chemistry, 2021, 296, 100464.	3.4	7
88	Eliminating predictable DNA off-target effects of cytosine base editor by using dual guiders including sgRNA and TALE. Molecular Therapy, 2022, 30, 2443-2451.	8.2	7
89	Generation of an Abcc8 heterozygous mutation human embryonic stem cell line using CRISPR/Cas9. Stem Cell Research, 2016, 17, 670-672.	0.7	6
90	The combination of dextran sulphate and polyvinyl alcohol prevents excess aggregation and promotes proliferation of pluripotent stem cells in suspension culture. Cell Proliferation, 2021, 54, e13112.	5.3	6

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91	Generation of permanent neonatal diabetes mellitus dogs with glucokinase point mutations through base editing. Cell Discovery, 2021, 7, 92.	6.7	6
92	Elimination of Cas9-dependent off-targeting of adenine base editor by using TALE to separately guide deaminase to target sites. Cell Discovery, 2022, 8, 28.	6.7	6
93	Double knock-in pig models with elements of binary Tet-On and phiC31 integrase systems for controllable and switchable gene expression. Science China Life Sciences, 2022, 65, 2269-2286.	4.9	6
94	Robustly improved base editing efficiency of Cpf1 base editor using optimized cytidine deaminases. Cell Discovery, 2020, 6, 62.	6.7	5
95	Inhibition of base editors with anti-deaminases derived from viruses. Nature Communications, 2022, 13, 597.	12.8	5
96	Generating functional cells through enhanced interspecies chimerism withÂhuman pluripotent stem cells. Stem Cell Reports, 2022, 17, 1059-1069.	4.8	5
97	Tandem repeat knockout utilizing the CRISPR/Cas9 system in human cells. Gene, 2016, 582, 122-127.	2.2	4
98	Improving the Cpf1-mediated base editing system by combining dCas9/dead sgRNA with human APOBEC3A variants. Journal of Genetics and Genomics, 2021, 48, 92-95.	3.9	4
99	Simple and Rapid Assembly of TALE Modules Based on the Degeneracy of the Codons and Trimer Repeats. Genes, 2021, 12, 1761.	2.4	4
100	Highly efficient A-to-G base editing by ABE8.17 in rabbits. Molecular Therapy - Nucleic Acids, 2022, 27, 1156-1163.	5.1	4
101	Human induced-T-to-natural killer cells have potent anti-tumour activities. Biomarker Research, 2022, 10, 13.	6.8	4
102	Generation of an Abcc8 homozygous mutation human embryonic stem cell line using CRISPR/Cas9. Stem Cell Research, 2016, 17, 640-642.	0.7	3
103	Altered expression of eNOS, prostacyclin synthase, prostaglandin G/H synthase, and thromboxane synthase in porcine aortic endothelial cells after exposure to human serumâ€"relevance to xenotransplantation. Cell Biology International, 2017, 41, 798-808.	3.0	3
104	Reduced off-target effect of NG-BE4max by using NG-HiFi system. Molecular Therapy - Nucleic Acids, 2021, 25, 168-172.	5.1	3
105	Faithful expression of imprinted genes in donor cells of SCNT cloned pigs. FEBS Letters, 2015, 589, 2066-2072.	2.8	2
106	Generation of an ASGR1 homozygous mutant human embryonic stem cell line WAe001-A-6 using CRISPR/Cas9. Stem Cell Research, 2017, 22, 29-32.	0.7	1
107	Generation of three miR-122 knockout lines from a human embryonic stem cell line. Stem Cell Research, 2017, 24, 164-168.	0.7	1
108	A tunable, rapid, and precise drug control of protein expression by combining transcriptional and post-translational regulation systems. Journal of Genetics and Genomics, 2020, 47, 705-712.	3.9	1

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109	The minimal promoter (P1) of Xist is non-essential for X chromosome inactivation. RNA Biology, 2020, 17, 623-629.	3.1	1
110	Development of a rabbit model of Wiskottâ€Aldrich syndrome. FASEB Journal, 2021, 35, e21226.	0.5	1
111	Generation of two MEN1 knockout lines from a human embryonic stem cell line. Stem Cell Research, 2017, 24, 169-173.	0.7	0
112	Efficient multi-nucleotide deletions using deaminase-Cas9 fusions in human cells. Journal of Genetics and Genomics, 2022, , .	3.9	0