Lei S Qi

List of Publications by Year
in descending order

85 papers	22,965 citations	43973 48 h-index	58464 82 g-index
101 all docs	101 docs citations	101 times ranked	21958 citing authors

#	Article	IF	Citations
1	Repurposing CRISPR as an RNA-Guided Platform for Sequence-Specific Control of Gene Expression. Cell, 2013, 152, 1173-1183.	13.5	4,090
2	CRISPR-Mediated Modular RNA-Guided Regulation of Transcription in Eukaryotes. Cell, 2013, 154, 442-451.	13.5	3,012
3	Genome-Scale CRISPR-Mediated Control of Gene Repression and Activation. Cell, 2014, 159, 647-661.	13.5	2,176
4	Dynamic Imaging of Genomic Loci in Living Human Cells by an Optimized CRISPR/Cas System. Cell, 2013, 155, 1479-1491.	13.5	1,695
5	A Protein-Tagging System for Signal Amplification in Gene Expression and Fluorescence Imaging. Cell, 2014, 159, 635-646.	13.5	1,245
6	CRISPR interference (CRISPRi) for sequence-specific control of gene expression. Nature Protocols, 2013, 8, 2180-2196.	5.5	930
7	CRISPR/Cas9 in Genome Editing and Beyond. Annual Review of Biochemistry, 2016, 85, 227-264.	5.0	897
8	Engineering Complex Synthetic Transcriptional Programs with CRISPR RNA Scaffolds. Cell, 2015, 160, 339-350.	13.5	809
9	Beyond editing: repurposing CRISPRâ€“Cas9 for precision genome regulation and interrogation. Nature Reviews Molecular Cell Biology, 2016, 17, 5-15.	16.1	698
10	A Comprehensive, CRISPR-based Functional Analysis of Essential Genes in Bacteria. Cell, 2016, 165, 1493-1506.	13.5	593
11	CRISPR Interference Efficiently Induces Specific and Reversible Gene Silencing in Human iPSCs. Cell Stem Cell, 2016, 18, 541-553.	5.2	418
12	Small Molecules Enhance CRISPR Genome Editing in Pluripotent Stem Cells. Cell Stem Cell, 2015, 16, 142-147.	5.2	372
13	Development of CRISPR as an Antiviral Strategy to Combat SARS-CoV-2 and Influenza. Cell, 2020, 181, 865-876.e12.	13.5	354
14	Combinatorial CRISPRâ€“Cas9 screens for de novo mapping of genetic interactions. Nature Methods, 2017, 14, 573-576.	9.0	287
15	Versatile RNA-sensing transcriptional regulators for engineering genetic networks. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8617-8622.	3.3	277
16	Complex transcriptional modulation with orthogonal and inducible dCas9 regulators. Nature Methods, 2016, 13, 1043-1049.	9.0	271
17	CRISPR technologies for precise epigenome editing. Nature Cell Biology, 2021, 23, 11-22.	4.6	248
18	A CRISPRâ€“dCas Toolbox for Genetic Engineering and Synthetic Biology. Journal of Molecular Biology, 2019, 431, 34-47.	2.0	225

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19	The New State of the Art: Cas9 for Gene Activation and Repression. Molecular and Cellular Biology, 2015, 35, 3800-3809.	1.1	197
20	CRISPR-mediated live imaging of genome editing and transcription. Science, 2019, 365, 1301-1305.	6.0	193
21	RNA processing enables predictable programming of gene expression. Nature Biotechnology, 2012, 30, 1002-1006.	9.4	184
22	Transient non-integrative expression of nuclear reprogramming factors promotes multifaceted amelioration of aging in human cells. Nature Communications, 2020, 11, 1545.	5.8	183
23	Engineered miniature CRISPR-Cas system for mammalian genome regulation and editing. Molecular Cell, 2021, 81, 4333-4345.e4.	4.5	177
24	CRISPR-ERA: a comprehensive design tool for CRISPR-mediated gene editing, repression and activation: Fig. 1.. Bioinformatics, 2015, 31, 3676-3678.	1.8	171
25	CRISPR-Mediated Programmable 3D Genome Positioning and Nuclear Organization. Cell, 2018, 175, 1405-1417.e14.	13.5	164
26	CRISPR Activation Screens Systematically Identify Factors that Drive Neuronal Fate and Reprogramming. Cell Stem Cell, 2018, 23, 758-771.e8.	5.2	161
27	Rationally designed families of orthogonal RNA regulators of translation. Nature Chemical Biology, 2012, 8, 447-454.	3.9	157
28	YAP Induces Human Naive Pluripotency. Cell Reports, 2016, 14, 2301-2312.	2.9	157
29	High-content CRISPR screening. Nature Reviews Methods Primers, 2022, 2, .	11.8	155
30	Genetic interaction mapping in mammalian cells using CRISPR interference. Nature Methods, 2017, 14, 577-580.	9.0	142
31	CRISPR-Based Chromatin Remodeling of the Endogenous Oct4 or Sox2 Locus Enables Reprogramming to Pluripotency. Cell Stem Cell, 2018, 22, 252-261.e4.	5.2	133
32	YAP-independent mechanotransduction drives breast cancer progression. Nature Communications, 2019, 10, 1848.	5.8	127
33	A versatile framework for microbial engineering using synthetic non-coding RNAs. Nature Reviews Microbiology, 2014, 12, 341-354.	13.6	126
34	Anti-CRISPR-mediated control of gene editing and synthetic circuits in eukaryotic cells. Nature Communications, 2019, 10, 194.	5.8	118
35	Toward scalable parts families for predictable design of biological circuits. Current Opinion in Microbiology, 2008, 11, 567-573.	2.3	106
36	A Single-Chain Photoswitchable CRISPR-Cas9 Architecture for Light-Inducible Gene Editing and Transcription. ACS Chemical Biology, 2018, 13, 443-448.	1.6	103

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37	Engineering naturally occurring trans -acting non-coding RNAs to sense molecular signals. Nucleic Acids Research, 2012, 40, 5775-5786.	6.5	87
38	Engineering cell sensing and responses using a GPCR-coupled CRISPR-Cas system. Nature Communications, 2017, 8, 2212.	5.8	81
39	CRISPR/Cas9 for Human Genome Engineering and Disease Research. Annual Review of Genomics and Human Genetics, 2016, 17, 131-154.	2.5	80
40	Bacterial CRISPR: accomplishments and prospects. Current Opinion in Microbiology, 2015, 27, 121-126.	2.3	74
41	Transcription Factor Competition Allows Embryonic Stem Cells to Distinguish Authentic Signals from Noise. Cell Systems, 2015, 1, 117-129.	2.9	73
42	Multiplexed Dynamic Imaging of Genomic Loci by Combined CRISPR Imaging and DNA Sequential FISH. Biophysical Journal, 2017, 112, 1773-1776.	0.2	70
43	Applications of CRISPR Genome Engineering in Cell Biology. Trends in Cell Biology, 2016, 26, 875-888.	3.6	68
44	An adaptor from translational to transcriptional control enables predictable assembly of complex regulation. Nature Methods, 2012, 9, 1088-1094.	9.0	67
45	Fibrinogen Alpha Chain Knockout Promotes Tumor Growth and Metastasis through Integrinâ€“AKT Signaling Pathway in Lung Cancer. Molecular Cancer Research, 2020, 18, 943-954.	1.5	65
46	Multiple Input Sensing and Signal Integration Using a Split Cas12a System. Molecular Cell, 2020, 78, 184-191.e3.	4.5	62
47	Low-frequency ultrasound-mediated cytokine transfection enhances T cell recruitment at local and distant tumor sites. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12674-12685.	3.3	61
48	Genetic and epigenetic control of gene expression by CRISPRâ€“Cas systems. F1000Research, 2017, 6, 747.	0.8	58
49	Targeted Transcriptional Repression in Bacteria Using CRISPR Interference (CRISPRi). Methods in Molecular Biology, 2015, 1311, 349-362.	0.4	51
50	Specific Gene Repression by CRISPRi System Transferred through Bacterial Conjugation. ACS Synthetic Biology, 2014, 3, 929-931.	1.9	47
51	Reversible Disruption of Specific Transcription Factor-DNA Interactions Using CRISPR/Cas9. Molecular Cell, 2019, 74, 622-633.e4.	4.5	45
52	A benchmark of algorithms for the analysis of pooled CRISPR screens. Genome Biology, 2020, 21, 62.	3.8	45
53	Multiplexed genome regulation in vivo with hyper-efficient Cas12a. Nature Cell Biology, 2022, 24, 590-600.	4.6	39
54	Double Emulsion Picoreactors for High-Throughput Single-Cell Encapsulation and Phenotyping via FACS. Analytical Chemistry, 2020, 92, 13262-13270.	3.2	38

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55	Engineering 3D genome organization. Nature Reviews Genetics, 2021, 22, 343-360.	7.7	38
56	CRISPhieRmix: a hierarchical mixture model for CRISPR pooled screens. Genome Biology, 2018, 19, 159.	3.8	36
57	Regulation of transcription by unnatural amino acids. Nature Biotechnology, 2011, 29, 164-168.	9.4	32
58	CRISPR-based genome editing in primary human pancreatic islet cells. Nature Communications, 2021, 12, 2397.	5.8	26
59	Enhanced Cas12a multi-gene regulation using a CRISPR array separator. ELife, 2021, 10, .	2.8	25
60	Therapeutic genome editing in cardiovascular diseases. Advanced Drug Delivery Reviews, 2021, 168, 147-157.	6.6	23
61	A comprehensive analysis and resource to use CRISPR-Cas13 for broad-spectrum targeting of RNA viruses. Cell Reports Medicine, 2021, 2, 100245.	3.3	23
62	Interrogation of the dynamic properties of higher-order heterochromatin using CRISPR-dCas9. Molecular Cell, 2021, 81, 4287-4299.e5.	4.5	21
63	The use of new CRISPR tools in cardiovascular research and medicine. Nature Reviews Cardiology, 2022, 19, 505-521.	6.1	21
64	CRISPR Technology for Genome Activation and Repression in Mammalian Cells. Cold Spring Harbor Protocols, 2016, 2016, pdb.prot090175.	0.2	20
65	Broad-spectrum CRISPR-mediated inhibition of SARS-CoV-2 variants and endemic coronaviruses in vitro. Nature Communications, 2022, 13, 2766.	5.8	20
66	When genome editing goes off-target. Science, 2019, 364, 234-236.	6.0	18
67	Dual CRISPR interference and activation for targeted reactivation of X-linked endogenous FOXP3 in human breast cancer cells. Molecular Cancer, 2022, 21, 38.	7.9	16
68	Durable CRISPR-Based Epigenetic Silencing. Biodesign Research, 2021, 2021, .	0.8	14
69	CRISPRi/a Screening with Human iPSCs. Methods in Molecular Biology, 2021, 2320, 261-281.	0.4	13
70	Multi-color super-resolution imaging to study human coronavirus RNA during cellular infection. Cell Reports Methods, 2022, 2, 100170.	1.4	13
71	CRISPR-Mediated Synergistic Epigenetic and Transcriptional Control. CRISPR Journal, 2022, 5, 264-275.	1.4	13
72	Scalable biological signal recording in mammalian cells using Cas12a base editors. Nature Chemical Biology, 2022, 18, 742-750.	3.9	12

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73	Identification of cell context-dependent YAP-associated proteins reveals Î²1 and Î²4 integrin mediate YAP translocation independently of cell spreading. Scientific Reports, 2019, 9, 17188.	1.6	11
74	Contextual reprogramming of CAR-T cells for treatment of HER2+ cancers. Journal of Translational Medicine, 2021, 19, 459.	1.8	11
75	Single-cell transcriptomic profiling reveals distinct mechanical responses between normal and diseased tendon progenitor cells. Cell Reports Medicine, 2021, 2, 100343.	3.3	10
76	Regenerating Urethral Striated Muscle by CRISPRi/dCas9-KRAB-Mediated Myostatin Silencing for Obesity-Associated Stress Urinary Incontinence. CRISPR Journal, 2020, 3, 562-572.	1.4	9
77	Identification of Novel Regulatory Genes in APAP Induced Hepatocyte Toxicity by a Genome-Wide CRISPR-Cas9 Screen. Scientific Reports, 2019, 9, 1396.	1.6	8
78	An Introduction to CRISPR Technology for Genome Activation and Repression in Mammalian Cells. Cold Spring Harbor Protocols, 2016, 2016, pdb.top086835.	0.2	7
79	Site-Programmable Transposition: Shifting the Paradigm for CRISPR-Cas Systems. Molecular Cell, 2019, 75, 206-208.	4.5	7
80	Evolution at the Cutting Edge: CRISPR-Mediated Directed Evolution. Molecular Cell, 2018, 72, 402-403.	4.5	4
81	Computational Methods for Analysis of Large-Scale CRISPR Screens. Annual Review of Biomedical Data Science, 2020, 3, 137-162.	2.8	4
82	Using CRISPR-ERA Webserver for sgRNA Design. Bio-protocol, 2017, 7, e2522.	0.2	2
83	Engineering mRNA structural regulation of transcription using an RNAâ€sensing riboregulator. FASEB Journal, 2010, 24, .	0.2	0
84	Abstract 185: p300 and STAT3 drive YAP-independent mechanotransduction during breast cancer invasion. , 2018, , .		0
85	Enhanced Myogenesis by Silencing Myostatin with Nonviral Delivery of dCas9 Ribonucleoprotein Complex. CRISPR Journal, 0, , .	1.4	0