J Keith Joung

List of Publications by Year
in descending order

90 papers	32,843 citations	26630 56 h-index	42399 92 g-index
102 all docs	102 docs citations	102 times ranked	30541 citing authors

#	Article	IF	Citations
1	CRISPR prime editing with ribonucleoprotein complexes in zebrafish and primary human cells. Nature Biotechnology, 2022, 40, 189-193.	17.5	118
2	CRISPR-Cas9 treatment partially restores amyloid-Î² 42/40 in human fibroblasts with the Alzheimerâ€™s disease PSEN1 M146L mutation. Molecular Therapy - Nucleic Acids, 2022, 28, 450-461.	5.1	13
3	Genome-wide functional perturbation of human microsatellite repeats using engineered zinc finger transcription factors. Cell Genomics, 2022, 2, 100119.	6.5	3
4	Optimization of AsCas12a for combinatorial genetic screens in human cells. Nature Biotechnology, 2021, 39, 94-104.	17.5	96
5	CRISPR C-to-G base editors for inducing targeted DNA transversions in human cells. Nature Biotechnology, 2021, 39, 41-46.	17.5	328
6	A Code of Ethics for Gene Drive Research. CRISPR Journal, 2021, 4, 19-24.	2.9	24
7	PrimeDesign software for rapid and simplified design of prime editing guide RNAs. Nature Communications, 2021, 12, 1034.	12.8	105
8	Scalable characterization of the PAM requirements of CRISPRâ€“Cas enzymes using HT-PAMDA. Nature Protocols, 2021, 16, 1511-1547.	12.0	23
9	Analysis of off-target effects in CRISPR-based gene drives in the human malaria mosquito. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	27
10	Augmenting and directing long-range CRISPR-mediated activation in human cells. Nature Methods, 2021, 18, 1075-1081.	19.0	17
11	Defining genome-wide CRISPRâ€“Cas genome-editing nuclease activity with GUIDE-seq. Nature Protocols, 2021, 16, 5592-5615.	12.0	27
12	Combined +58 and +55 <i>BCL11A</i> enhancer Editing Yields Exceptional Efficiency, Specificity and HbF Induction in Human and NHP Preclinical Models. Blood, 2021, 138, 1852-1852.	1.4	1
13	Zebrafish<i>dscaml1</i>Deficiency Impairs Retinal Patterning and Oculomotor Function. Journal of Neuroscience, 2020, 40, 143-158.	3.6	15
14	Cell-based artificial APC resistant to lentiviral transduction for efficient generation of CAR-T cells from various cell sources. , 2020, 8, e000990.		13
15	Mutant Allele-Specific CRISPR Disruption in DYT1 Dystonia Fibroblasts Restores Cell Function. Molecular Therapy - Nucleic Acids, 2020, 21, 1-12.	5.1	8
16	A dual-deaminase CRISPR base editor enables concurrent adenine and cytosine editing. Nature Biotechnology, 2020, 38, 861-864.	17.5	168
17	Therapeutic base editing of human hematopoietic stem cells. Nature Medicine, 2020, 26, 535-541.	30.7	196
18	Disruption of the kringle 1 domain of prothrombin leads to late onset mortality in zebrafish. Scientific Reports, 2020, 10, 4049.	3.3	10

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19	Technologies and Computational Analysis Strategies for CRISPR Applications. Molecular Cell, 2020, 79, 11-29.	9.7	28
20	Activities and specificities of <scp>CRISPR</scp>/Cas9 and Cas12a nucleases for targeted mutagenesis in maize. Plant Biotechnology Journal, 2019, 17, 362-372.	8.3	192
21	Allele-specific gene editing prevents deafness in a model of dominant progressive hearing loss. Nature Medicine, 2019, 25, 1123-1130.	30.7	149
22	CRISPR DNA base editors with reduced RNA off-target and self-editing activities. Nature Biotechnology, 2019, 37, 1041-1048.	17.5	236
23	High levels of AAV vector integration into CRISPR-induced DNA breaks. Nature Communications, 2019, 10, 4439.	12.8	257
24	Transcriptome-wide off-target RNA editing induced by CRISPR-guided DNA base editors. Nature, 2019, 569, 433-437.	27.8	434
25	Engineered CRISPRâ€“Cas12a variants with increased activities and improved targeting ranges for gene, epigenetic and base editing. Nature Biotechnology, 2019, 37, 276-282.	17.5	439
26	CRISPResso2 provides accurate and rapid genome editing sequence analysis. Nature Biotechnology, 2019, 37, 224-226.	17.5	891
27	Allele-Specific CRISPR-Cas9 Genome Editing of the Single-Base P23H Mutation for Rhodopsin-Associated Dominant Retinitis Pigmentosa. CRISPR Journal, 2018, 1, 55-64.	2.9	96
28	Impact of Genetic Variation on CRISPR-Cas Targeting. CRISPR Journal, 2018, 1, 159-170.	2.9	24
29	Gene therapy comes of age. Science, 2018, 359, .	12.6	936
30	Prediction of off-target activities for the end-to-end design of CRISPR guide RNAs. Nature Biomedical Engineering, 2018, 2, 38-47.	22.5	230
31	Response to â€œUnexpected mutations after CRISPRâ€“Cas9 editing in vivoâ€• Nature Methods, 2018, 15, 238-239.	19.0	25
32	CRISPR/Cas9 Mediated Disruption of the Swedish APP Allele as a Therapeutic Approach for Early-Onset Alzheimerâ€™s Disease. Molecular Therapy - Nucleic Acids, 2018, 11, 429-440.	5.1	116
33	CRISPR-SURF: discovering regulatory elements by deconvolution of CRISPR tiling screen data. Nature Methods, 2018, 15, 992-993.	19.0	33
34	Defining CRISPRâ€“Cas9 genome-wide nuclease activities with CIRCLE-seq. Nature Protocols, 2018, 13, 2615-2642.	12.0	69
35	Discovery of widespread type I and type V CRISPR-Cas inhibitors. Science, 2018, 362, 240-242.	12.6	214
36	In vivo CRISPR editing with no detectable genome-wide off-target mutations. Nature, 2018, 561, 416-419.	27.8	274

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37	Efficient CRISPR/Cas9-mediated editing of trinucleotide repeat expansion in myotonic dystrophy patient-derived iPS and myogenic cells. Nucleic Acids Research, 2018, 46, 8275-8298.	14.5	78
38	An APOBEC3A-Cas9 base editor with minimized bystander and off-target activities. Nature Biotechnology, 2018, 36, 977-982.	17.5	328
39	Temporal and Spatial Post-Transcriptional Regulation of Zebrafishtie1mRNA by Long Noncoding RNA During Brain Vascular Assembly. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 1562-1575.	2.4	19
40	CIRCLE-seq: a highly sensitive in vitro screen for genome-wide CRISPRâ€“Cas9 nuclease off-targets. Nature Methods, 2017, 14, 607-614.	19.0	601
41	Inducible and multiplex gene regulation using CRISPRâ€“Cpf1-based transcription factors. Nature Methods, 2017, 14, 1163-1166.	19.0	170
42	Enhanced proofreading governs CRISPRâ€“Cas9 targeting accuracy. Nature, 2017, 550, 407-410.	27.8	901
43	Camptothecin resistance is determined by the regulation of topoisomerase I degradation mediated by ubiquitin proteasome pathway. Oncotarget, 2017, 8, 43733-43751.	1.8	20
44	Nodal patterning without Lefty inhibitory feedback is functional but fragile. ELife, 2017, 6, .	6.0	52
45	Isocitrate Dehydrogenase Mutations Confer Dasatinib Hypersensitivity and SRC Dependence in Intrahepatic Cholangiocarcinoma. Cancer Discovery, 2016, 6, 727-739.	9.4	126
46	Defining and improving the genome-wide specificities of CRISPRâ€“Cas9 nucleases. Nature Reviews Genetics, 2016, 17, 300-312.	16.3	380
47	Open-source guideseq software for analysis of GUIDE-seq data. Nature Biotechnology, 2016, 34, 483-483.	17.5	49
48	Genome-wide specificities of CRISPR-Cas Cpf1 nucleases in human cells. Nature Biotechnology, 2016, 34, 869-874.	17.5	566
49	High-fidelity CRISPRâ€“Cas9 nucleases with no detectable genome-wide off-target effects. Nature, 2016, 529, 490-495.	27.8	2,126
50	Genome Editing in Human Cells Using CRISPR/Cas Nucleases. Current Protocols in Molecular Biology, 2015, 112, 31.3.1-31.3.18.	2.9	12
51	Dimeric CRISPR RNA-Guided FokI-dCas9 Nucleases Directed by Truncated gRNAs for Highly Specific Genome Editing. Human Gene Therapy, 2015, 26, 425-431.	2.7	127
52	Chromatin regulation at the frontier of synthetic biology. Nature Reviews Genetics, 2015, 16, 159-171.	16.3	89
53	Standards needed for gene-editing errors. Nature, 2015, 523, 158-158.	27.8	19
54	Engineered CRISPR-Cas9 nucleases with altered PAM specificities. Nature, 2015, 523, 481-485.	27.8	1,388

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55	Context influences on TALEâ€œDNA binding revealed by quantitative profiling. Nature Communications, 2015, 6, 7440.	12.8	30
56	Rescue of DNA-PK Signaling and T-Cell Differentiation by Targeted Genome Editing in a prkdc Deficient iPSC Disease Model. PLoS Genetics, 2015, 11, e1005239.	3.5	17
57	Targeted disruption of DNMT1, DNMT3A and DNMT3B in human embryonic stem cells. Nature Genetics, 2015, 47, 469-478.	21.4	409
58	CAUSEL: an epigenome- and genome-editing pipeline for establishing function of noncoding GWAS variants. Nature Medicine, 2015, 21, 1357-1363.	30.7	90
59	Broadening the targeting range of Staphylococcus aureus CRISPR-Cas9 by modifying PAM recognition. Nature Biotechnology, 2015, 33, 1293-1298.	17.5	511
60	Continuous directed evolution of DNA-binding proteins to improve TALEN specificity. Nature Methods, 2015, 12, 939-942.	19.0	88
61	Hypoxia drives transient site-specific copy gain and drug-resistant gene expression. Genes and Development, 2015, 29, 1018-1031.	5.9	72
62	GUIDE-seq enables genome-wide profiling of off-target cleavage by CRISPR-Cas nucleases. Nature Biotechnology, 2015, 33, 187-197.	17.5	1,757
63	A Zebrafish Model of Myelodysplastic Syndrome Produced through <i>tet2</i> Genomic Editing. Molecular and Cellular Biology, 2015, 35, 789-804.	2.3	58
64	Cationic lipid-mediated delivery of proteins enables efficient protein-based genome editing in vitro and in vivo. Nature Biotechnology, 2015, 33, 73-80.	17.5	1,180
65	Factor X Mutant Zebrafish Tolerate a Severe Hemostatic Defect in Early Development Yet Develop Lethal Hemorrhage in Adulthood. Blood, 2015, 126, 426-426.	1.4	1
66	Targeted Genome Editing in Human Cells Using CRISPR/Cas Nucleases and Truncated Guide RNAs. Methods in Enzymology, 2014, 546, 21-45.	1.0	43
67	Systematic screening reveals a role for BRCA1 in the response to transcription-associated DNA damage. Genes and Development, 2014, 28, 1957-1975.	5.9	86
68	Broad specificity profiling of TALENs results in engineered nucleases with improved DNA-cleavage specificity. Nature Methods, 2014, 11, 429-435.	19.0	182
69	CRISPR-Cas systems for editing, regulating and targeting genomes. Nature Biotechnology, 2014, 32, 347-355.	17.5	2,648
70	Pathways Disrupted in Human ALS Motor Neurons Identified through Genetic Correction of Mutant SOD1. Cell Stem Cell, 2014, 14, 781-795.	11.1	392
71	Dimeric CRISPR RNA-guided FokI nucleases for highly specific genome editing. Nature Biotechnology, 2014, 32, 569-576.	17.5	852
72	Improving CRISPR-Cas nuclease specificity using truncated guide RNAs. Nature Biotechnology, 2014, 32, 279-284.	17.5	1,706

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73	IÎºB Kinase Î² (IKBKB) Mutations in Lymphomas That Constitutively Activate Canonical Nuclear Factor Î°B (NFÎºB) Signaling. Journal of Biological Chemistry, 2014, 289, 26960-26972.	3.4	20
74	Genome Editing: A Tool For Research and Therapy: Towards a functional understanding of variants for molecular diagnostics using genome editing. Nature Medicine, 2014, 20, 1103-1104.	30.7	14
75	Whatâ€™s Changed with Genome Editing?. Cell Stem Cell, 2014, 15, 3-4.	11.1	23
76	Targeted mutagenesis of zebrafish antithrombin III triggers disseminated intravascular coagulation and thrombosis, revealing insight into function. Blood, 2014, 124, 142-150.	1.4	52
77	Genome and Epigenome Editing: A Revolution in Science and Medicine. Blood, 2014, 124, SCI-10-SCI-10.	1.4	0
78	CRISPR RNAâ€"guided activation of endogenous human genes. Nature Methods, 2013, 10, 977-979.	19.0	996
79	Interactome Maps of Mouse Gene Regulatory Domains Reveal Basic Principles of Transcriptional Regulation. Cell, 2013, 155, 1507-1520.	28.9	299
80	Engineering Customized TALE Nucleases (TALENs) and TALE Transcription Factors by Fast Ligationâ€Based Automatable Solidâ€Phase Highâ€Throughput (FLASH) Assembly. Current Protocols in Molecular Biology, 2013, 103, Unit 12.16.	2.9	28
81	TALENs: a widely applicable technology for targeted genome editing. Nature Reviews Molecular Cell Biology, 2013, 14, 49-55.	37.0	1,326
82	Efficient genome editing in zebrafish using a CRISPR-Cas system. Nature Biotechnology, 2013, 31, 227-229.	17.5	2,638
83	High-frequency off-target mutagenesis induced by CRISPR-Cas nucleases in human cells. Nature Biotechnology, 2013, 31, 822-826.	17.5	2,754
84	A Zebrafish Model Of Antithrombin III Deficiency Displays Bleeding and Thrombosis Secondary To Disseminated Intravascular Coagulation. Blood, 2013, 122, 200-200.	1.4	1
85	Engineering Designer Transcription Activatorâ€â€Like Effector Nucleases (TALENs) by REAL or REALâ€Fast Assembly. Current Protocols in Molecular Biology, 2012, 100, Unit 12.15.	2.9	68
86	FLASH assembly of TALENs for high-throughput genome editing. Nature Biotechnology, 2012, 30, 460-465.	17.5	1,070
87	Engineering Designer Nucleases with Customized Cleavage Specificities. Current Protocols in Molecular Biology, 2011, 96, Unit12.13.	2.9	16
88	Reply to â€œGenome editing with modularly assembled zinc-finger nucleasesâ€. Nature Methods, 2010, 7, 91-92.	19.0	71
89	Identifying and modifying protein-DNA and protein-protein interactions using a bacterial two-hybrid selection system. Journal of Cellular Biochemistry, 2001, 84, 53-57.	2.6	13
90	Activation of prokaryotic transcription through arbitrary proteinâ€"protein contacts. Nature, 1997, 386, 627-630.	27.8	282