Benjamin P Kleinstiver

List of Publications by Year
in descending order

46 papers	9,148 citations	257450 24 h-index	214800 47 g-index
63 all docs	63 docs citations	63 times ranked	9430 citing authors

#	Article	IF	Citations
1	High-fidelity CRISPRâ€“Cas9 nucleases with no detectable genome-wide off-target effects. Nature, 2016, 529, 490-495.	27.8	2,126
2	Engineered CRISPR-Cas9 nucleases with altered PAM specificities. Nature, 2015, 523, 481-485.	27.8	1,388
3	Enhanced proofreading governs CRISPRâ€“Cas9 targeting accuracy. Nature, 2017, 550, 407-410.	27.8	901
4	Unconstrained genome targeting with near-PAMless engineered CRISPR-Cas9 variants. Science, 2020, 368, 290-296.	12.6	714
5	Genome-wide specificities of CRISPR-Cas Cpf1 nucleases in human cells. Nature Biotechnology, 2016, 34, 869-874.	17.5	566
6	Broadening the targeting range of Staphylococcus aureus CRISPR-Cas9 by modifying PAM recognition. Nature Biotechnology, 2015, 33, 1293-1298.	17.5	511
7	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
8	High levels of AAV vector integration into CRISPR-induced DNA breaks. Nature Communications, 2019, 10, 4439.	12.8	257
9	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
10	Discovery of widespread type I and type V CRISPR-Cas inhibitors. Science, 2018, 362, 240-242.	12.6	214
11	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
12	Inducible and multiplex gene regulation using CRISPRâ€“Cpf1-based transcription factors. Nature Methods, 2017, 14, 1163-1166.	19.0	170
13	Astrocytic interleukin-3 programs microglia and limits Alzheimerâ€™s disease. Nature, 2021, 595, 701-706.	27.8	157
14	Allele-specific gene editing prevents deafness in a model of dominant progressive hearing loss. Nature Medicine, 2019, 25, 1123-1130.	30.7	149
15	Isocitrate Dehydrogenase Mutations Confer Dasatinib Hypersensitivity and SRC Dependence in Intrahepatic Cholangiocarcinoma. Cancer Discovery, 2016, 6, 727-739.	9.4	126
16	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
17	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
18	Optimization of AsCas12a for combinatorial genetic screens in human cells. Nature Biotechnology, 2021, 39, 94-104.	17.5	96

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19	Broad-spectrum anti-CRISPR proteins facilitate horizontal gene transfer. Nature Microbiology, 2020, 5, 620-629.	13.3	79
20	Hypoxia drives transient site-specific copy gain and drug-resistant gene expression. Genes and Development, 2015, 29, 1018-1031.	5.9	72
21	Listeria Phages Induce Cas9 Degradation to Protect Lysogenic Genomes. Cell Host and Microbe, 2020, 28, 31-40.e9.	11.0	54
22	Monomeric site-specific nucleases for genome editing. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8061-8066.	7.1	52
23	Enhanced homology-directed repair for highly efficient gene editing in hematopoietic stem/progenitor cells. Blood, 2021, 137, 2598-2608.	1.4	51
24	NNT mediates redox-dependent pigmentation via a UVB- and MITF-independent mechanism. Cell, 2021, 184, 4268-4283.e20.	28.9	35
25	Whole-genome sequencing association analysis of quantitative red blood cell phenotypes: The NHLBI TOPMed program. American Journal of Human Genetics, 2021, 108, 874-893.	6.2	28
26	Genome editing in animals with minimal PAM CRISPR-Cas9 enzymes. Nature Communications, 2022, 13, 2601.	12.8	24
27	The I-TevI Nuclease and Linker Domains Contribute to the Specificity of Monomeric TALENs. G3: Genes, Genomes, Genetics, 2014, 4, 1155-1165.	1.8	23
28	Scalable characterization of the PAM requirements of CRISPRâ€“Cas enzymes using HT-PAMDA. Nature Protocols, 2021, 16, 1511-1547.	12.0	23
29	In vivo engineering of lymphocytes after systemic exosome-associated AAV delivery. Scientific Reports, 2020, 10, 4544.	3.3	20
30	CRISPR-targetedMAGT1insertion restores XMEN patient hematopoietic stem cells and lymphocytes. Blood, 2021, 138, 2768-2780.	1.4	20
31	Camptothecin resistance is determined by the regulation of topoisomerase I degradation mediated by ubiquitin proteasome pathway. Oncotarget, 2017, 8, 43733-43751.	1.8	20
32	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
33	A unified genetic, computational and experimental framework identifies functionally relevant residues of the homing endonuclease I-BmoI. Nucleic Acids Research, 2010, 38, 2411-2427.	14.5	17
34	Strand-specific Contacts and Divalent Metal Ion Regulate Double-strand Break Formation by the GIY-YIG Homing Endonuclease I-BmoI. Journal of Molecular Biology, 2007, 374, 306-321.	4.2	15
35	CRISPR-Cas knockout of miR21 reduces glioma growth. Molecular Therapy - Oncolytics, 2022, 25, 121-136.	4.4	14
36	The monomeric GIY-YIG homing endonuclease I-BmoI uses a molecular anchor and a flexible tether to sequentially nick DNA. Nucleic Acids Research, 2013, 41, 5413-5427.	14.5	13

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37	Cell-based artificial APC resistant to lentiviral transduction for efficient generation of CAR-T cells from various cell sources. , 2020, 8, e000990.		13
38	Mutant Allele-Specific CRISPR Disruption in DYT1 Dystonia Fibroblasts Restores Cell Function. Molecular Therapy - Nucleic Acids, 2020, 21, 1-12.	5.1	8
39	enAsCas12a Enables CRISPR-Directed Evolution to Screen for Functional Drug Resistance Mutations in Sequences Inaccessible to SpCas9. Molecular Therapy, 2021, 29, 208-224.	8.2	8
40	Divalent Metal Ion Differentially Regulates the Sequential Nicking Reactions of the GIY-YIG Homing Endonuclease I-BmoI. PLoS ONE, 2011, 6, e23804.	2.5	7
41	Voices in methods development. Nature Methods, 2019, 16, 945-951.	19.0	5
42	Lack of Cas13a inhibition by anti-CRISPR proteins from Leptotrichia prophages. Molecular Cell, 2022, 82, 2161-2166.e3.	9.7	4
43	Making the cut with PAMless CRISPR-Cas enzymes. Trends in Genetics, 2021, 37, 1053-1055.	6.7	3
44	Plant genome editing branches out. Nature Plants, 2021, 7, 4-5.	9.3	3
45	Estimating the evidence of selection and the reliability of inference in unigenic evolution. Algorithms for Molecular Biology, 2010, 5, 35.	1.2	1
46	Rapid Screening of Endonuclease Target Site Preference Using a Modified Bacterial Two-Plasmid Selection. Methods in Molecular Biology, 2014, 1123, 97-104.	0.9	1