Matthew C Canver

List of Publications by Year in Descending Order

47 papers	2,797 citations	20 h-index	48 g-index
48 ext. papers	3,707 ext. citations	11.7 avg, IF	4.92 L-index

#	Paper	IF	Citations
47	Technologies and Computational Analysis Strategies for CRISPR Applications. *Molecular Cell*, **2020**, 79, 11-29	17.6	7
46	Accelerated thrombin times are associated with thrombotic risk. *American Journal of Hematology*, **2020**, 95, E113-E114	7.1	
45	A saturating mutagenesis CRISPR-Cas9-mediated functional genomic screen identifies and regulatory elements of in murine ESCs. *Journal of Biological Chemistry*, **2020**, 295, 15797-15809	5.4	2
44	CRISPRitz: rapid, high-throughput and variant-aware in silico off-target site identification for CRISPR genome editing. *Bioinformatics*, **2020**, 36, 2001-2008	7.2	15
43	Thawed solvent/detergent-treated plasma demonstrates comparable clinical efficacy to thawed plasma. *Transfusion*, **2020**, 60, 1940-1949	2.9	0
42	Visual evidence of a hemolytic transfusion reaction identified by blood bank testing after emergency blood transfusion. *Transfusion*, **2019**, 59, 3301-3302	2.9	
41	Performance of Five Commercial Identification Platforms for Identification of Staphylococcus delphini. *Journal of Clinical Microbiology*, **2019**, 57,	9.7	4
40	Improved Performance of a Rapid Immunochromatographic Assay for Detection of PBP2a in Non-Staphylococcus aureus Staphylococcal Species. *Journal of Clinical Microbiology*, **2019**, 57,	9.7	7
39	TAF5L and TAF6L Maintain Self-Renewal of Embryonic Stem Cells via the MYC Regulatory Network. *Molecular Cell*, **2019**, 74, 1148-1163.e7	17.6	19
38	CRISPResso2 provides accurate and rapid genome editing sequence analysis. *Nature Biotechnology*, **2019**, 37, 224-226	44.5	326
37	Rational targeting of a NuRD subcomplex guided by comprehensive in situ mutagenesis. *Nature Genetics*, **2019**, 51, 1149-1159	36.3	44
36	DrugThatGene: integrative analysis to streamline the identification of druggable genes, pathways and protein complexes from CRISPR screens. *Bioinformatics*, **2019**, 35, 1981-1984	7.2	3
35	Genome-wide CRISPR-Cas9 Screen Identifies Leukemia-Specific Dependence on a Pre-mRNA Metabolic Pathway Regulated by DCPS. *Cancer Cell*, **2018**, 33, 386-400.e5	24.3	57
34	Impact of Genetic Variation on CRISPR-Cas Targeting. *CRISPR Journal*, **2018**, 1, 159-170	2.5	16
33	Integrated design, execution, and analysis of arrayed and pooled CRISPR genome-editing experiments. *Nature Protocols*, **2018**, 13, 946-986	18.8	42
32	Rational Targeting of a NuRD Sub-Complex for Fetal Hemoglobin Induction Following Comprehensive in Situ Mutagenesis. *Blood*, **2018**, 132, 2342-2342	2.2	
31	CRISPR-SURF: discovering regulatory elements by deconvolution of CRISPR tiling screen data. *Nature Methods*, **2018**, 15, 992-993	21.6	17

30	CRISPRO: identification of functional protein coding sequences based on genome editing dense mutagenesis. *Genome Biology*, **2018**, 19, 169	18.3	20
29	Downregulation of Endothelin Receptor B Contributes to Defective B Cell Lymphopoiesis in Trisomy 21 Pluripotent Stem Cells. *Scientific Reports*, **2018**, 8, 8001	4.9	10
28	Variant-aware saturating mutagenesis using multiple Cas9 nucleases identifies regulatory elements at trait-associated loci. *Nature Genetics*, **2017**, 49, 625-634	36.3	73
27	Functional interrogation of non-coding DNA through CRISPR genome editing. *Methods*, **2017**, 121-122, 118-129	4.6	19
26	High-Throughput Approaches to Pinpoint Function within the Noncoding Genome. *Molecular Cell*, **2017**, 68, 44-59	17.6	37
25	Human genetic variation alters CRISPR-Cas9 on- and off-targeting specificity at therapeutically implicated loci. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E11257-E11266	11.5	66
24	Genome-Wide CRISPR/Cas9 Screen Reveals That the Dcps Scavenger Decapping Enzyme Is Essential for AML Cell Survival. *Blood*, **2017**, 130, 782-782	2.2	
23	Interferon-β signaling promotes embryonic HSC maturation. *Blood*, **2016**, 128, 204-16	2.2	28
22	Transcription factors LRF and BCL11A independently repress expression of fetal hemoglobin. *Science*, **2016**, 351, 285-9	33.3	187
21	Analyzing CRISPR genome-editing experiments with CRISPResso. *Nature Biotechnology*, **2016**, 34, 695-7	44.5	286
20	Customizing the genome as therapy for the β hemoglobinopathies. *Blood*, **2016**, 127, 2536-45	2.2	38
19	miRNA-embedded shRNAs for Lineage-specific BCL11A Knockdown and Hemoglobin F Induction. *Molecular Therapy*, **2015**, 23, 1465-74	11.7	82
18	BCL11A enhancer dissection by Cas9-mediated in situ saturating mutagenesis. *Nature*, **2015**, 527, 192-7	50.4	528
17	PRC2 Is Required to Maintain Expression of the Maternal Gtl2-Rian-Mirg Locus by Preventing De Novo DNA Methylation in Mouse Embryonic Stem Cells. *Cell Reports*, **2015**, 12, 1456-70	10.6	46
16	EHMT1 and EHMT2 inhibition induces fetal hemoglobin expression. *Blood*, **2015**, 126, 1930-9	2.2	64
15	Generation of genomic deletions in mammalian cell lines via CRISPR/Cas9. *Journal of Visualized Experiments*, **2015**, e52118	1.6	75
14	Angiopoietin-like proteins stimulate HSPC development through interaction with notch receptor signaling. *ELife*, **2015**, 4,	8.9	22
13	Novel mathematical algorithm for pupillometric data analysis. *Computer Methods and Programs in Biomedicine*, **2014**, 113, 221-5	6.9	6

12	Characterization of genomic deletion efficiency mediated by clustered regularly interspaced short palindromic repeats (CRISPR)/Cas9 nuclease system in mammalian cells. *Journal of Biological Chemistry*, **2014**, 289, 21312-24	5.4	236
11	Optimization of Bcl11a Knockdown By miRNA Scaffold Embedded Shrnas Leading to Enhanced Induction of Fetal Hemoglobin in Erythroid Cells for the Treatment of Beta-Hemoglobinopathies. *Blood*, **2014**, 124, 2150-2150	2.2	1
10	An erythroid enhancer of BCL11A subject to genetic variation determines fetal hemoglobin level. *Science*, **2013**, 342, 253-7	33.3	400
9	Looking Forward [Perspectives on Graduate Life]. *IEEE Pulse*, **2013**, 4, 11-65	0.7	
8	Independence Day [Perspectives on Graduate Life]. *IEEE Pulse*, **2013**, 4, 12-12	0.7	
7	Making the big decision [Perspectives on Graduate Life]. *IEEE Pulse*, **2013**, 4, 9-10	0.7	
6	Another One in the Books [Perspectives on Graduate Life]. *IEEE Pulse*, **2013**, 4, 8-62	0.7	
5	Fine-Mapping and Genome Editing Reveal An Essential Erythroid Enhancer At The HbF-Associated BCL11A Locus. *Blood*, **2013**, 122, 437-437	2.2	1
4	Graduate school: the problem of choice. *IEEE Pulse*, **2012**, 3, 8, 10	0.7	1
3	Bioengineering Training in Medical Education [Perspectives on Graduate Life]. *IEEE Pulse*, **2010**, 1, 9-11	0.7	
2	Histamine H1 and H2 receptor-mediated vasoreactivity of human internal thoracic and radial arteries. *Surgery*, **2004**, 136, 458-63	3.6	8
1	Analysis and comparison of genome editing using CRISPResso2		4