Daniel E Bauer

List of Publications by Year
in descending order

93 papers	8,685 citations	81900 39 h-index	54911 84 g-index
106 all docs	106 docs citations	106 times ranked	11143 citing authors

#	Article	IF	Citations
1	CRISPResso2 provides accurate and rapid genome editing sequence analysis. Nature Biotechnology, 2019, 37, 224-226.	17.5	891
2	BCL11A enhancer dissection by Cas9-mediated in situ saturating mutagenesis. Nature, 2015, 527, 192-197.	27.8	726
3	An Erythroid Enhancer of BCL11A Subject to Genetic Variation Determines Fetal Hemoglobin Level. Science, 2013, 342, 253-257.	12.6	518
4	Phage-assisted evolution of an adenine base editor with improved Cas domain compatibility and activity. Nature Biotechnology, 2020, 38, 883-891.	17.5	502
5	Analyzing CRISPR genome-editing experiments with CRISPResso. Nature Biotechnology, 2016, 34, 695-697.	17.5	410
6	Highly efficient therapeutic gene editing of human hematopoietic stem cells. Nature Medicine, 2019, 25, 776-783.	30.7	344
7	Direct Promoter Repression by BCL11A Controls the Fetal to Adult Hemoglobin Switch. Cell, 2018, 173, 430-442.e17.	28.9	328
8	An APOBEC3A-Cas9 base editor with minimized bystander and off-target activities. Nature Biotechnology, 2018, 36, 977-982.	17.5	328
9	Clinicopathologic Features and Long-term Outcomes of NUT Midline Carcinoma. Clinical Cancer Research, 2012, 18, 5773-5779.	7.0	323
10	Characterization of Genomic Deletion Efficiency Mediated by Clustered Regularly Interspaced Palindromic Repeats (CRISPR)/Cas9 Nuclease System in Mammalian Cells*. Journal of Biological Chemistry, 2014, 289, 21312-21324.	3.4	309
11	Transcription factors LRF and BCL11A independently repress expression of fetal hemoglobin. Science, 2016, 351, 285-289.	12.6	260
12	Therapeutic base editing of human hematopoietic stem cells. Nature Medicine, 2020, 26, 535-541.	30.7	196
13	Corepressor-dependent silencing of fetal hemoglobin expression by BCL11A. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6518-6523.	7.1	189
14	Combinatorial Assembly of Developmental Stage-Specific Enhancers Controls Gene Expression Programs during Human Erythropoiesis. Developmental Cell, 2012, 23, 796-811.	7.0	183
15	Reawakening fetal hemoglobin: prospects for new therapies for the Î²-globin disorders. Blood, 2012, 120, 2945-2953.	1.4	154
16	Intensive treatment and survival outcomes in NUT midline carcinoma of the head and neck. Cancer, 2016, 122, 3632-3640.	4.1	145
17	Genetic treatment of a molecular disorder: gene therapy approaches to sickle cell disease. Blood, 2016, 127, 839-848.	1.4	138
18	Lineage-specific BCL11A knockdown circumvents toxicities and reverses sickle phenotype. Journal of Clinical Investigation, 2016, 126, 3868-3878.	8.2	129

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19	Generation of Genomic Deletions in Mammalian Cell Lines via CRISPR/Cas9. Journal of Visualized Experiments, 2015, , e52118.	0.3	123
20	Functional footprinting of regulatory DNA. Nature Methods, 2015, 12, 927-930.	19.0	123
21	Genome editing of HBG1 and HBG2 to induce fetal hemoglobin. Blood Advances, 2019, 3, 3379-3392.	5.2	121
22	Recent progress in understanding and manipulating haemoglobin switching for the haemoglobinopathies. British Journal of Haematology, 2018, 180, 630-643.	2.5	107
23	miRNA-embedded shRNAs for Lineage-specific BCL11A Knockdown and Hemoglobin F Induction. Molecular Therapy, 2015, 23, 1465-1474.	8.2	101
24	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.	16.8	99
25	Variant-aware saturating mutagenesis using multiple Cas9 nucleases identifies regulatory elements at trait-associated loci. Nature Genetics, 2017, 49, 625-634.	21.4	96
26	Hemoglobin switching's surprise: the versatile transcription factor BCL11A is a master repressor of fetal hemoglobin. Current Opinion in Genetics and Development, 2015, 33, 62-70.	3.3	94
27	Update on fetal hemoglobin gene regulation in hemoglobinopathies. Current Opinion in Pediatrics, 2011, 23, 1-8.	2.0	92
28	Emerging Genetic Therapy for Sickle Cell Disease. Annual Review of Medicine, 2019, 70, 257-271.	12.2	90
29	Rational targeting of a NuRD subcomplex guided by comprehensive in situ mutagenesis. Nature Genetics, 2019, 51, 1149-1159.	21.4	83
30	EHMT1 and EHMT2 inhibition induces fetal hemoglobin expression. Blood, 2015, 126, 1930-1939.	1.4	76
31	Fetal haemoglobin in sickle-cell disease: from genetic epidemiology to new therapeutic strategies. Lancet, The, 2016, 387, 2554-2564.	13.7	73
32	CRISPR-suppressor scanning reveals a nonenzymatic role of LSD1 in AML. Nature Chemical Biology, 2019, 15, 529-539.	8.0	71
33	Integrated design, execution, and analysis of arrayed and pooled CRISPR genome-editing experiments. Nature Protocols, 2018, 13, 946-986.	12.0	70
34	Synthetic Lethality of Wnt Pathway Activation and Asparaginase in Drug-Resistant Acute Leukemias. Cancer Cell, 2019, 35, 664-676.e7.	16.8	70
35	Editing aberrant splice sites efficiently restores Î²-globin expression in Î²-thalassemia. Blood, 2019, 133, 2255-2262.	1.4	57
36	Small-Molecule PAPD5 Inhibitors Restore Telomerase Activity in Patient Stem Cells. Cell Stem Cell, 2020, 26, 896-909.e8.	11.1	57

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37	The mTORC1/4E-BP pathway coordinates hemoglobin production with <scp>L</scp> -leucine availability. Science Signaling, 2015, 8, ra34.	3.6	54
38	BCL11A enhancerâ€“edited hematopoietic stem cells persist in rhesus monkeys without toxicity. Journal of Clinical Investigation, 2020, 130, 6677-6687.	8.2	54
39	Genome-wide association study of red blood cell traits in Hispanics/Latinos: The Hispanic Community Health Study/Study of Latinos. PLoS Genetics, 2017, 13, e1006760.	3.5	53
40	An erythroid-specific ATP2B4 enhancer mediates red blood cell hydration and malaria susceptibility. Journal of Clinical Investigation, 2017, 127, 3065-3074.	8.2	48
41	Transcription factor competition at the Î³-globin promoters controls hemoglobin switching. Nature Genetics, 2021, 53, 511-520.	21.4	43
42	Erythropoietin signaling regulates heme biosynthesis. ELife, 2017, 6, .	6.0	36
43	ZNF410 represses fetal globin by singular control of CHD4. Nature Genetics, 2021, 53, 719-728.	21.4	35
44	CRISPRO: identification of functional protein coding sequences based on genome editing dense mutagenesis. Genome Biology, 2018, 19, 169.	8.8	34
45	Strict in vivo specificity of the Bcl11a erythroid enhancer. Blood, 2016, 128, 2338-2342.	1.4	33
46	CRISPR-SURF: discovering regulatory elements by deconvolution of CRISPR tiling screen data. Nature Methods, 2018, 15, 992-993.	19.0	33
47	Quantitative assessment of timing, efficiency, specificity and genetic mosaicism of CRISPR/Cas9-mediated gene editing of hemoglobin beta gene in rhesus monkey embryos. Human Molecular Genetics, 2017, 26, 2678-2689.	2.9	32
48	Genetic therapies for sickle cell disease. Seminars in Hematology, 2018, 55, 76-86.	3.4	32
49	Editing GWAS: experimental approaches to dissect and exploit disease-associated genetic variation. Genome Medicine, 2021, 13, 41.	8.2	32
50	Growing and Genetically Manipulating Human Umbilical Cord Blood-Derived Erythroid Progenitor (HUDEP) Cell Lines. Methods in Molecular Biology, 2018, 1698, 275-284.	0.9	31
51	FAM210B is an erythropoietin target and regulates erythroid heme synthesis by controlling mitochondrial iron import and ferrochelatase activity. Journal of Biological Chemistry, 2018, 293, 19797-19811.	3.4	30
52	Clonal hematopoiesis in sickle cell disease. Blood, 2021, 138, 2148-2152.	1.4	29
53	Functional interrogation of non-coding DNA through CRISPR genome editing. Methods, 2017, 121-122, 118-129.	3.8	28
54	AmpUMI: design and analysis of unique molecular identifiers for deep amplicon sequencing. Bioinformatics, 2018, 34, i202-i210.	4.1	28

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55	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
56	14q32 and let-7 microRNAs regulate transcriptional networks in fetal and adult human erythroblasts. Human Molecular Genetics, 2018, 27, 1411-1420.	2.9	25
57	Common variants in signaling transcription-factor-binding sites drive phenotypic variability in red blood cell traits. Nature Genetics, 2020, 52, 1333-1345.	21.4	24
58	A genome editing primer for the hematologist. Blood, 2016, 127, 2525-2535.	1.4	23
59	Dissecting ELANE neutropenia pathogenicity by human HSC gene editing. Cell Stem Cell, 2021, 28, 833-845.e5.	11.1	23
60	End points for sickle cell disease clinical trials: renal and cardiopulmonary, cure, and low-resource settings. Blood Advances, 2019, 3, 4002-4020.	5.2	21
61	Hematopoietic stem cells develop in the absence of endothelial cadherin 5 expression. Blood, 2015, 126, 2811-2820.	1.4	20
62	Technical considerations for the use of CRISPR/Cas9 in hematology research. Experimental Hematology, 2017, 54, 4-11.	0.4	18
63	Forward genetic screen of human transposase genomic rearrangements. BMC Genomics, 2016, 17, 548.	2.8	13
64	Editing outside the body: ExÂvivo gene-modification for Î²-hemoglobinopathy cellular therapy. Molecular Therapy, 2021, 29, 3163-3178.	8.2	12
65	Curative approaches for sickle cell disease: A review of allogeneic and autologous strategies. Blood Cells, Molecules, and Diseases, 2017, 67, 155-168.	1.4	11
66	Development of a double shmiR lentivirus effectively targeting both BCL11A and ZNF410 for enhanced induction of fetal hemoglobin to treat Î²-hemoglobinopathies. Molecular Therapy, 2022, 30, 2693-2708.	8.2	11
67	Gene Editing ELANE in Human Hematopoietic Stem and Progenitor Cells Reveals Disease Mechanisms and Therapeutic Strategies for Severe Congenital Neutropenia. Blood, 2019, 134, 3-3.	1.4	8
68	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.	1.4	8
69	Molecular analysis of the erythroid phenotype of a patient with BCL11A haploinsufficiency. Blood Advances, 2021, 5, 2339-2349.	5.2	7
70	Aggressive treatment and survival outcomes in NUT midline carcinoma (NMC) of the head and neck (HN).. Journal of Clinical Oncology, 2014, 32, 6057-6057.	1.6	7
71	Single-cell cloning of human T-cell lines reveals clonal variation in cell death responses to chemotherapeutics. Cancer Genetics, 2019, 237, 69-77.	0.4	6
72	Durable and Robust Fetal Globin Induction without Anemia in Rhesus Monkeys Following Autologous Hematopoietic Stem Cell Transplant with BCL11A Erythroid Enhancer Editing. Blood, 2019, 134, 4632-4632.	1.4	6

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73	DNAJB1-PRKACA in HEK293T cells induces LINC00473 overexpression that depends on PKA signaling. PLoS ONE, 2022, 17, e0263829.	2.5	6
74	Motif-Raptor: a cell type-specific and transcription factor centric approach for post-GWAS prioritization of causal regulators. Bioinformatics, 2021, 37, 2103-2111.	4.1	5
75	Optimization of Nuclear Localization Signal Composition Improves CRISPR-Cas12a Editing Rates in Human Primary Cells. , 2022, 1, 271-284.		5
76	DrugThatGene: integrative analysis to streamline the identification of druggable genes, pathways and protein complexes from CRISPR screens. Bioinformatics, 2019, 35, 1981-1984.	4.1	3
77	Identification Of BCL11A Structure-Function Domains For Fetal Hemoglobin Silencing. Blood, 2013, 122, 435-435.	1.4	3
78	Highly Efficient Therapeutic Gene Editing of BCL11A enhancer in Human Hematopoietic Stem Cells from ÃŸ-Hemoglobinopathy Patients for Fetal Hemoglobin Induction. Blood, 2018, 132, 3482-3482.	1.4	2
79	Getting Past HSC Security: Cyclosporine H Gives Lentiviruses an Entry Pass. Cell Stem Cell, 2018, 23, 775-776.	11.1	1
80	Hematopoietic SIN Lentiviral Micro RNA-Mediated Silencing of BCL11A: Pre-Clinical Evidence for a Sickle Cell Disease Gene-Therapy Trial. Blood, 2012, 120, 753-753.	1.4	1
81	Mitochondrial Protein Kinase A Regulates Heme Biosynthesis. Blood, 2015, 126, 271-271.	1.4	1
82	Genome-Wide CRISPR/Cas9 Screen Reveals That the Dcps Scavenger Decapping Enzyme Is Essential for AML Cell Survival. Blood, 2017, 130, 782-782.	1.4	1
83	Gene Therapy. Hematology/Oncology Clinics of North America, 2017, 31, xiii-xiv.	2.2	0
84	Production of foetal globin in adult monkeys. Nature Biomedical Engineering, 2019, 3, 857-859.	22.5	0
85	Functional Evaluation of HbF-Associated Region of BCL11A Locus. Blood, 2011, 118, 2148-2148.	1.4	0
86	Sideroflexin 4 Deficiency Results In An Erythroid Differentiation Defect. Blood, 2013, 122, 3417-3417.	1.4	0
87	An SCF-FBXW7 Ubiquitin Ligase Mediated Feedback Loop Facilitates GATA Factor Switching and Reinforces Commitment to Terminal Erythroid Maturation. Blood, 2014, 124, 245-245.	1.4	0
88	Erythroid Cells Adapt to L-Leucine Scarcity By Reducing Hemoglobin Production Via the mTORC1/4E-BP Pathway. Blood, 2014, 124, 2660-2660.	1.4	0
89	Hematopoietic Stem Cells Develop in the Absence of Endothelial Cadherin 5 Expression. Blood, 2015, 126, 1165-1165.	1.4	0
90	Transcriptional Signaling Centers Govern Human Erythropoiesis and Harbor Genetic Variations of Red Blood Cell Traits. Blood, 2018, 132, 1277-1277.	1.4	0

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91	Rational Targeting of a NuRD Sub-Complex for Fetal Hemoglobin Induction Following Comprehensive in Situ Mutagenesis. Blood, 2018, 132, 2342-2342.	1.4	0
92	Human Genetic Diversity Alters Therapeutic Gene Editing Off-Target Outcomes. Blood, 2021, 138, 3993-3993.	1.4	0
93	ZNF410 Represses Fetal Globin By Devoted Control of CHD4/NuRD. Blood, 2020, 136, 1-1.	1.4	0