

Hyongbum-henry Kim

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4642685/publications.pdf>

Version: 2024-02-01

93
papers

6,855
citations

66234

42
h-index

64668

79
g-index

101
all docs

101
docs citations

101
times ranked

10253
citing authors

#	ARTICLE	IF	CITATIONS
1	A guide to genome engineering with programmable nucleases. <i>Nature Reviews Genetics</i> , 2014, 15, 321-334.	7.7	990
2	Gene disruption by cell-penetrating peptide-mediated delivery of Cas9 protein and guide RNA. <i>Genome Research</i> , 2014, 24, 1020-1027.	2.4	552
3	Targeted genome editing in human cells with zinc finger nucleases constructed via modular assembly. <i>Genome Research</i> , 2009, 19, 1279-1288.	2.4	403
4	In vivo high-throughput profiling of CRISPR-Cpf1 activity. <i>Nature Methods</i> , 2017, 14, 153-159.	9.0	305
5	Deep learning improves prediction of CRISPR-Cpf1 guide RNA activity. <i>Nature Biotechnology</i> , 2018, 36, 239-241.	9.4	252
6	Surrogate reporters for enrichment of cells with nuclease-induced mutations. <i>Nature Methods</i> , 2011, 8, 941-943.	9.0	192
7	Predicting the efficiency of prime editing guide RNAs in human cells. <i>Nature Biotechnology</i> , 2021, 39, 198-206.	9.4	160
8	Somatic Mutations in TSC1 and TSC2 Cause Focal Cortical Dysplasia. <i>American Journal of Human Genetics</i> , 2017, 100, 454-472.	2.6	157
9	Constriction of the mitochondrial inner compartment is a priming event for mitochondrial division. <i>Nature Communications</i> , 2017, 8, 15754.	5.8	155
10	CD31 ⁺ Cells Represent Highly Angiogenic and Vasculogenic Cells in Bone Marrow. <i>Circulation Research</i> , 2010, 107, 602-614.	2.0	137
11	Prediction of the sequence-specific cleavage activity of Cas9 variants. <i>Nature Biotechnology</i> , 2020, 38, 1328-1336.	9.4	133
12	SpCas9 activity prediction by DeepSpCas9, a deep learning-based model with high generalization performance. <i>Science Advances</i> , 2019, 5, eaax9249.	4.7	130
13	CD49f Enhances Multipotency and Maintains Stemness Through the Direct Regulation of OCT4 and SOX2. <i>Stem Cells</i> , 2012, 30, 876-887.	1.4	129
14	Surrogate reporter-based enrichment of cells containing RNA-guided Cas9 nuclease-induced mutations. <i>Nature Communications</i> , 2014, 5, 3378.	5.8	123
15	Sustained release of ascorbate-2-phosphate and dexamethasone from porous PLGA scaffolds for bone tissue engineering using mesenchymal stem cells. <i>Biomaterials</i> , 2003, 24, 4671-4679.	5.7	120
16	Dexamethasone coordinately regulates angiopoietin-1 and VEGF: A mechanism of glucocorticoid-induced stabilization of blood-brain barrier. <i>Biochemical and Biophysical Research Communications</i> , 2008, 372, 243-248.	1.0	116
17	Dual Angiogenic and Neurotrophic Effects of Bone Marrow-Derived Endothelial Progenitor Cells on Diabetic Neuropathy. <i>Circulation</i> , 2009, 119, 699-708.	1.6	108
18	Human Peripheral Blood-Derived CD31 ⁺ Cells Have Robust Angiogenic and Vasculogenic Properties and Are Effective for Treating Ischemic Vascular Disease. <i>Journal of the American College of Cardiology</i> , 2010, 56, 593-607.	1.2	108

#	ARTICLE	IF	CITATIONS
19	Podoplanin-Expressing Cells Derived From Bone Marrow Play a Crucial Role in Postnatal Lymphatic Neovascularization. <i>Circulation</i> , 2010, 122, 1413-1425.	1.6	102
20	High-throughput analysis of the activities of xCas9, SpCas9-NG and SpCas9 at matched and mismatched target sequences in human cells. <i>Nature Biomedical Engineering</i> , 2020, 4, 111-124.	11.6	98
21	Application of prime editing to the correction of mutations and phenotypes in adult mice with liver and eye diseases. <i>Nature Biomedical Engineering</i> , 2022, 6, 181-194.	11.6	92
22	In vivo bone formation by human marrow stromal cells in biodegradable scaffolds that release dexamethasone and ascorbate-2-phosphate. <i>Biochemical and Biophysical Research Communications</i> , 2005, 332, 1053-1060.	1.0	83
23	Brain Somatic Mutations in MTOR Disrupt Neuronal Ciliogenesis, Leading to Focal Cortical Dyslamination. <i>Neuron</i> , 2018, 99, 83-97.e7.	3.8	83
24	Preassembled zinc-finger arrays for rapid construction of ZFNs. <i>Nature Methods</i> , 2011, 8, 7-7.	9.0	77
25	Sequence-specific prediction of the efficiencies of adenine and cytosine base editors. <i>Nature Biotechnology</i> , 2020, 38, 1037-1043.	9.4	73
26	The Effect of Mineral Trioxide Aggregate on Odontogenic Differentiation in Dental Pulp Stem Cells. <i>Journal of Endodontics</i> , 2013, 39, 242-248.	1.4	62
27	Pathological roles of the VEGF/SphK pathway in Niemann-Pick type C neurons. <i>Nature Communications</i> , 2014, 5, 5514.	5.8	61
28	Diabetic Mesenchymal Stem Cells Are Ineffective for Improving Limb Ischemia Due to Their Impaired Angiogenic Capability. <i>Cell Transplantation</i> , 2015, 24, 1571-1584.	1.2	60
29	Paired D10A Cas9 nickases are sometimes more efficient than individual nucleases for gene disruption. <i>Nucleic Acids Research</i> , 2018, 46, e71-e71.	6.5	60
30	Regulation of pluripotency and differentiation by deubiquitinating enzymes. <i>Cell Death and Differentiation</i> , 2016, 23, 1257-1264.	5.0	59
31	Targeting mutant <i>KRAS</i> with CRISPR-Cas9 controls tumor growth. <i>Genome Research</i> , 2018, 28, 374-382.	2.4	59
32	Bone Marrow Mononuclear Cells Have Neurovascular Tropism and Improve Diabetic Neuropathy. <i>Stem Cells</i> , 2009, 27, 1686-1696.	1.4	58
33	Cell-Penetrating Peptide-Mediated Delivery of Cas9 Protein and Guide RNA for Genome Editing. <i>Methods in Molecular Biology</i> , 2017, 1507, 81-94.	0.4	58
34	Designed nucleases for targeted genome editing. <i>Plant Biotechnology Journal</i> , 2016, 14, 448-462.	4.1	57
35	Angiotensin-2 Stimulates Blood Flow Recovery After Femoral Artery Occlusion by Inducing Inflammation and Arteriogenesis. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2008, 28, 1989-1995.	1.1	56
36	Magnetic Separation and Antibiotics Selection Enable Enrichment of Cells with ZFN/TALEN-Induced Mutations. <i>PLoS ONE</i> , 2013, 8, e56476.	1.1	55

#	ARTICLE	IF	CITATIONS
37	Multi-functional ceramic hybrid coatings on biodegradable AZ31 Mg implants: electrochemical, tribological and quantum chemical aspects for orthopaedic applications. <i>RSC Advances</i> , 2014, 4, 24272.	1.7	54
38	Alteration of Synaptic Activityâ€“Regulating Genes Underlying Functional Improvement by Long-term Exposure to an Enriched Environment in the Adult Brain. <i>Neurorehabilitation and Neural Repair</i> , 2013, 27, 561-574.	1.4	50
39	Doxycycline Enhances Survival and Self-Renewal of Human Pluripotent Stem Cells. <i>Stem Cell Reports</i> , 2014, 3, 353-364.	2.3	50
40	Generation of a more efficient prime editor 2 by addition of the Rad51 DNA-binding domain. <i>Nature Communications</i> , 2021, 12, 5617.	5.8	47
41	Targeted Genome Engineering to Control VEGF Expression in Human Umbilical Cord Blood-Derived Mesenchymal Stem Cells: Potential Implications for the Treatment of Myocardial Infarction. <i>Stem Cells Translational Medicine</i> , 2017, 6, 1040-1051.	1.6	43
42	Effect of Ionizing Radiation Induced Damage of Endothelial Progenitor Cells in Vascular Regeneration. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2012, 32, 343-352.	1.1	42
43	Electrochemical and in vitro bioactivity of polypyrrole/ceramic nanocomposite coatings on 316L SS bio-implants. <i>Materials Science and Engineering C</i> , 2014, 43, 76-85.	3.8	42
44	Interaction of Mesenchymal Stem Cells and Osteoblasts for in vitro Osteogenesis. <i>Yonsei Medical Journal</i> , 2003, 44, 187.	0.9	42
45	Emerging Therapy for Diabetic Neuropathy: Cell Therapy Targeting Vessels and Nerves. <i>Endocrine, Metabolic and Immune Disorders - Drug Targets</i> , 2012, 12, 168-178.	0.6	39
46	An autophagy enhancer ameliorates diabetes of human IAPP-transgenic mice through clearance of amyloidogenic oligomer. <i>Nature Communications</i> , 2021, 12, 183.	5.8	36
47	Astroglial Activation by an Enriched Environment after Transplantation of Mesenchymal Stem Cells Enhances Angiogenesis after Hypoxic-Ischemic Brain Injury. <i>International Journal of Molecular Sciences</i> , 2016, 17, 1550.	1.8	33
48	High-throughput functional evaluation of human cancer-associated mutations using base editors. <i>Nature Biotechnology</i> , 2022, 40, 874-884.	9.4	32
49	Environmental enrichment enhances synaptic plasticity by internalization of striatal dopamine transporters. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016, 36, 2122-2133.	2.4	31
50	Genome-scale screening of deubiquitinase subfamily identifies USP3 as a stabilizer of Cdc25A regulating cell cycle in cancer. <i>Cell Death and Differentiation</i> , 2020, 27, 3004-3020.	5.0	31
51	Hepatitis C Virus Entry Is Impaired by Claudin-1 Downregulation in Diacylglycerol Acyltransferase-1-Deficient Cells. <i>Journal of Virology</i> , 2014, 88, 9233-9244.	1.5	30
52	Repair of Ischemic Injury by Pluripotent Stem Cell Based Cell Therapy without Teratoma through Selective Photosensitivity. <i>Stem Cell Reports</i> , 2015, 5, 1067-1080.	2.3	30
53	Effective Gene Delivery into Human Stem Cells with a Cell-Targeting Peptide-Modified Bioreducible Polymer. <i>Small</i> , 2015, 11, 2069-2079.	5.2	29
54	Recording of elapsed time and temporal information about biological events using Cas9. <i>Cell</i> , 2021, 184, 1047-1063.e23.	13.5	29

#	ARTICLE	IF	CITATIONS
55	<i>En bloc</i> and segmental deletions of human <i>XIST</i> reveal X chromosome inactivation-involving RNA elements. <i>Nucleic Acids Research</i> , 2019, 47, 3875-3887.	6.5	28
56	Novel genes and cellular pathways related to infection with adenovirus-36 as an obesity agent in human mesenchymal stem cells. <i>International Journal of Obesity</i> , 2012, 36, 195-200.	1.6	27
57	GalNAc-T14 promotes metastasis through Wnt dependent <i>HOXB9</i> expression in lung adenocarcinoma. <i>Oncotarget</i> , 2015, 6, 41916-41928.	0.8	27
58	An electrochemical, in vitro bioactivity, and quantum chemical approach to nanostructured copolymer coatings for orthopedic applications. <i>Journal of Materials Science</i> , 2014, 49, 4067-4080.	1.7	26
59	Chemical Controllable Gene Drive in <i>Drosophila</i>. <i>ACS Synthetic Biology</i> , 2020, 9, 2362-2377.	1.9	26
60	<i>In vivo</i> outer hair cell gene editing ameliorates progressive hearing loss in dominant-negative <i>Kcnq4</i> murine model. <i>Theranostics</i> , 2022, 12, 2465-2482.	4.6	26
61	Recent developments and clinical studies utilizing engineered zinc finger nuclease technology. <i>Cellular and Molecular Life Sciences</i> , 2015, 72, 3819-3830.	2.4	25
62	Elucidation of Relevant Neuroinflammation Mechanisms Using Gene Expression Profiling in Patients with Amyotrophic Lateral Sclerosis. <i>PLoS ONE</i> , 2016, 11, e0165290.	1.1	25
63	Advances in bone marrow-derived cell therapy: CD31-expressing cells as next generation cardiovascular cell therapy. <i>Regenerative Medicine</i> , 2011, 6, 335-349.	0.8	24
64	Concise Review: Fate Determination of Stem Cells by Deubiquitinating Enzymes. <i>Stem Cells</i> , 2017, 35, 9-16.	1.4	24
65	<sc>LIN</sc> 28A loss of function is associated with Parkinson's disease pathogenesis. <i>EMBO Journal</i> , 2019, 38, e101196.	3.5	23
66	Stability of Zinc Finger Nuclease Protein Is Enhanced by the Proteasome Inhibitor MG132. <i>PLoS ONE</i> , 2013, 8, e54282.	1.1	21
67	Enrichment of cells with TALEN-induced mutations using surrogate reporters. <i>Methods</i> , 2014, 69, 108-117.	1.9	21
68	Off-target response of a Wip1 chemical inhibitor in skin keratinocytes. <i>Journal of Dermatological Science</i> , 2014, 73, 125-134.	1.0	21
69	CRISPR/Cas9 system as an innovative genetic engineering tool: Enhancements in sequence specificity and delivery methods. <i>Biochimica Et Biophysica Acta: Reviews on Cancer</i> , 2015, 1856, 234-243.	3.3	19
70	Expression of short hairpin RNAs against the coxsackievirus B3 exerts potential antiviral effects in Cos-7 cells and in mice. <i>Virus Research</i> , 2007, 125, 9-13.	1.1	17
71	Environmental Enrichment Synergistically Improves Functional Recovery by Transplanted Adipose Stem Cells in Chronic Hypoxic-Ischemic Brain Injury. <i>Cell Transplantation</i> , 2013, 22, 1553-1568.	1.2	17
72	Evaluation of chemically modified Tiâ€“5Moâ€“3Fe alloy surface: Electrochemical aspects and in vitro bioactivity on MG63 cells. <i>Applied Surface Science</i> , 2014, 307, 52-61.	3.1	17

#	ARTICLE	IF	CITATIONS
73	Cell Therapy with Bone Marrow Cells for Myocardial Regeneration. <i>Antioxidants and Redox Signaling</i> , 2009, 11, 1897-1911.	2.5	16
74	Early Immunomodulation by Intravenously Transplanted Mesenchymal Stem Cells Promotes Functional Recovery in Spinal Cord Injured Rats. <i>Cell Medicine</i> , 2011, 2, 55-68.	5.0	16
75	Rh D blood group conversion using transcription activator-like effector nucleases. <i>Nature Communications</i> , 2015, 6, 7451.	5.8	16
76	Deficiency in DGCR8-dependent canonical microRNAs causes infertility due to multiple abnormalities during uterine development in mice. <i>Scientific Reports</i> , 2016, 6, 20242.	1.6	16
77	Therapeutic application of the CRISPR system: current issues and new prospects. <i>Human Genetics</i> , 2019, 138, 563-590.	1.8	16
78	Bone tissue engineering using marrow stromal cells. <i>Biotechnology and Bioprocess Engineering</i> , 2007, 12, 48-53.	1.4	14
79	Genome Engineering in Human Cells. <i>Methods in Enzymology</i> , 2014, 546, 93-118.	0.4	13
80	In Situ Pluripotency Factor Expression Promotes Functional Recovery From Cerebral Ischemia. <i>Molecular Therapy</i> , 2016, 24, 1538-1549.	3.7	13
81	Dexamethasone increases angiopoietin-1 and quiescent hematopoietic stem cells: A novel mechanism of dexamethasone-induced hematoprotection. <i>FEBS Letters</i> , 2008, 582, 3509-3514.	1.3	11
82	Basic Principles and Clinical Applications of CRISPR-Based Genome Editing. <i>Yonsei Medical Journal</i> , 2022, 63, 105.	0.9	11
83	RanBPM: a potential therapeutic target for modulating diverse physiological disorders. <i>Drug Discovery Today</i> , 2017, 22, 1816-1824.	3.2	10
84	In vivo gene correction with targeted sequence substitution through microhomology-mediated end joining. <i>Biochemical and Biophysical Research Communications</i> , 2018, 502, 116-122.	1.0	9
85	Generation of F508-CFTR T84 cell lines by CRISPR/Cas9-mediated genome editing. <i>Biotechnology Letters</i> , 2016, 38, 2023-2034.	1.1	7
86	Enhanced gene disruption by programmable nucleases delivered by a minicircle vector. <i>Gene Therapy</i> , 2014, 21, 921-930.	2.3	6
87	Coxsackievirus B3 used as a gene therapy vector to express functional FGF2. <i>Gene Therapy</i> , 2012, 19, 1159-1165.	2.3	5
88	Production of Mutated Porcine Embryos Using Zinc Finger Nucleases and a Reporter-based Cell Enrichment System. <i>Asian-Australasian Journal of Animal Sciences</i> , 2014, 27, 324-329.	2.4	5
89	Generation of mutation-corrected induced pluripotent stem cell lines derived from adrenoleukodystrophy patient by using homology directed repair. <i>Stem Cell Research</i> , 2022, 59, 102664.	0.3	2
90	Programmable Nuclease-Based Integration into Novel Extragenic Genomic Safe Harbor Identified from Korean Population-Based CNV Analysis. <i>Molecular Therapy - Oncolytics</i> , 2019, 14, 253-265.	2.0	1

#	ARTICLE	IF	CITATIONS
91	Improving CRISPR tools by elucidating DNA repair. Nature Biotechnology, 2021, 39, 1512-1514.	9.4	1
92	Development of an Electroporation System for Preclinical Use. , 2008, , .		0
93	Heroes of peer review: Hyongbum (Henry) Kim. Genome Biology, 2016, 17, 200.	3.8	0