Hyongbum-henry Kim

List of Publications by Year
in descending order

93 papers	6,855 citations	66343 42 h-index	64796 79 g-index
101 all docs	101 docs citations	101 times ranked	10253 citing authors

#	Article	IF	Citations
1	Application of prime editing to the correction of mutations and phenotypes in adult mice with liver and eye diseases. Nature Biomedical Engineering, 2022, 6, 181-194.	22.5	92
2	Generation of mutation-corrected induced pluripotent stem cell lines derived from adrenoleukodystrophy patient by using homology directed repair. Stem Cell Research, 2022, 59, 102664.	0.7	2
3	Basic Principles and Clinical Applications of CRISPR-Based Genome Editing. Yonsei Medical Journal, 2022, 63, 105.	2.2	11
4	In vivo outer hair cell gene editing ameliorates progressive hearing loss in dominant-negative Kcnq4 murine model. Theranostics, 2022, 12, 2465-2482.	10.0	26
5	High-throughput functional evaluation of human cancer-associated mutations using base editors. Nature Biotechnology, 2022, 40, 874-884.	17.5	32
6	Predicting the efficiency of prime editing guide RNAs in human cells. Nature Biotechnology, 2021, 39, 198-206.	17.5	160
7	An autophagy enhancer ameliorates diabetes of human IAPP-transgenic mice through clearance of amyloidogenic oligomer. Nature Communications, 2021, 12, 183.	12.8	36
8	Recording of elapsed time and temporal information about biological events using Cas9. Cell, 2021, 184, 1047-1063.e23.	28.9	29
9	Generation of a more efficient prime editor 2 by addition of the Rad51 DNA-binding domain. Nature Communications, 2021, 12, 5617.	12.8	47
10	Improving CRISPR tools by elucidating DNA repair. Nature Biotechnology, 2021, 39, 1512-1514.	17.5	1
11	Chemical Controllable Gene Drive in Drosophila. ACS Synthetic Biology, 2020, 9, 2362-2377.	3.8	26
12	Genome-scale screening of deubiquitinase subfamily identifies USP3 as a stabilizer of Cdc25A regulating cell cycle in cancer. Cell Death and Differentiation, 2020, 27, 3004-3020.	11.2	31
13	Prediction of the sequence-specific cleavage activity of Cas9 variants. Nature Biotechnology, 2020, 38, 1328-1336.	17.5	133
14	Sequence-specific prediction of the efficiencies of adenine and cytosine base editors. Nature Biotechnology, 2020, 38, 1037-1043.	17.5	73
15	High-throughput analysis of the activities of xCas9, SpCas9-NG and SpCas9 at matched and mismatched target sequences in human cells. Nature Biomedical Engineering, 2020, 4, 111-124.	22.5	98
16	SpCas9 activity prediction by DeepSpCas9, a deep learningâ€"based model with high generalization performance. Science Advances, 2019, 5, eaax9249.	10.3	130
17	Programmable Nuclease-Based Integration into Novel Extragenic Genomic Safe Harbor Identified from Korean Population-Based CNV Analysis. Molecular Therapy - Oncolytics, 2019, 14, 253-265.	4.4	1
18	Therapeutic application of the CRISPR system: current issues and new prospects. Human Genetics, 2019, 138, 563-590.	3.8	16

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19	En blocand segmental deletions of humanXISTreveal X chromosome inactivation-involving RNA elements. Nucleic Acids Research, 2019, 47, 3875-3887.	14.5	28
20	<scp>LIN</scp> 28A loss of function is associated with Parkinson's disease pathogenesis. EMBO Journal, 2019, 38, e101196.	7.8	23
21	Deep learning improves prediction of CRISPRâ€"Cpf1 guide RNA activity. Nature Biotechnology, 2018, 36, 239-241.	17.5	252
22	Targeting mutant KRAS with CRISPR-Cas9 controls tumor growth. Genome Research, 2018, 28, 374-382.	5.5	59
23	Paired D10A Cas9 nickases are sometimes more efficient than individual nucleases for gene disruption. Nucleic Acids Research, 2018, 46, e71-e71.	14.5	60
24	InÂvivo gene correction with targeted sequence substitution through microhomology-mediated end joining. Biochemical and Biophysical Research Communications, 2018, 502, 116-122.	2.1	9
25	Brain Somatic Mutations in MTOR Disrupt Neuronal Ciliogenesis, Leading to Focal Cortical Dyslamination. Neuron, 2018, 99, 83-97.e7.	8.1	83
26	Concise Review: Fate Determination of Stem Cells by Deubiquitinating Enzymes. Stem Cells, 2017, 35, 9-16.	3.2	24
27	Somatic Mutations in TSC1 and TSC2 Cause Focal Cortical Dysplasia. American Journal of Human Genetics, 2017, 100, 454-472.	6.2	157
28	Constriction of the mitochondrial inner compartment is a priming event for mitochondrial division. Nature Communications, 2017, 8, 15754.	12.8	155
29	Targeted Genome Engineering to Control VEGF Expression in Human Umbilical Cord Blood-Derived Mesenchymal Stem Cells: Potential Implications for the Treatment of Myocardial Infarction. Stem Cells Translational Medicine, 2017, 6, 1040-1051.	3.3	43
30	In vivo high-throughput profiling of CRISPRâ€"Cpf1 activity. Nature Methods, 2017, 14, 153-159.	19.0	305
31	RanBPM: a potential therapeutic target for modulating diverse physiological disorders. Drug Discovery Today, 2017, 22, 1816-1824.	6.4	10
32	Cell-Penetrating Peptide-Mediated Delivery of Cas9 Protein and Guide RNA for Genome Editing. Methods in Molecular Biology, 2017, 1507, 81-94.	0.9	58
33	Astroglial Activation by an Enriched Environment after Transplantation of Mesenchymal Stem Cells Enhances Angiogenesis after Hypoxic-Ischemic Brain Injury. International Journal of Molecular Sciences, 2016, 17, 1550.	4.1	33
34	Designed nucleases for targeted genome editing. Plant Biotechnology Journal, 2016, 14, 448-462.	8.3	57
35	Environmental enrichment enhances synaptic plasticity by internalization of striatal dopamine transporters. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 2122-2133.	4.3	31
36	Heroes of peer review: Hyongbum (Henry) Kim. Genome Biology, 2016, 17, 200.	8.8	0

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37	In Situ Pluripotency Factor Expression Promotes Functional Recovery From Cerebral Ischemia. Molecular Therapy, 2016, 24, 1538-1549.	8.2	13
38	Generation of Î”F508-CFTR T84 cell lines by CRISPR/Cas9-mediated genome editing. Biotechnology Letters, 2016, 38, 2023-2034.	2.2	7
39	Deficiency in DGCR8-dependent canonical microRNAs causes infertility due to multiple abnormalities during uterine development in mice. Scientific Reports, 2016, 6, 20242.	3.3	16
40	Regulation of pluripotency and differentiation by deubiquitinating enzymes. Cell Death and Differentiation, 2016, 23, 1257-1264.	11.2	59
41	Elucidation of Relevant Neuroinflammation Mechanisms Using Gene Expression Profiling in Patients with Amyotrophic Lateral Sclerosis. PLoS ONE, 2016, 11, e0165290.	2.5	25
42	Diabetic Mesenchymal Stem Cells Are Ineffective for Improving Limb Ischemia Due to Their Impaired Angiogenic Capability. Cell Transplantation, 2015, 24, 1571-1584.	2.5	60
43	CRISPR/Cas9 system as an innovative genetic engineering tool: Enhancements in sequence specificity and delivery methods. Biochimica Et Biophysica Acta: Reviews on Cancer, 2015, 1856, 234-243.	7.4	19
44	Recent developments and clinical studies utilizing engineered zinc finger nuclease technology. Cellular and Molecular Life Sciences, 2015, 72, 3819-3830.	5.4	25
45	Rh D blood group conversion using transcription activator-like effector nucleases. Nature Communications, 2015, 6, 7451.	12.8	16
46	Repair of Ischemic Injury by Pluripotent Stem Cell Based Cell Therapy without Teratoma through Selective Photosensitivity. Stem Cell Reports, 2015, 5, 1067-1080.	4.8	30
47	Effective Gene Delivery into Human Stem Cells with a Cell-Targeting Peptide-Modified Bioreducible Polymer. Small, 2015, 11, 2069-2079.	10.0	29
48	GalNAc-T14 promotes metastasis through Wnt dependentHOXB9expression in lung adenocarcinoma. Oncotarget, 2015, 6, 41916-41928.	1.8	27
49	Pathological roles of the VEGF/SphK pathway in Niemannâ€"Pick type C neurons. Nature Communications, 2014, 5, 5514.	12.8	61
50	Genome Engineering in Human Cells. Methods in Enzymology, 2014, 546, 93-118.	1.0	13
51	A guide to genome engineering with programmable nucleases. Nature Reviews Genetics, 2014, 15, 321-334.	16.3	990
52	An electrochemical, in vitro bioactivity, and quantum chemical approach to nanostructured copolymer coatings for orthopedic applications. Journal of Materials Science, 2014, 49, 4067-4080.	3.7	26
53	Enrichment of cells with TALEN-induced mutations using surrogate reporters. Methods, 2014, 69, 108-117.	3.8	21
54	Hepatitis C Virus Entry Is Impaired by Claudin-1 Downregulation in Diacylglycerol Acyltransferase-1-Deficient Cells. Journal of Virology, 2014, 88, 9233-9244.	3.4	30

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55	Multi-functional ceramic hybrid coatings on biodegradable AZ31 Mg implants: electrochemical, tribological and quantum chemical aspects for orthopaedic applications. RSC Advances, 2014, 4, 24272.	3.6	54
56	Electrochemical and in vitro bioactivity of polypyrrole/ceramic nanocomposite coatings on 316L SS bio-implants. Materials Science and Engineering C, 2014, 43, 76-85.	7.3	42
57	Enhanced gene disruption by programmable nucleases delivered by a minicircle vector. Gene Therapy, 2014, 21, 921-930.	4.5	6
58	Doxycycline Enhances Survival and Self-Renewal of Human Pluripotent Stem Cells. Stem Cell Reports, 2014, 3, 353-364.	4.8	50
59	Gene disruption by cell-penetrating peptide-mediated delivery of Cas9 protein and guide RNA. Genome Research, 2014, 24, 1020-1027.	5.5	552
60	Surrogate reporter-based enrichment of cells containing RNA-guided Cas9 nuclease-induced mutations. Nature Communications, 2014, 5, 3378.	12.8	123
61	Off-target response of a Wip1 chemical inhibitor in skin keratinocytes. Journal of Dermatological Science, 2014, 73, 125-134.	1.9	21
62	Evaluation of chemically modified Tiâ€"5Moâ€"3Fe alloy surface: Electrochemical aspects and in vitro bioactivity on MG63 cells. Applied Surface Science, 2014, 307, 52-61.	6.1	17
63	Production of Mutated Porcine Embryos Using Zinc Finger Nucleases and a Reporter-based Cell Enrichment System. Asian-Australasian Journal of Animal Sciences, 2014, 27, 324-329.	2.4	5
64	Alteration of Synaptic Activityâ€"Regulating Genes Underlying Functional Improvement by Long-term Exposure to an Enriched Environment in the Adult Brain. Neurorehabilitation and Neural Repair, 2013, 27, 561-574.	2.9	50
65	The Effect of Mineral Trioxide Aggregate on Odontogenic Differentiation in Dental Pulp Stem Cells. Journal of Endodontics, 2013, 39, 242-248.	3.1	62
66	Environmental Enrichment Synergistically Improves Functional Recovery by Transplanted Adipose Stem Cells in Chronic Hypoxic-Ischemic Brain Injury. Cell Transplantation, 2013, 22, 1553-1568.	2.5	17
67	Stability of Zinc Finger Nuclease Protein Is Enhanced by the Proteasome Inhibitor MG132. PLoS ONE, 2013, 8, e54282.	2.5	21
68	Magnetic Separation and Antibiotics Selection Enable Enrichment of Cells with ZFN/TALEN-Induced Mutations. PLoS ONE, 2013, 8, e56476.	2.5	55
69	Emerging Therapy for Diabetic Neuropathy: Cell Therapy Targeting Vessels and Nerves. Endocrine, Metabolic and Immune Disorders - Drug Targets, 2012, 12, 168-178.	1.2	39
70	Coxsackievirus B3 used as a gene therapy vector to express functional FGF2. Gene Therapy, 2012, 19, 1159-1165.	4.5	5
71	Effect of Ionizing Radiation Induced Damage of Endothelial Progenitor Cells in Vascular Regeneration. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 343-352.	2.4	42
72	CD49f Enhances Multipotency and Maintains Stemness Through the Direct Regulation of OCT4 and SOX2. Stem Cells, 2012, 30, 876-887.	3.2	129

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73	Novel genes and cellular pathways related to infection with adenovirus-36 as an obesity agent in human mesenchymal stem cells. International Journal of Obesity, 2012, 36, 195-200.	3.4	27
74	Surrogate reporters for enrichment of cells with nuclease-induced mutations. Nature Methods, 2011, 8, 941-943.	19.0	192
75	Early Immunomodulation by Intravenously Transplanted Mesenchymal Stem Cells Promotes Functional Recovery in Spinal Cord Injured Rats. Cell Medicine, 2011, 2, 55-68.	5.0	16
76	Preassembled zinc-finger arrays for rapid construction of ZFNs. Nature Methods, 2011, 8, 7-7.	19.0	77
77	Advances in bone marrow-derived cell therapy: CD31-expressing cells as next generation cardiovascular cell therapy. Regenerative Medicine, 2011, 6, 335-349.	1.7	24
78	Podoplanin-Expressing Cells Derived From Bone Marrow Play a Crucial Role in Postnatal Lymphatic Neovascularization. Circulation, 2010, 122, 1413-1425.	1.6	102
79	CD31 ⁺ Cells Represent Highly Angiogenic and Vasculogenic Cells in Bone Marrow. Circulation Research, 2010, 107, 602-614.	4.5	137
80	Human Peripheral Blood-Derived CD31+Cells Have Robust Angiogenic and Vasculogenic Properties and Are Effective for Treating Ischemic Vascular Disease. Journal of the American College of Cardiology, 2010, 56, 593-607.	2.8	108
81	Cell Therapy with Bone Marrow Cells for Myocardial Regeneration. Antioxidants and Redox Signaling, 2009, 11, 1897-1911.	5.4	16
82	Dual Angiogenic and Neurotrophic Effects of Bone Marrowâ€"Derived Endothelial Progenitor Cells on Diabetic Neuropathy. Circulation, 2009, 119, 699-708.	1.6	108
83	Bone Marrow Mononuclear Cells Have Neurovascular Tropism and Improve Diabetic Neuropathy. Stem Cells, 2009, 27, 1686-1696.	3.2	58
84	Targeted genome editing in human cells with zinc finger nucleases constructed via modular assembly. Genome Research, 2009, 19, 1279-1288.	5.5	403
85	Dexamethasone increases angiopoietinâ€1 and quiescent hematopoietic stem cells: A novel mechanism of dexamethasoneâ€induced hematoprotection. FEBS Letters, 2008, 582, 3509-3514.	2.8	11
86	Dexamethasone coordinately regulates angiopoietin-1 and VEGF: A mechanism of glucocorticoid-induced stabilization of bloodâ€"brain barrier. Biochemical and Biophysical Research Communications, 2008, 372, 243-248.	2.1	116
87	Development of an Electroporation System for Preclinical Use. , 2008, , .		0
88	Angiopoietin-2 Stimulates Blood Flow Recovery After Femoral Artery Occlusion by Inducing Inflammation and Arteriogenesis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 1989-1995.	2.4	56
89	Expression of short hairpin RNAs against the coxsackievirus B3 exerts potential antiviral effects in Cos-7 cells and in mice. Virus Research, 2007, 125, 9-13.	2.2	17
90	Bone tissue engineering using marrow stromal cells. Biotechnology and Bioprocess Engineering, 2007, 12, 48-53.	2.6	14

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91	In vivo bone formation by human marrow stromal cells in biodegradable scaffolds that release dexamethasone and ascorbate-2-phosphate. Biochemical and Biophysical Research Communications, 2005, 332, 1053-1060.	2.1	83
92	Sustained release of ascorbate-2-phosphate and dexamethasone from porous PLGA scaffolds for bone tissue engineering using mesenchymal stem cells. Biomaterials, 2003, 24, 4671-4679.	11.4	120
93	Interaction of Mesenchymal Stem Cells and Osteoblasts for in vitro Osteogenesis. Yonsei Medical Journal, 2003, 44, 187.	2.2	42