Hyongbum-henry Kim

List of Publications by Year in Descending Order

94 papers	4,987 citations	36 h-index	69 g-index
101 ext. papers	5,966 ext. citations	11.7 avg, IF	5.97 L-index

#	Paper	IF	Citations
94	Basic Principles and Clinical Applications of CRISPR-Based Genome Editing.. *Yonsei Medical Journal*, **2022**, 63, 105-113	3	0
93	Generation of mutation-corrected induced pluripotent stem cell lines derived from adrenoleukodystrophy patient by using homology directed repair.. *Stem Cell Research*, **2022**, 59, 102664	1.6	0
92	outer hair cell gene editing ameliorates progressive hearing loss in dominant-negative murine model.. *Theranostics*, **2022**, 12, 2465-2482	12.1	3
91	Predicting the efficiency of prime editing guide RNAs in human cells. *Nature Biotechnology*, **2021**, 39, 198-206	44.5	68
90	An autophagy enhancer ameliorates diabetes of human IAPP-transgenic mice through clearance of amyloidogenic oligomer. *Nature Communications*, **2021**, 12, 183	17.4	15
89	Recording of elapsed time and temporal information about biological events using Cas9. *Cell*, **2021**, 184, 1047-1063.e23	56.2	12
88	Application of prime editing to the correction of mutations and phenotypes in adult mice with liver and eye diseases. *Nature Biomedical Engineering*, **2021**,	19	18
87	Generation of a more efficient prime editor 2 by addition of the Rad51 DNA-binding domain. *Nature Communications*, **2021**, 12, 5617	17.4	10
86	Improving CRISPR tools by elucidating DNA repair. *Nature Biotechnology*, **2021**,	44.5	1
85	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	12.7	16
84	Prediction of the sequence-specific cleavage activity of Cas9 variants. *Nature Biotechnology*, **2020**, 38, 1328-1336	44.5	57
83	Sequence-specific prediction of the efficiencies of adenine and cytosine base editors. *Nature Biotechnology*, **2020**, 38, 1037-1043	44.5	32
82	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	19	60
81	Chemical Controllable Gene Drive in. *ACS Synthetic Biology*, **2020**, 9, 2362-2377	5.7	11
80	Programmable Nuclease-Based Integration into Novel Extragenic Genomic Safe Harbor Identified from Korean Population-Based CNV Analysis. *Molecular Therapy - Oncolytics*, **2019**, 14, 253-265	6.4	
79	Therapeutic application of the CRISPR system: current issues and new prospects. *Human Genetics*, **2019**, 138, 563-590	6.3	13
78	SpCas9 activity prediction by DeepSpCas9, a deep learning-based model with high generalization performance. *Science Advances*, **2019**, 5, eaax9249	14.3	52

77	En bloc and segmental deletions of human XIST reveal X chromosome inactivation-involving RNA elements. *Nucleic Acids Research*, **2019**, 47, 3875-3887	20.1	15
76	LIN28A loss of function is associated with Parkinson's disease pathogenesis. *EMBO Journal*, **2019**, 38, e101196	13	14
75	Deep learning improves prediction of CRISPR-Cpf1 guide RNA activity. *Nature Biotechnology*, **2018**, 36, 239-241	44.5	137
74	Targeting mutant with CRISPR-Cas9 controls tumor growth. *Genome Research*, **2018**,	9.7	33
73	Paired D10A Cas9 nickases are sometimes more efficient than individual nucleases for gene disruption. *Nucleic Acids Research*, **2018**, 46, e71	20.1	35
72	Brain Somatic Mutations in MTOR Disrupt Neuronal Ciliogenesis, Leading to Focal Cortical Dyslamination. *Neuron*, **2018**, 99, 83-97.e7	13.9	53
71	In vivo gene correction with targeted sequence substitution through microhomology-mediated end joining. *Biochemical and Biophysical Research Communications*, **2018**, 502, 116-122	3.4	6
70	Concise Review: Fate Determination of Stem Cells by Deubiquitinating Enzymes. *Stem Cells*, **2017**, 35, 9-16	5.8	16
69	Somatic Mutations in TSC1 and TSC2 Cause Focal Cortical Dysplasia. *American Journal of Human Genetics*, **2017**, 100, 454-472	11	102
68	Constriction of the mitochondrial inner compartment is a priming event for mitochondrial division. *Nature Communications*, **2017**, 8, 15754	17.4	80
67	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	6.9	36
66	In vivo high-throughput profiling of CRISPR-Cpf1 activity. *Nature Methods*, **2017**, 14, 153-159	21.6	199
65	RanBPM: a potential therapeutic target for modulating diverse physiological disorders. *Drug Discovery Today*, **2017**, 22, 1816-1824	8.8	5
64	Cell-Penetrating Peptide-Mediated Delivery of Cas9 Protein and Guide RNA for Genome Editing. *Methods in Molecular Biology*, **2017**, 1507, 81-94	1.4	37
63	In Situ Pluripotency Factor Expression Promotes Functional Recovery From Cerebral Ischemia. *Molecular Therapy*, **2016**, 24, 1538-49	11.7	7
62	Generation of ΔI508-CFTR T84 cell lines by CRISPR/Cas9-mediated genome editing. *Biotechnology Letters*, **2016**, 38, 2023-2034	3	6
61	Deficiency in DGCR8-dependent canonical microRNAs causes infertility due to multiple abnormalities during uterine development in mice. *Scientific Reports*, **2016**, 6, 20242	4.9	13
60	Regulation of pluripotency and differentiation by deubiquitinating enzymes. *Cell Death and Differentiation*, **2016**, 23, 1257-64	12.7	36

59	Elucidation of Relevant Neuroinflammation Mechanisms Using Gene Expression Profiling in Patients with Amyotrophic Lateral Sclerosis. *PLoS ONE*, **2016**, 11, e0165290	3.7	14
58	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,	6.3	23
57	Designed nucleases for targeted genome editing. *Plant Biotechnology Journal*, **2016**, 14, 448-62	11.6	39
56	Environmental enrichment enhances synaptic plasticity by internalization of striatal dopamine transporters. *Journal of Cerebral Blood Flow and Metabolism*, **2016**, 36, 2122-2133	7.3	23
55	Heroes of peer review: Hyongbum (Henry) Kim. *Genome Biology*, **2016**, 17, 200	18.3	
54	Recent developments and clinical studies utilizing engineered zinc finger nuclease technology. *Cellular and Molecular Life Sciences*, **2015**, 72, 3819-30	10.3	20
53	Rh D blood group conversion using transcription activator-like effector nucleases. *Nature Communications*, **2015**, 6, 7451	17.4	10
52	Repair of Ischemic Injury by Pluripotent Stem Cell Based Cell Therapy without Teratoma through Selective Photosensitivity. *Stem Cell Reports*, **2015**, 5, 1067-1080	8	26
51	Effective gene delivery into human stem cells with a cell-targeting Peptide-modified bioreducible polymer. *Small*, **2015**, 11, 2069-79	11	27
50	Diabetic Mesenchymal Stem Cells Are Ineffective for Improving Limb Ischemia Due to Their Impaired Angiogenic Capability. *Cell Transplantation*, **2015**, 24, 1571-84	4	46
49	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, 234-43	11.2	15
48	GalNAc-T14 promotes metastasis through Wnt dependent HOXB9 expression in lung adenocarcinoma. *Oncotarget*, **2015**, 6, 41916-28	3.3	24
47	A guide to genome engineering with programmable nucleases. *Nature Reviews Genetics*, **2014**, 15, 321-34	30.1	853
46	An electrochemical, in vitro bioactivity, and quantum chemical approach to nanostructured copolymer coatings for orthopedic applications. *Journal of Materials Science*, **2014**, 49, 4067-4080	4.3	23
45	Enrichment of cells with TALEN-induced mutations using surrogate reporters. *Methods*, **2014**, 69, 108-17	4.6	17
44	Hepatitis C virus entry is impaired by claudin-1 downregulation in diacylglycerol acyltransferase-1-deficient cells. *Journal of Virology*, **2014**, 88, 9233-44	6.6	26
43	Multi-functional ceramic hybrid coatings on biodegradable AZ31 Mg implants: electrochemical, tribological and quantum chemical aspects for orthopaedic applications. *RSC Advances*, **2014**, 4, 24272	3.7	42
42	Electrochemical and in vitro bioactivity of polypyrrole/ceramic nanocomposite coatings on 316L SS bio-implants. *Materials Science and Engineering C*, **2014**, 43, 76-85	8.3	30

41	Enhanced gene disruption by programmable nucleases delivered by a minicircle vector. *Gene Therapy*, **2014**, 21, 921-30	4	5
40	Doxycycline enhances survival and self-renewal of human pluripotent stem cells. *Stem Cell Reports*, **2014**, 3, 353-64	8	38
39	Gene disruption by cell-penetrating peptide-mediated delivery of Cas9 protein and guide RNA. *Genome Research*, **2014**, 24, 1020-7	9.7	442
38	Surrogate reporter-based enrichment of cells containing RNA-guided Cas9 nuclease-induced mutations. *Nature Communications*, **2014**, 5, 3378	17.4	92
37	Off-target response of a Wip1 chemical inhibitor in skin keratinocytes. *Journal of Dermatological Science*, **2014**, 73, 125-34	4.3	18
36	Evaluation of chemically modified Ti□Mo□Fe alloy surface: Electrochemical aspects and in vitro bioactivity on MG63 cells. *Applied Surface Science*, **2014**, 307, 52-61	6.7	14
35	Pathological roles of the VEGF/SphK pathway in Niemann-Pick type C neurons. *Nature Communications*, **2014**, 5, 5514	17.4	52
34	Genome engineering in human cells. *Methods in Enzymology*, **2014**, 546, 93-118	1.7	10
33	Production of Mutated Porcine Embryos Using Zinc Finger Nucleases and a Reporter-based Cell Enrichment System. *Asian-Australasian Journal of Animal Sciences*, **2014**, 27, 324-9	2.4	3
32	Alteration of synaptic activity-regulating genes underlying functional improvement by long-term exposure to an enriched environment in the adult brain. *Neurorehabilitation and Neural Repair*, **2013**, 27, 561-74	4.7	38
31	The effect of mineral trioxide aggregate on odontogenic differentiation in dental pulp stem cells. *Journal of Endodontics*, **2013**, 39, 242-8	4.7	53
30	Environmental enrichment synergistically improves functional recovery by transplanted adipose stem cells in chronic hypoxic-ischemic brain injury. *Cell Transplantation*, **2013**, 22, 1553-68	4	16
29	Stability of zinc finger nuclease protein is enhanced by the proteasome inhibitor MG132. *PLoS ONE*, **2013**, 8, e54282	3.7	19
28	Magnetic separation and antibiotics selection enable enrichment of cells with ZFN/TALEN-induced mutations. *PLoS ONE*, **2013**, 8, e56476	3.7	50
27	Effect of ionizing radiation induced damage of endothelial progenitor cells in vascular regeneration. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2012**, 32, 343-52	9.4	34
26	CD49f enhances multipotency and maintains stemness through the direct regulation of OCT4 and SOX2. *Stem Cells*, **2012**, 30, 876-87	5.8	109
25	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	5.5	21
24	Emerging therapy for diabetic neuropathy: cell therapy targeting vessels and nerves. *Endocrine, Metabolic and Immune Disorders - Drug Targets*, **2012**, 12, 168-78	2.2	30

23	Coxsackievirus B3 used as a gene therapy vector to express functional FGF2. *Gene Therapy*, **2012**, 19, 1159-65	4	4
22	Surrogate reporters for enrichment of cells with nuclease-induced mutations. *Nature Methods*, **2011**, 8, 941-3	21.6	164
21	Early Immunomodulation by Intravenously Transplanted Mesenchymal Stem Cells Promotes Functional Recovery in Spinal Cord Injured Rats. *Cell Medicine*, **2011**, 2, 55-67	4.9	15
20	Preassembled zinc-finger arrays for rapid construction of ZFNs. *Nature Methods*, **2011**, 8, 7	21.6	71
19	Advances in bone marrow-derived cell therapy: CD31-expressing cells as next generation cardiovascular cell therapy. *Regenerative Medicine*, **2011**, 6, 335-49	2.5	20
18	Podoplanin-expressing cells derived from bone marrow play a crucial role in postnatal lymphatic neovascularization. *Circulation*, **2010**, 122, 1413-25	16.7	79
17	CD31+ cells represent highly angiogenic and vasculogenic cells in bone marrow: novel role of nonendothelial CD31+ cells in neovascularization and their therapeutic effects on ischemic vascular disease. *Circulation Research*, **2010**, 107, 602-14	15.7	102
16	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	15.1	91
15	Cell therapy with bone marrow cells for myocardial regeneration. *Antioxidants and Redox Signaling*, **2009**, 11, 1897-911	8.4	13
14	Dual angiogenic and neurotrophic effects of bone marrow-derived endothelial progenitor cells on diabetic neuropathy. *Circulation*, **2009**, 119, 699-708	16.7	101
13	Bone marrow mononuclear cells have neurovascular tropism and improve diabetic neuropathy. *Stem Cells*, **2009**, 27, 1686-96	5.8	52
12	Targeted genome editing in human cells with zinc finger nucleases constructed via modular assembly. *Genome Research*, **2009**, 19, 1279-88	9.7	344
11	Dexamethasone increases angiopoietin-1 and quiescent hematopoietic stem cells: a novel mechanism of dexamethasone-induced hematoprotection. *FEBS Letters*, **2008**, 582, 3509-14	3.8	10
10	Dexamethasone coordinately regulates angiopoietin-1 and VEGF: a mechanism of glucocorticoid-induced stabilization of blood-brain barrier. *Biochemical and Biophysical Research Communications*, **2008**, 372, 243-8	3.4	101
9	Angiopoietin-2 stimulates blood flow recovery after femoral artery occlusion by inducing inflammation and arteriogenesis. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2008**, 28, 1989-95	9.4	49
8	Bone tissue engineering using marrow stromal cells. *Biotechnology and Bioprocess Engineering*, **2007**, 12, 48-53	3.1	12
7	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	6.4	14
6	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, 1053-60	3.4	76

5	Sustained release of ascorbate-2-phosphate and dexamethasone from porous PLGA scaffolds for bone tissue engineering using mesenchymal stem cells. *Biomaterials*, **2003**, 24, 4671-9	15.6	107
4	Interaction of mesenchymal stem cells and osteoblasts for in vitro osteogenesis. *Yonsei Medical Journal*, **2003**, 44, 187-97	3	37
3	Scarless Enriched selection of Genome edited Human Pluripotent Stem Cells Using Induced Drug Resistance		1
2	SpCas9 activity prediction by DeepSpCas9, a deep learning-based model with unparalleled generalization performance		2
1	Prime editing enables precise genome editing in mouse liver and retina		5