Kenneth R Chien

List of Publications by Year in Descending Order

78 papers	11,886 citations	43 h-index	90 g-index
90 ext. papers	13,204 ext. citations	22.6 avg, IF	5.95 L-index

#	Paper	IF	Citations
78	Isolation of human ESC-derived cardiac derivatives and embryonic heart cells for population and single-cell RNA-seq analysis. *STAR Protocols*, **2021**, 2, 100339	1.4	1
77	PHF7 directs cardiac reprogramming. *Nature Cell Biology*, **2021**, 23, 440-442	23.4	1
76	BMP-2 and VEGF-A modRNAs in collagen scaffold synergistically drive bone repair through osteogenic and angiogenic pathways. *Communications Biology*, **2021**, 4, 82	6.7	13
75	Phospholamban antisense oligonucleotides improve cardiac function in murine cardiomyopathy. *Nature Communications*, **2021**, 12, 5180	17.4	5
74	Amnion signals are essential for mesoderm formation in primates. *Nature Communications*, **2021**, 12, 5126	17.4	9
73	An mRNA assay system demonstrates proteasomal-specific degradation contributes to cardiomyopathic phospholamban null mutation. *Molecular Medicine*, **2021**, 27, 102	6.2	0
72	VEGFA mRNA for regenerative treatment of heart failure. *Nature Reviews Drug Discovery*, **2021**,	64.1	4
71	Trajectory mapping of human embryonic stem cell cardiogenesis reveals lineage branch points and an ISL1 progenitor-derived cardiac fibroblast lineage. *Stem Cells*, **2020**, 38, 1267-1278	5.8	6
70	Genome-wide CRISPR screen identifies ZIC2 as an essential gene that controls the cell fate of early mesodermal precursors to human heart progenitors. *Stem Cells*, **2020**, 38, 741-755	5.8	4
69	Cardiac progenitors and paracrine mediators in cardiogenesis and heart regeneration. *Seminars in Cell and Developmental Biology*, **2020**, 100, 29-51	7.5	16
68	Population and Single-Cell Analysis of Human Cardiogenesis Reveals Unique LGR5 Ventricular Progenitors in Embryonic Outflow Tract. *Developmental Cell*, **2019**, 48, 475-490.e7	10.2	35
67	Intradermal delivery of modified mRNA encoding VEGF-A in patients with type 2 diabetes. *Nature Communications*, **2019**, 10, 871	17.4	75
66	Cell-mediated delivery of VEGF modified mRNA enhances blood vessel regeneration and ameliorates murine critical limb ischemia. *Journal of Controlled Release*, **2019**, 310, 103-114	11.7	13
65	In search of the next super models. *EMBO Molecular Medicine*, **2019**, 11, e11502	12	1
64	Regenerating the field of cardiovascular cell therapy. *Nature Biotechnology*, **2019**, 37, 232-237	44.5	90
63	SMAD4 Is Essential for Human Cardiac Mesodermal Precursor Cell Formation. *Stem Cells*, **2019**, 37, 216-228	5.8	8
62	Human ISL1 Ventricular Progenitors Self-Assemble into an In Vivo Functional Heart Patch and Preserve Cardiac Function Post Infarction. *Molecular Therapy*, **2018**, 26, 1644-1659	11.7	22

61	Modified VEGF-A mRNA induces sustained multifaceted microvascular response and accelerates diabetic wound healing. *Scientific Reports*, **2018**, 8, 17509	4.9	43
60	Lncled in to Cardiogenesis. *Cell Stem Cell*, **2018**, 22, 787-789	18	1
59	Biocompatible, Purified mRNA Improves Cardiac Function after Intracardiac Injection 1 Week Post-myocardial Infarction in Swine. *Molecular Therapy - Methods and Clinical Development*, **2018**, 9, 330-346	6.4	73
58	Heart Regeneration 4.0: Matrix Medicine. *Developmental Cell*, **2017**, 42, 7-8	10.2	8
57	Insulin-Like Growth Factor 1 Receptor-Dependent Pathway Drives Epicardial Adipose Tissue Formation After Myocardial Injury. *Circulation*, **2017**, 135, 59-72	16.7	48
56	Endothelin-1 supports clonal derivation and expansion of cardiovascular progenitors derived from human embryonic stem cells. *Nature Communications*, **2016**, 7, 10774	17.4	17
55	Programming and reprogramming a human heart cell. *EMBO Journal*, **2015**, 34, 710-38	13	69
54	Synthetic chemically modified mRNA (modRNA): toward a new technology platform for cardiovascular biology and medicine. *Cold Spring Harbor Perspectives in Medicine*, **2014**, 5, a014035	5.4	34
53	Modeling the mitochondrial cardiomyopathy of Barth syndrome with induced pluripotent stem cell and heart-on-chip technologies. *Nature Medicine*, **2014**, 20, 616-23	50.5	604
52	How to make a cardiomyocyte. *Development (Cambridge)*, **2014**, 141, 4418-31	6.6	97
51	The muscle ankyrin repeat proteins CARP, Ankrd2, and DARP are not essential for normal cardiac development and function at basal conditions and in response to pressure overload. *PLoS ONE*, **2014**, 9, e93638	3.7	36
50	N-cadherin prevents the premature differentiation of anterior heart field progenitors in the pharyngeal mesodermal microenvironment. *Cell Research*, **2014**, 24, 1420-32	24.7	27
49	Manipulation of a VEGF-Notch signaling circuit drives formation of functional vascular endothelial progenitors from human pluripotent stem cells. *Cell Research*, **2014**, 24, 820-41	24.7	59
48	Next-generation models of human cardiogenesis via genome editing. *Cold Spring Harbor Perspectives in Medicine*, **2014**, 4, a013920	5.4	3
47	Cardiovascular regenerative therapeutics via synthetic paracrine factor modified mRNA. *Stem Cell Research*, **2014**, 13, 693-704	1.6	26
46	Disease modeling and phenotypic drug screening for diabetic cardiomyopathy using human induced pluripotent stem cells. *Cell Reports*, **2014**, 9, 810-21	10.6	158
45	Tolerance induction to human stem cell transplants with extension to their differentiated progeny. *Nature Communications*, **2014**, 5, 5629	17.4	25
44	A HCN4+ cardiomyogenic progenitor derived from the first heart field and human pluripotent stem cells. *Nature Cell Biology*, **2013**, 15, 1098-106	23.4	137

43	Modified mRNA directs the fate of heart progenitor cells and induces vascular regeneration after myocardial infarction. *Nature Biotechnology*, **2013**, 31, 898-907	44.5	418
42	Driving vascular endothelial cell fate of human multipotent Isl1+ heart progenitors with VEGF modified mRNA. *Cell Research*, **2013**, 23, 1172-86	24.7	69
41	Regenerative biology: heartbroken embryos heal. *Nature*, **2013**, 498, 439-40	50.4	1
40	Embryonic heart progenitors and cardiogenesis. *Cold Spring Harbor Perspectives in Medicine*, **2013**, 3, a013847	5.4	133
39	Towards regenerative therapy for cardiac disease. *Lancet, The*, **2012**, 379, 933-942	40	191
38	Highly efficient derivation of ventricular cardiomyocytes from induced pluripotent stem cells with a distinct epigenetic signature. *Cell Research*, **2012**, 22, 142-54	24.7	70
37	Bioengineering heart muscle: a paradigm for regenerative medicine. *Annual Review of Biomedical Engineering*, **2011**, 13, 245-67	12	150
36	A common MLP (muscle LIM protein) variant is associated with cardiomyopathy. *Circulation Research*, **2010**, 106, 695-704	15.7	77
35	Pregenerative medicine: developmental paradigms in the biology of cardiovascular regeneration. *Journal of Clinical Investigation*, **2010**, 120, 20-8	15.9	62
34	Stem cell models of cardiac development and disease. *Annual Review of Cell and Developmental Biology*, **2010**, 26, 667-87	12.6	53
33	Human ISL1 heart progenitors generate diverse multipotent cardiovascular cell lineages. *Nature*, **2009**, 460, 113-7	50.4	458
32	Generation of functional ventricular heart muscle from mouse ventricular progenitor cells. *Science*, **2009**, 326, 426-9	33.3	182
31	Regeneration next: toward heart stem cell therapeutics. *Cell Stem Cell*, **2009**, 5, 364-77	18	153
30	Regenerative medicine and human models of human disease. *Nature*, **2008**, 453, 302-5	50.4	73
29	Epicardial progenitors contribute to the cardiomyocyte lineage in the developing heart. *Nature*, **2008**, 454, 109-13	50.4	783
28	Cardiogenesis and the complex biology of regenerative cardiovascular medicine. *Science*, **2008**, 322, 1494-7	33.3	211
27	Islet1 cardiovascular progenitors: a single source for heart lineages?. *Development (Cambridge)*, **2008**, 135, 193-205	6.6	186
26	Thymosin beta4 induces adult epicardial progenitor mobilization and neovascularization. *Nature*, **2007**, 445, 177-82	50.4	534

25	Thymosin beta-4 is essential for coronary vessel development and promotes neovascularization via adult epicardium. *Annals of the New York Academy of Sciences*, **2007**, 1112, 171-88	6.5	53
24	The renewal and differentiation of Isl1+ cardiovascular progenitors are controlled by a Wnt/beta-catenin pathway. *Cell Stem Cell*, **2007**, 1, 165-79	18	268
23	Herceptin and the heart--a molecular modifier of cardiac failure. *New England Journal of Medicine*, **2006**, 354, 789-90	59.2	152
22	Cardiomyopathy associated with microcirculation dysfunction in laminin alpha4 chain-deficient mice. *Journal of Biological Chemistry*, **2006**, 281, 213-20	5.4	58
21	Reversal of calcium cycling defects in advanced heart failure toward molecular therapy. *Journal of the American College of Cardiology*, **2006**, 48, A15-23	15.1	32
20	Multipotent embryonic isl1+ progenitor cells lead to cardiac, smooth muscle, and endothelial cell diversification. *Cell*, **2006**, 127, 1151-65	56.2	812
19	Lost and found: cardiac stem cell therapy revisited. *Journal of Clinical Investigation*, **2006**, 116, 1838-40	15.9	43
18	Postnatal isl1+ cardioblasts enter fully differentiated cardiomyocyte lineages. *Nature*, **2005**, 433, 647-53	50.4	1087
17	The new Silk Road. *Nature*, **2004**, 428, 208-9	50.4	2
16	Chronic phospholamban inhibition prevents progressive cardiac dysfunction and pathological remodeling after infarction in rats. *Journal of Clinical Investigation*, **2004**, 113, 727-36	15.9	125
15	RXR□Null Haematopoietic Cells Fail To Reconstitute Haematopoiesis in Lethally Irradiated Recipient Mice.. *Blood*, **2004**, 104, 2669-2669	2.2	
14	Genotype, phenotype: upstairs, downstairs in the family of cardiomyopathies. *Journal of Clinical Investigation*, **2003**, 111, 175-8	15.9	16
13	Chronic suppression of heart-failure progression by a pseudophosphorylated mutant of phospholamban via in vivo cardiac rAAV gene delivery. *Nature Medicine*, **2002**, 8, 864-71	50.5	311
12	The cardiac mechanical stretch sensor machinery involves a Z disc complex that is defective in a subset of human dilated cardiomyopathy. *Cell*, **2002**, 111, 943-55	56.2	631
11	Absence of pressure overload induced myocardial hypertrophy after conditional inactivation of Galphaq/Galpha11 in cardiomyocytes. *Nature Medicine*, **2001**, 7, 1236-40	50.5	312
10	To Cre or not to Cre: the next generation of mouse models of human cardiac diseases. *Circulation Research*, **2001**, 88, 546-9	15.7	30
9	Effects of deletion of muscle LIM protein on myocyte function. *American Journal of Physiology - Heart and Circulatory Physiology*, **2001**, 280, H2665-73	5.2	26
8	Reply to □Re-evaluating sarcoplasmic reticulum function in heart failure□ *Nature Medicine*, **2000**, 6, 942-3	50.5	25

7	Chronic phospholamban-sarcoplasmic reticulum calcium ATPase interaction is the critical calcium cycling defect in dilated cardiomyopathy. *Cell*, **1999**, 99, 313-22	56.2	432
6	Toward molecular strategies for heart disease--past, present, future. *Japanese Circulation Journal*, **1997**, 61, 91-118		6
5	MLP-deficient mice exhibit a disruption of cardiac cytoarchitectural organization, dilated cardiomyopathy, and heart failure. *Cell*, **1997**, 88, 393-403	56.2	724
4	Cardiotrophin-1 and the role of gp130-dependent signaling pathways in cardiac growth and development. *Journal of Molecular Medicine*, **1997**, 75, 492-501	5.5	75
3	Developmental expression of the murine spliceosome-associated protein mSAP49. *Developmental Dynamics*, **1997**, 208, 482-90	2.9	17
2	Regulation of cardiac gene expression during myocardial growth and hypertrophy: molecular studies of an adaptive physiologic response. *FASEB Journal*, **1991**, 5, 3037-46	0.9	692
1	Amnion signals are essential for mesoderm formation in primates		5