Kenneth R Chien

List of Publications by Citations

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	Postnatal isl1+ cardioblasts enter fully differentiated cardiomyocyte lineages. *Nature*, **2005**, 433, 647-53	50.4	1087
77	Multipotent embryonic isl1+ progenitor cells lead to cardiac, smooth muscle, and endothelial cell diversification. *Cell*, **2006**, 127, 1151-65	56.2	812
76	Epicardial progenitors contribute to the cardiomyocyte lineage in the developing heart. *Nature*, **2008**, 454, 109-13	50.4	783
75	MLP-deficient mice exhibit a disruption of cardiac cytoarchitectural organization, dilated cardiomyopathy, and heart failure. *Cell*, **1997**, 88, 393-403	56.2	724
74	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
73	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
72	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
71	Thymosin beta4 induces adult epicardial progenitor mobilization and neovascularization. *Nature*, **2007**, 445, 177-82	50.4	534
70	Human ISL1 heart progenitors generate diverse multipotent cardiovascular cell lineages. *Nature*, **2009**, 460, 113-7	50.4	458
69	Chronic phospholamban-sarcoplasmic reticulum calcium ATPase interaction is the critical calcium cycling defect in dilated cardiomyopathy. *Cell*, **1999**, 99, 313-22	56.2	432
68	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
67	Absence of pressure overload induced myocardial hypertrophy after conditional inactivation of Galphaq/Galpha11 in cardiomyocytes. *Nature Medicine*, **2001**, 7, 1236-40	50.5	312
66	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
65	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
64	Cardiogenesis and the complex biology of regenerative cardiovascular medicine. *Science*, **2008**, 322, 1494-7	33.3	211
63	Towards regenerative therapy for cardiac disease. *Lancet, The*, **2012**, 379, 933-942	40	191
62	Islet1 cardiovascular progenitors: a single source for heart lineages?. *Development (Cambridge)*, **2008**, 135, 193-205	6.6	186

61	Generation of functional ventricular heart muscle from mouse ventricular progenitor cells. *Science*, **2009**, 326, 426-9	33.3	182
60	Disease modeling and phenotypic drug screening for diabetic cardiomyopathy using human induced pluripotent stem cells. *Cell Reports*, **2014**, 9, 810-21	10.6	158
59	Regeneration next: toward heart stem cell therapeutics. *Cell Stem Cell*, **2009**, 5, 364-77	18	153
58	Herceptin and the heart--a molecular modifier of cardiac failure. *New England Journal of Medicine*, **2006**, 354, 789-90	59.2	152
57	Bioengineering heart muscle: a paradigm for regenerative medicine. *Annual Review of Biomedical Engineering*, **2011**, 13, 245-67	12	150
56	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
55	Embryonic heart progenitors and cardiogenesis. *Cold Spring Harbor Perspectives in Medicine*, **2013**, 3, a013847	5.4	133
54	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
53	How to make a cardiomyocyte. *Development (Cambridge)*, **2014**, 141, 4418-31	6.6	97
52	Regenerating the field of cardiovascular cell therapy. *Nature Biotechnology*, **2019**, 37, 232-237	44.5	90
51	A common MLP (muscle LIM protein) variant is associated with cardiomyopathy. *Circulation Research*, **2010**, 106, 695-704	15.7	77
50	Intradermal delivery of modified mRNA encoding VEGF-A in patients with type 2 diabetes. *Nature Communications*, **2019**, 10, 871	17.4	75
49	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
48	Regenerative medicine and human models of human disease. *Nature*, **2008**, 453, 302-5	50.4	73
47	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
46	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
45	Programming and reprogramming a human heart cell. *EMBO Journal*, **2015**, 34, 710-38	13	69
44	Driving vascular endothelial cell fate of human multipotent Isl1+ heart progenitors with VEGF modified mRNA. *Cell Research*, **2013**, 23, 1172-86	24.7	69

43	Pregenerative medicine: developmental paradigms in the biology of cardiovascular regeneration. *Journal of Clinical Investigation*, **2010**, 120, 20-8	15.9	62
42	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
41	Cardiomyopathy associated with microcirculation dysfunction in laminin alpha4 chain-deficient mice. *Journal of Biological Chemistry*, **2006**, 281, 213-20	5.4	58
40	Stem cell models of cardiac development and disease. *Annual Review of Cell and Developmental Biology*, **2010**, 26, 667-87	12.6	53
39	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
38	Insulin-Like Growth Factor 1 Receptor-Dependent Pathway Drives Epicardial Adipose Tissue Formation After Myocardial Injury. *Circulation*, **2017**, 135, 59-72	16.7	48
37	Lost and found: cardiac stem cell therapy revisited. *Journal of Clinical Investigation*, **2006**, 116, 1838-40	15.9	43
36	Modified VEGF-A mRNA induces sustained multifaceted microvascular response and accelerates diabetic wound healing. *Scientific Reports*, **2018**, 8, 17509	4.9	43
35	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
34	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
33	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
32	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
31	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
30	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
29	Cardiovascular regenerative therapeutics via synthetic paracrine factor modified mRNA. *Stem Cell Research*, **2014**, 13, 693-704	1.6	26
28	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
27	Tolerance induction to human stem cell transplants with extension to their differentiated progeny. *Nature Communications*, **2014**, 5, 5629	17.4	25
26	Reply to URe-evaluating sarcoplasmic reticulum function in heart failureU *Nature Medicine*, **2000**, 6, 942-3	50.5	25

25	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
24	Endothelin-1 supports clonal derivation and expansion of cardiovascular progenitors derived from human embryonic stem cells. *Nature Communications*, **2016**, 7, 10774	17.4	17
23	Developmental expression of the murine spliceosome-associated protein mSAP49. *Developmental Dynamics*, **1997**, 208, 482-90	2.9	17
22	Genotype, phenotype: upstairs, downstairs in the family of cardiomyopathies. *Journal of Clinical Investigation*, **2003**, 111, 175-8	15.9	16
21	Cardiac progenitors and paracrine mediators in cardiogenesis and heart regeneration. *Seminars in Cell and Developmental Biology*, **2020**, 100, 29-51	7.5	16
20	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
19	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
18	Amnion signals are essential for mesoderm formation in primates. *Nature Communications*, **2021**, 12, 5126	17.4	9
17	Heart Regeneration 4.0: Matrix Medicine. *Developmental Cell*, **2017**, 42, 7-8	10.2	8
16	SMAD4 Is Essential for Human Cardiac Mesodermal Precursor Cell Formation. *Stem Cells*, **2019**, 37, 216-228	5.8	8
15	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
14	Toward molecular strategies for heart disease--past, present, future. *Japanese Circulation Journal*, **1997**, 61, 91-118		6
13	Amnion signals are essential for mesoderm formation in primates		5
12	Phospholamban antisense oligonucleotides improve cardiac function in murine cardiomyopathy. *Nature Communications*, **2021**, 12, 5180	17.4	5
11	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
10	VEGFA mRNA for regenerative treatment of heart failure. *Nature Reviews Drug Discovery*, **2021**,	64.1	4
9	Next-generation models of human cardiogenesis via genome editing. *Cold Spring Harbor Perspectives in Medicine*, **2014**, 4, a013920	5.4	3
8	The new Silk Road. *Nature*, **2004**, 428, 208-9	50.4	2

7	Regenerative biology: heartbroken embryos heal. *Nature*, **2013**, 498, 439-40	50.4	1
6	In search of the next super models. *EMBO Molecular Medicine*, **2019**, 11, e11502	12	1
5	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
4	PHF7 directs cardiac reprogramming. *Nature Cell Biology*, **2021**, 23, 440-442	23.4	1
3	Lncled in to Cardiogenesis. *Cell Stem Cell*, **2018**, 22, 787-789	18	1
2	An mRNA assay system demonstrates proteasomal-specific degradation contributes to cardiomyopathic phospholamban null mutation. *Molecular Medicine*, **2021**, 27, 102	6.2	0
1	RXR□Null Haematopoietic Cells Fail To Reconstitute Haematopoiesis in Lethally Irradiated Recipient Mice.. *Blood*, **2004**, 104, 2669-2669	2.2	