Kenneth R Chien

List of Publications by Year
in descending order

83 papers	14,157 citations	57681 46 h-index	58552 86 g-index
90 all docs	90 docs citations	90 times ranked	13931 citing authors

#	Article	IF	Citations
1	Sequencing of a Chinese tetralogy of Fallot cohort reveals clustering mutations in myogenic heart progenitors. JCI Insight, 2022, 7, .	2.3	9
2	VEGFA mRNA for regenerative treatment of heart failure. Nature Reviews Drug Discovery, 2022, 21, 79-80.	21.5	31
3	Migratory and anti-fibrotic programmes define the regenerative potential of human cardiac progenitors. Nature Cell Biology, 2022, 24, 659-671.	4.6	21
4	Epicardium-derived cells organize through tight junctions to replenish cardiac muscle in salamanders. Nature Cell Biology, 2022, 24, 645-658.	4.6	12
5	Blocking phospholamban with VHH intrabodies enhances contractility and relaxation in heart failure. Nature Communications, 2022, 13, .	5.8	7
6	BMP-2 and VEGF-A modRNAs in collagen scaffold synergistically drive bone repair through osteogenic and angiogenic pathways. Communications Biology, 2021, 4, 82.	2.0	43
7	Isolation of human ESC-derived cardiac derivatives and embryonic heart cells for population and single-cell RNA-seq analysis. STAR Protocols, 2021, 2, 100339.	0.5	6
8	PHF7 directs cardiac reprogramming. Nature Cell Biology, 2021, 23, 440-442.	4.6	2
9	Phospholamban antisense oligonucleotides improve cardiac function in murine cardiomyopathy. Nature Communications, 2021, 12, 5180.	5.8	24
10	Amnion signals are essential for mesoderm formation in primates. Nature Communications, 2021, 12, 5126.	5.8	59
11	An mRNA assay system demonstrates proteasomal-specific degradation contributes to cardiomyopathic phospholamban null mutation. Molecular Medicine, 2021, 27, 102.	1.9	1
12	Cardiac progenitors and paracrine mediators in cardiogenesis and heart regeneration. Seminars in Cell and Developmental Biology, 2020, 100, 29-51.	2.3	38
13	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.	1.4	15
14	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.	1.4	15
15	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.	4.8	33
16	Population and Single-Cell Analysis of Human Cardiogenesis Reveals Unique LGR5 Ventricular Progenitors in Embryonic Outflow Tract. Developmental Cell, 2019, 48, 475-490.e7.	3.1	71
17	Intradermal delivery of modified mRNA encoding VEGF-A in patients with type 2 diabetes. Nature Communications, 2019, 10, 871.	5.8	138
18	Regenerating the field of cardiovascular cell therapy. Nature Biotechnology, 2019, 37, 232-237.	9.4	140

#	Article	IF	Citations
19	SMAD4 Is Essential for Human Cardiac Mesodermal Precursor Cell Formation. Stem Cells, 2019, 37, 216-225.	1.4	11
20	In search of the next super models. EMBO Molecular Medicine, 2019, 11, e11502.	3.3	1
21	Human ISL1+ Ventricular Progenitors Self-Assemble into an InÂVivo Functional Heart Patch and Preserve Cardiac Function Post Infarction. Molecular Therapy, 2018, 26, 1644-1659.	3.7	38
22	Modified VEGF-A mRNA induces sustained multifaceted microvascular response and accelerates diabetic wound healing. Scientific Reports, 2018, 8, 17509.	1.6	80
23	Lncâ€™ed in to Cardiogenesis. Cell Stem Cell, 2018, 22, 787-789.	5.2	1
24	Biocompatible, Purified VEGF-A mRNA Improves Cardiac Function after Intracardiac Injection 1 Week Post-myocardial Infarction in Swine. Molecular Therapy - Methods and Clinical Development, 2018, 9, 330-346.	1.8	116
25	Heart Regeneration 4.0: Matrix Medicine. Developmental Cell, 2017, 42, 7-8.	3.1	12
26	Insulin-Like Growth Factor 1 Receptor-Dependent Pathway Drives Epicardial Adipose Tissue Formation After Myocardial Injury. Circulation, 2017, 135, 59-72.	1.6	74
27	Endothelin-1 supports clonal derivation and expansion of cardiovascular progenitors derived from human embryonic stem cells. Nature Communications, 2016, 7, 10774.	5.8	21
28	Programming and reprogramming a human heartÂcell. EMBO Journal, 2015, 34, 710-738.	3.5	96
29	Synthetic Chemically Modified mRNA (modRNA): Toward a New Technology Platform for Cardiovascular Biology and Medicine. Cold Spring Harbor Perspectives in Medicine, 2015, 5, a014035-a014035.	2.9	45
30	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.	1.1	49
31	N-cadherin prevents the premature differentiation of anterior heart field progenitors in the pharyngeal mesodermal microenvironment. Cell Research, 2014, 24, 1420-1432.	5.7	35
32	Manipulation of a VEGF-Notch signaling circuit drives formation of functional vascular endothelial progenitors from human pluripotent stem cells. Cell Research, 2014, 24, 820-841.	5.7	81
33	Next-Generation Models of Human Cardiogenesis via Genome Editing. Cold Spring Harbor Perspectives in Medicine, 2014, 4, a013920-a013920.	2.9	4
34	Cardiovascular regenerative therapeutics via synthetic paracrine factor modified mRNA. Stem Cell Research, 2014, 13, 693-704.	0.3	26
35	Disease Modeling and Phenotypic Drug Screening for Diabetic Cardiomyopathy using Human Induced Pluripotent Stem Cells. Cell Reports, 2014, 9, 810-820.	2.9	206
36	Tolerance induction to human stem cell transplants with extension to their differentiated progeny. Nature Communications, 2014, 5, 5629.	5.8	26

#	Article	IF	Citations
37	Modeling the mitochondrial cardiomyopathy of Barth syndrome with induced pluripotent stem cell and heart-on-chip technologies. Nature Medicine, 2014, 20, 616-623.	15.2	733
38	How to make a cardiomyocyte. Development (Cambridge), 2014, 141, 4418-4431.	1.2	126
39	A HCN4+ cardiomyogenic progenitor derived from the first heart field and human pluripotent stem cells. Nature Cell Biology, 2013, 15, 1098-1106.	4.6	166
40	Modified mRNA directs the fate of heart progenitor cells and induces vascular regeneration after myocardial infarction. Nature Biotechnology, 2013, 31, 898-907.	9.4	528
41	Driving vascular endothelial cell fate of human multipotent Isl1+ heart progenitors with VEGF modified mRNA. Cell Research, 2013, 23, 1172-1186.	5.7	89
42	Heartbroken embryos heal. Nature, 2013, 498, 439-440.	13.7	1
43	Embryonic Heart Progenitors and Cardiogenesis. Cold Spring Harbor Perspectives in Medicine, 2013, 3, a013847-a013847.	2.9	187
44	Highly efficient derivation of ventricular cardiomyocytes from induced pluripotent stem cells with a distinct epigenetic signature. Cell Research, 2012, 22, 142-154.	5.7	77
45	Towards regenerative therapy for cardiac disease. Lancet, The, 2012, 379, 933-942.	6.3	214
46	Bioengineering Heart Muscle: A Paradigm for Regenerative Medicine. Annual Review of Biomedical Engineering, 2011, 13, 245-267.	5.7	172
47	A Common <i>MLP</i> (Muscle LIM Protein) Variant Is Associated With Cardiomyopathy. Circulation Research, 2010, 106, 695-704.	2.0	90
48	Pregenerative medicine: developmental paradigms in the biology of cardiovascular regeneration. Journal of Clinical Investigation, 2010, 120, 20-28.	3.9	68
49	Stem Cell Models of Cardiac Development and Disease. Annual Review of Cell and Developmental Biology, 2010, 26, 667-687.	4.0	63
50	Human ISL1 heart progenitors generate diverse multipotent cardiovascular cell lineages. Nature, 2009, 460, 113-117.	13.7	515
51	Generation of Functional Ventricular Heart Muscle from Mouse Ventricular Progenitor Cells. Science, 2009, 326, 426-429.	6.0	202
52	Regeneration Next: Toward Heart Stem Cell Therapeutics. Cell Stem Cell, 2009, 5, 364-377.	5.2	166
53	Regenerative medicine and human models of human disease. Nature, 2008, 453, 302-305.	13.7	84
54	Epicardial progenitors contribute to the cardiomyocyte lineage in the developing heart. Nature, 2008, 454, 109-113.	13.7	905

#	Article	IF	Citations
55	Cardiogenesis and the Complex Biology of Regenerative Cardiovascular Medicine. Science, 2008, 322, 1494-1497.	6.0	237
56	Islet1 cardiovascular progenitors: a single source for heart lineages?. Development (Cambridge), 2008, 135, 193-205.	1.2	206
57	The Renewal and Differentiation of Isl1+ Cardiovascular Progenitors Are Controlled by a Wnt/Î²-Catenin Pathway. Cell Stem Cell, 2007, 1, 165-179.	5.2	300
58	Thymosin Î²4 induces adult epicardial progenitor mobilization and neovascularization. Nature, 2007, 445, 177-182.	13.7	605
59	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, 171-188.	1.8	64
60	Reversal of Calcium Cycling Defects in Advanced Heart Failure. Journal of the American College of Cardiology, 2006, 48, A15-A23.	1.2	33
61	Multipotent Embryonic Isl1+ Progenitor Cells Lead to Cardiac, Smooth Muscle, and Endothelial Cell Diversification. Cell, 2006, 127, 1151-1165.	13.5	944
62	Herceptin and the Heart â€" A Molecular Modifier of Cardiac Failure. New England Journal of Medicine, 2006, 354, 789-790.	13.9	185
63	Cardiomyopathy Associated with Microcirculation Dysfunction in Laminin Î±4 Chain-deficient Mice*. Journal of Biological Chemistry, 2006, 281, 213-220.	1.6	74
64	Lost and found: cardiac stem cell therapy revisited. Journal of Clinical Investigation, 2006, 116, 1838-1840.	3.9	53
65	Postnatal isl1+ cardioblasts enter fully differentiated cardiomyocyte lineages. Nature, 2005, 433, 647-653.	13.7	1,229
66	The new Silk Road. Nature, 2004, 428, 208-209.	13.7	4
67	Chronic phospholamban inhibition prevents progressive cardiac dysfunction and pathological remodeling after infarction in rats. Journal of Clinical Investigation, 2004, 113, 727-736.	3.9	141
68	RXRÎ± Null Haematopoietic Cells Fail To Reconstitute Haematopoiesis in Lethally Irradiated Recipient Mice.. Blood, 2004, 104, 2669-2669.	0.6	0
69	Calcium and heart failure: the cycle game. Nature Medicine, 2003, 9, 508-509.	15.2	47
70	Genotype, phenotype: upstairs, downstairs in the family of cardiomyopathies. Journal of Clinical Investigation, 2003, 111, 175-178.	3.9	29
71	The Cardiac Mechanical Stretch Sensor Machinery Involves a Z Disc Complex that Is Defective in a Subset of Human Dilated Cardiomyopathy. Cell, 2002, 111, 943-955.	13.5	712
72	Chronic suppression of heart-failure progression by a pseudophosphorylated mutant of phospholamban via in vivo cardiac rAAV gene delivery. Nature Medicine, 2002, 8, 864-871.	15.2	344

#	Article	IF	Citations
73	Effects of deletion of muscle LIM protein on myocyte function. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H2665-H2673.	1.5	30
74	Absence of pressure overload induced myocardial hypertrophy after conditional inactivation of GÎ±q/GÎ±11 in cardiomyocytes. Nature Medicine, 2001, 7, 1236-1240.	15.2	354
75	To Cre or Not To Cre. Circulation Research, 2001, 88, 546-549.	2.0	35
76	Reply to â€˜Re-evaluating sarcoplasmic reticulum function in heart failureâ€™. Nature Medicine, 2000, 6, 942-943.	15.2	27
77	Inflammatory pathways and cardiac repair: the affliction of infarction. Nature Medicine, 1999, 5, 1122-1123.	15.2	23
78	Chronic Phospholambanâ€"Sarcoplasmic Reticulum Calcium ATPase Interaction Is the Critical Calcium Cycling Defect in Dilated Cardiomyopathy. Cell, 1999, 99, 313-322.	13.5	482
79	Toward Molecular Strategies for Heart Disease. Japanese Circulation Journal, 1997, 61, 91-118.	1.0	8
80	MLP-Deficient Mice Exhibit a Disruption of Cardiac Cytoarchitectural Organization, Dilated Cardiomyopathy, and Heart Failure. Cell, 1997, 88, 393-403.	13.5	790
81	Cardiotrophin-1 and the role of gp130-dependent signaling pathways in cardiac growth and development. Journal of Molecular Medicine, 1997, 75, 492-501.	1.7	89
82	Developmental expression of the murine spliceosome-associated protein mSAP49. Developmental Dynamics, 1997, 208, 482-490.	0.8	21
83	Regulation of cardiac gene expression during myocardial growth and hypertrophy: molecular studies of an adaptive physiologic response. FASEB Journal, 1991, 5, 3037-3064.	0.2	743