Kenneth R Boheler

List of Publications by Year
in descending order

108 papers	6,255 citations	76326 40 h-index	74163 75 g-index
110 all docs	110 docs citations	110 times ranked	7822 citing authors

#	Article	IF	Citations
1	Differentiation of Pluripotent Embryonic Stem Cells Into Cardiomyocytes. Circulation Research, 2002, 91, 189-201.	4.5	678
2	Embryonic Stem Cells: Prospects for Developmental Biology and Cell Therapy. Physiological Reviews, 2005, 85, 635-678.	28.8	674
3	A Mass Spectrometric-Derived Cell Surface Protein Atlas. PLoS ONE, 2015, 10, e0121314.	2.5	356
4	AGEMAP: A Gene Expression Database for Aging in Mice. PLoS Genetics, 2007, 3, e201.	3.5	355
5	Embryonic Stem Cells as a Model to Study Cardiac, Skeletal Muscle, and Vascular Smooth Muscle Cell Differentiation. , 2002, 185, 127-156.		172
6	Transcriptome Analysis of Mouse Stem Cells and Early Embryos. PLoS Biology, 2003, 1, e74.	5.6	156
7	Distinct Roles of MicroRNA-1 and -499 in Ventricular Specification and Functional Maturation of Human Embryonic Stem Cell-Derived Cardiomyocytes. PLoS ONE, 2011, 6, e27417.	2.5	153
8	Somatic Stem Cell Marker Promininâ€•1/CD133 Is Expressed in Embryonic Stem Cellâ€"Derived Progenitors. Stem Cells, 2005, 23, 791-804.	3.2	122
9	The ryanodine receptor modulates the spontaneous beating rate of cardiomyocytes during development. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 9225-9230.	7.1	114
10	Endothelin-1 Is Involved in Norepinephrine-Induced Ventricular Hypertrophy In Vivo. Circulation, 1996, 93, 2068-2079.	1.6	110
11	SAGE Identification of Gene Transcripts with Profiles Unique to Pluripotent Mouse R1 Embryonic Stem Cells. Genomics, 2002, 79, 169-176.	2.9	107
12	Characterization and expression of the rat heart sarcoplasmic reticulum Ca2+ -ATPase mRNA. FEBS Letters, 1989, 249, 35-41.	2.8	98
13	Physical developmental cues for the maturation of human pluripotent stem cell-derived cardiomyocytes. Stem Cell Research and Therapy, 2014, 5, 117.	5.5	97
14	Sex- and age-dependent human transcriptome variability: Implications for chronic heart failure. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 2754-2759.	7.1	96
15	B-MYB Is Essential for Normal Cell Cycle Progression and Chromosomal Stability of Embryonic Stem Cells. PLoS ONE, 2008, 3, e2478.	2.5	96
16	Cardiomyocytes purified from differentiated embryonic stem cells exhibit characteristics of early chamber myocardium. Journal of Molecular and Cellular Cardiology, 2003, 35, 1461-1472.	1.9	92
17	Patterns of Expression of Sarcoplasmic Reticulum Ca 2+ -ATPase and Phospholamban mRNAs During Rat Heart Development. Circulation Research, 1995, 76, 616-625.	4.5	92
18	Clenbuterol induces cardiac hypertrophy with normal functional, morphological and molecular features. Cardiovascular Research, 1998, 37, 115-122.	3.8	91

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19	Electrophysiological and contractile function of cardiomyocytes derived from human embryonic stem cells. Progress in Biophysics and Molecular Biology, 2012, 110, 178-195.	2.9	79
20	Molecular mechanisms of cardiomyocyte aging. Clinical Science, 2011, 121, 315-329.	4.3	76
21	A Human Pluripotent Stem Cell Surface N-Glycoproteome Resource Reveals Markers, Extracellular Epitopes, and Drug Targets. Stem Cell Reports, 2014, 3, 185-203.	4.8	73
22	Embryonic stem cells and cardiomyocyte differentiation: phenotypic and molecular analyses. Journal of Cellular and Molecular Medicine, 2005, 9, 804-817.	3.6	72
23	Crucial role of the sarcoplasmic reticulum in the developmental regulation of Ca 2+ transients and contraction in cardiomyocytes derived from embryonic stem cells. FASEB Journal, 2006, 20, 181-183.	0.5	71
24	Gene expression in cardiac hypertrophy. Trends in Cardiovascular Medicine, 1992, 2, 176-182.	4.9	68
25	The Mouse C2C12 Myoblast Cell Surface N-Linked Glycoproteome. Molecular and Cellular Proteomics, 2009, 8, 2555-2569.	3.8	68
26	Developmental cues for the maturation of metabolic, electrophysiological and calcium handling properties of human pluripotent stem cell-derived cardiomyocytes. Stem Cell Research and Therapy, 2014, 5, 17.	5.5	67
27	Stem cell pluripotency: A cellular trait that depends on transcription factors, chromatin state and a checkpoint deficient cell cycle. Journal of Cellular Physiology, 2009, 221, 10-17.	4.1	64
28	Cardiac ryanodine receptors control heart rate and rhythmicity in adult mice. Cardiovascular Research, 2012, 96, 372-380.	3.8	64
29	Pharmacological Modulation of Pressure-Overload Cardiac Hypertrophy. Circulation, 1997, 96, 2239-2246.	1.6	62
30	Proteomic Analysis of Human Pluripotent Stem Cellâ€"Derived, Fetal, and Adult Ventricular Cardiomyocytes Reveals Pathways Crucial for Cardiac Metabolism and Maturation. Circulation: Cardiovascular Genetics, 2015, 8, 427-436.	5.1	61
31	A Cell Surfaceome Map for Immunophenotyping and Sorting Pluripotent Stem Cells. Molecular and Cellular Proteomics, 2012, 11, 303-316.	3.8	58
32	Pluripotency of embryonic stem cells. Cell and Tissue Research, 2008, 331, 5-22.	2.9	56
33	High Efficiency Differentiation of Human Pluripotent Stem Cells to Cardiomyocytes and Characterization by Flow Cytometry. Journal of Visualized Experiments, 2014, , 52010.	0.3	56
34	SAGE identification of differentiation responsive genes in P19 embryonic cells induced to form cardiomyocytes in vitro. Mechanisms of Development, 2002, 117, 25-74.	1.7	54
35	Twoâ€dimensional gel electrophoresis database of murine R1 embryonic stem cells. Proteomics, 2004, 4, 3813-3832.	2.2	54
36	Clenbuterol Induces Hypertrophy of the Latissimus Dorsi Muscle and Heart in the Rat With Molecular and Phenotypic Changes. Circulation, 1995, 92, 483-489.	1.6	52

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37	The molecular biology of heart failure. Journal of the American College of Cardiology, 1993, 22, A30-A33.	2.8	45
38	Long-Term Improvement in Postinfarct Left Ventricular Global and Regional Contractile Function Is Mediated by Embryonic Stem Cellâ€“Derived Cardiomyocytes. Circulation: Cardiovascular Imaging, 2011, 4, 33-41.	2.6	45
39	Integrated transcriptomic and regulatory network analyses identify microRNA-200c as a novel repressor of human pluripotent stem cell-derived cardiomyocyte differentiation and maturation. Cardiovascular Research, 2018, 114, 894-906.	3.8	44
40	Mitogen-Activated Protein Kinase-Activated Protein Kinases 2 and 3 Regulate SERCA2a Expression and Fiber Type Composition To Modulate Skeletal Muscle and Cardiomyocyte Function. Molecular and Cellular Biology, 2013, 33, 2586-2602.	2.3	43
41	WNT-conditioned media differentially affect the proliferation and differentiation of cord blood-derived CD133+ cells in vitro. Differentiation, 2007, 75, 100-111.	1.9	41
42	Sp1 and Sp3 transcription factors are required for trans-activation of the human SERCA2 promoter in cardiomyocytes. Cardiovascular Research, 2003, 60, 347-354.	3.8	38
43	Aging-associated changes in cardiac gene expression. Cardiovascular Research, 2005, 66, 194-204.	3.8	37
44	A novel role for proteomics in the discovery of cellâ€surface markers on stem cells: Scratching the surface. Proteomics - Clinical Applications, 2008, 2, 892-903.	1.6	37
45	The cell surface marker CD36 selectively identifies matured, mitochondria-rich hPSC-cardiomyocytes. Cell Research, 2020, 30, 626-629.	12.0	36
46	A Quantitative and Validated SAGE Transcriptome Reference for Adult Mouse Heart. Genomics, 2002, 80, 213-222.	2.9	35
47	The new role of SAGE in gene discovery. Trends in Biotechnology, 2003, 21, 55-57.	9.3	35
48	The B-MYB Transcriptional Network Guides Cell Cycle Progression and Fate Decisions to Sustain Self-Renewal and the Identity of Pluripotent Stem Cells. PLoS ONE, 2012, 7, e42350.	2.5	35
49	Organic Electrochemical Transistor Arrays for In Vitro Electrophysiology Monitoring of 2D and 3D Cardiac Tissues. Advanced Biology, 2019, 3, e1800248.	3.0	35
50	Transcriptome-Guided Functional Analyses Reveal Novel Biological Properties and Regulatory Hierarchy of Human Embryonic Stem Cell-Derived Ventricular Cardiomyocytes Crucial for Maturation. PLoS ONE, 2013, 8, e77784.	2.5	35
51	The Pro-angiogenic Cytokine Pleiotrophin Potentiates Cardiomyocyte Apoptosis through Inhibition of Endogenous AKT/PKB Activity. Journal of Biological Chemistry, 2007, 282, 34984-34993.	3.4	34
52	Differentiation induction of mouse embryonic stem cells into sinus node-like cells by suramin. International Journal of Cardiology, 2011, 147, 95-111.	1.7	34
53	PTHGRN: unraveling post-translational hierarchical gene regulatory networks using PPI, ChIP-seq and gene expression data. Nucleic Acids Research, 2014, 42, W130-W136.	14.5	34
54	Galanin and galanin receptors in embryonic stem cells: accidental or essential?. Neuropeptides, 2002, 36, 239-245.	2.2	33

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55	Can transcriptome size be estimated from SAGE catalogs?. Bioinformatics, 2003, 19, 443-448.	4.1	33
56	Rhythmic beating of stem cell-derived cardiac cells requires dynamic coupling of electrophysiology and Ca cycling. Journal of Molecular and Cellular Cardiology, 2011, 50, 66-76.	1.9	33
57	Proliferation of mouse embryonic stem cell progeny and the spontaneous contractile activity of cardiomyocytes are affected by microtopography. Developmental Dynamics, 2009, 238, 1964-1973.	1.8	32
58	Cardiomyogenic stem and progenitor cell plasticity and the dissection of cardiopoiesis. Journal of Molecular and Cellular Cardiology, 2008, 45, 475-494.	1.9	31
59	Human pluripotent stem cell-derived cardiomyocytes for heart regeneration, drug discovery and disease modeling: from the genetic, epigenetic, and tissue modeling perspectives. Stem Cell Research and Therapy, 2013, 4, 97.	5.5	31
60	A distant upstream region of the rat multipartite Na + â€“Ca 2+ exchanger NCX1 gene promoter is sufficient to confer cardiac-specific expression. Mechanisms of Development, 2001, 109, 267-279.	1.7	27
61	Embryonic Stem Cell-Derived Cardiomyocyte Heterogeneity and the Isolation of Immature and Committed Cells for Cardiac Remodeling and Regeneration. Stem Cells International, 2011, 2011, 1-10.	2.5	25
62	Epigenetic Regulation of the Electrophysiological Phenotype of Human Embryonic Stem Cell-Derived Ventricular Cardiomyocytes: Insights for Driven Maturation and Hypertrophic Growth. Stem Cells and Development, 2013, 22, 2678-2690.	2.1	25
63	Enhanced Proliferation of Monolayer Cultures of Embryonic Stem (ES) Cell-Derived Cardiomyocytes Following Acute Loss of Retinoblastoma. PLoS ONE, 2008, 3, e3896.	2.5	24
64	Inhibition of an NAD+ Salvage Pathway Provides Efficient and Selective Toxicity to Human Pluripotent Stem Cells. Stem Cells Translational Medicine, 2015, 4, 483-493.	3.3	24
65	Functional Properties of Engineered Heart Slices Incorporating Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes. Stem Cell Reports, 2019, 12, 982-995.	4.8	24
66	Sub-Antihypertensive Doses of Ramipril Normalize Sarcoplasmic Reticulum Calcium ATPase Expression and Function following Cardiac Hypertrophy in Rats. Journal of Molecular and Cellular Cardiology, 1998, 30, 2683-2694.	1.9	23
67	The sarco(endo)plasmic reticulum Ca2+-ATPase gene is regulated at the transcriptional level during compensated left ventricular hypertrophy in the rat. Comptes Rendus De L'AcadÃ©mie Des Sciences SÃ©rie 3, Sciences De La Vie, 1997, 320, 963-969.	0.8	22
68	Can Exogenous Stem Cells Be Used in Transplantation?. Cells Tissues Organs, 1999, 165, 237-245.	2.3	22
69	Mitochondrial Ca2+ flux modulates spontaneous electrical activity in ventricular cardiomyocytes. PLoS ONE, 2018, 13, e0200448.	2.5	22
70	Concise Review: Cell Surface <i>N</i>-Linked Glycoproteins as Potential Stem Cell Markers and Drug Targets. Stem Cells Translational Medicine, 2017, 6, 131-138.	3.3	21
71	Altered Electrical, Biomolecular, and Immunologic Phenotypes in a Novel Patient-Derived Stem Cell Model of Desmoglein-2 Mutant ARVC. Journal of Clinical Medicine, 2021, 10, 3061.	2.4	21
72	Pluripotent stem cell heterogeneity and the evolving role of proteomic technologies in stem cell biology. Proteomics, 2011, 11, 3947-3961.	2.2	20

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73	An integrative method to decode regulatory logics in gene transcription. Nature Communications, 2017, 8, 1044.	12.8	19
74	Signals from Embryonic Fibroblasts Induce Adult Intestinal Epithelial Cells to Form Nestin-Positive Cells with Proliferation and Multilineage Differentiation Capacity In Vitro. Stem Cells, 2006, 24, 2085-2097.	3.2	18
75	Expanding the mouse embryonic stem cell proteome: Combining three proteomic approaches. Proteomics, 2010, 10, 2728-2732.	2.2	17
76	Plant Homeo Domain Finger Protein 8 Regulates Mesodermal and Cardiac Differentiation of Embryonic Stem Cells Through Mediating the Histone Demethylation of <i>pmaip1</i>. Stem Cells, 2016, 34, 1527-1540.	3.2	16
77	Cardiomyocytes Derived From Embryonic Stem Cells. , 2005, 108, 417-436.		15
78	Discovering altered genomic expression patterns in heart: transcriptome determination by serial analysis of gene expression. European Journal of Heart Failure, 2001, 3, 271-281.	7.1	14
79	Are These Cardiomyocytes? Protocol Development Reveals Impact of Sample Preparation on the Accuracy of Identifying Cardiomyocytes by Flow Cytometry. Stem Cell Reports, 2019, 12, 395-410.	4.8	14
80	Analysis of altered genomic expression profiles in the senescent and diseased myocardium using cDNA microarrays. European Journal of Heart Failure, 2002, 4, 687-697.	7.1	13
81	ES Cell Differentiation to the Cardiac Lineage. Methods in Enzymology, 2003, 365, 228-241.	1.0	13
82	Pluripotency of human embryonic and induced pluripotent stem cells for cardiac and vascular regeneration. Thrombosis and Haemostasis, 2010, 104, 23-29.	3.4	13
83	Maturing heart muscle cells: Mechanisms and transcriptomic insights. Seminars in Cell and Developmental Biology, 2021, 119, 49-60.	5.0	13
84	Ascorbic acid promotes cardiomyogenesis through SMAD1 signaling in differentiating mouse embryonic stem cells. PLoS ONE, 2017, 12, e0188569.	2.5	13
85	Low-dose ramipril treatment improves relaxation and calcium cycling after established cardiac hypertrophy. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H1029-H1038.	3.2	12
86	Linkage of cardiac gene expression profiles and ETS2 with lifespan variability in rats. Aging Cell, 2012, 11, 350-359.	6.7	12
87	Nâ€glycoprotein surfaceomes of four developmentally distinct mouse cell types. Proteomics - Clinical Applications, 2014, 8, 603-609.	1.6	12
88	Linkage of Pluripotent Stem Cell- Associated Transcripts to Regulatory Gene Networks. Cells Tissues Organs, 2008, 188, 31-45.	2.3	9
89	Human ESC/iPSC-based â€˜omicsâ€™ and bioinformatics for translational research. Drug Discovery Today: Disease Models, 2012, 9, e161-e170.	1.2	8
90	Importance of evaluating protein glycosylation in pluripotent stem cell-derived cardiomyocytes for research and clinical applications. Pflugers Archiv European Journal of Physiology, 2021, 473, 1041-1059.	2.8	8

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91	Serial Analysis of Gene Expression (SAGE). Methods in Molecular Biology, 2007, 366, 41-59.	0.9	8
92	Induced pluripotent stem cell-derived vascular smooth muscle cells. Vascular Biology (Bristol,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702	3.2	8
93	Regulation of expression of contractile proteins with cardiac hypertrophy and failure. Molecular and Cellular Biochemistry, 1996, 157, 181-9.	3.1	6
94	Immunophenotyping of Live Human Pluripotent Stem Cells by Flow Cytometry. Methods in Molecular Biology, 2018, 1722, 127-149.	0.9	6
95	Cell surface markers for immunophenotyping human pluripotent stem cell-derived cardiomyocytes. Pflugers Archiv European Journal of Physiology, 2021, 473, 1023-1039.	2.8	6
96	Ouabain treatment is associated with upregulation of phosphatase inhibitor-1 and Na+/Ca2+-exchanger and Î²-adrenergic sensitization in rat hearts. Biochemical and Biophysical Research Communications, 2004, 318, 219-226.	2.1	5
97	Myocardial aging and embryonic stem cell biology. Advances in Cell Aging and Gerontology, 2002, , 141-176.	0.1	4
98	SAGE Analysis to Identify Embryonic Stem Cell-Predominant Transcripts. , 2006, 329, 195-222.		3
99	The golden age of cardiomyogenic stem cells: avoiding a foolâ€™s fate. Expert Review of Cardiovascular Therapy, 2009, 7, 1-4.	1.5	3
100	Cardiomyocytes derived from pluripotent stem cells: Progress and prospects from China. Experimental Cell Research, 2013, 319, 120-125.	2.6	2
101	Discovery of Surface Target Proteins Linking Drugs, Molecular Markers, Gene Regulation, Protein Networks, and Disease by Using a Web-Based Platform Targets-search. Methods in Molecular Biology, 2018, 1722, 331-344.	0.9	2
102	Cardiac Na+-Ca2+ exchanger 1 (ncx1h) is critical for the ventricular cardiomyocyte formation via regulating the expression levels of gata4 and hand2 in zebrafish. Science China Life Sciences, 2021, 64, 255-268.	4.9	2
103	Consensus Comparative Analysis of Human Embryonic Stem Cell-Derived Cardiomyocytes. PLoS ONE, 2015, 10, e0125442.	2.5	1
104	Cardiac Development. Medical Intelligence Unit, 1995, , 25-78.	0.2	1
105	Gene Expression in Cardiac Hypertrophy. Medical Intelligence Unit, 1995, , 165-236.	0.2	1
106	Overview: The Molecular Phenotype of Normal and Impaired Relaxation. , 1994, , 3-6.		0
107	Special issue on recent progress with hPSC-derived cardiovascular cells for organoids, engineered myocardium, drug discovery, disease models, and therapy. Pflugers Archiv European Journal of Physiology, 2021, 473, 983-988.	2.8	0
108	Abstract 15961: Syncytial Model of Type 2 Long QT Syndrome Derived From Human iPS Cells Can Be Paced and Responds to Ikr Block and Activation. Circulation, 2014, 130, .	1.6	0