Wolfram-Hubertus H Zimmermann

List of Publications by Year
in descending order

182 papers	11,934 citations	26630 56 h-index	29157 104 g-index
194 all docs	194 docs citations	194 times ranked	12676 citing authors

#	Article	IF	Citations
1	Engineered heart tissue grafts improve systolic and diastolic function in infarcted rat hearts. Nature Medicine, 2006, 12, 452-458.	30.7	928
2	Tissue Engineering of a Differentiated Cardiac Muscle Construct. Circulation Research, 2002, 90, 223-230.	4.5	860
3	Defined Engineered Human Myocardium With Advanced Maturation for Applications in Heart Failure Modeling and Repair. Circulation, 2017, 135, 1832-1847.	1.6	462
4	Three-dimensional engineered heart tissue from neonatal rat cardiac myocytes. Biotechnology and Bioengineering, 2000, 68, 106-114.	3.3	440
5	Human Engineered Heart Tissue as a Versatile Tool in Basic Research and Preclinical Toxicology. PLoS ONE, 2011, 6, e26397.	2.5	305
6	Myeloperoxidase acts as a profibrotic mediator of atrial fibrillation. Nature Medicine, 2010, 16, 470-474.	30.7	283
7	Optimizing Engineered Heart Tissue for Therapeutic Applications as Surrogate Heart Muscle. Circulation, 2006, 114, I-72-I-78.	1.6	264
8	Engineered heart tissue for regeneration of diseased hearts. Biomaterials, 2004, 25, 1639-1647.	11.4	249
9	Engineering Myocardial Tissue. Circulation Research, 2005, 97, 1220-1231.	4.5	235
10	Extracellular Signal-Regulated Kinases 1 and 2 Regulate the Balance Between Eccentric and Concentric Cardiac Growth. Circulation Research, 2011, 108, 176-183.	4.5	217
11	Deep phenotyping of human induced pluripotent stem cellâ€"derived atrial and ventricular cardiomyocytes. JCI Insight, 2018, 3, .	5.0	214
12	Hepatocyte Growth Factor or Vascular Endothelial Growth Factor Gene Transfer Maximizes Mesenchymal Stem Cellâ€"Based Myocardial Salvage After Acute Myocardial Infarction. Circulation, 2009, 120, S247-54.	1.6	202
13	Correction of diverse muscular dystrophy mutations in human engineered heart muscle by single-site genome editing. Science Advances, 2018, 4, eaap9004.	10.3	200
14	Human Engineered Heart Muscles Engraft and Survive Long Term in a Rodent Myocardial Infarction Model. Circulation Research, 2015, 117, 720-730.	4.5	197
15	Cardiac Grafting of Engineered Heart Tissue in Syngenic Rats. Circulation, 2002, 106, .	1.6	193
16	Cardiac grafting of engineered heart tissue in syngenic rats. Circulation, 2002, 106, I151-7.	1.6	189
17	Towards better definition, quantification and treatment of fibrosis in heart failure. A scientific roadmap by the Committee of Translational Research of the Heart Failure Association (HFA) of the European Society of Cardiology. European Journal of Heart Failure, 2019, 21, 272-285.	7.1	182
18	Cardiac tissue engineering for replacement therapy. Heart Failure Reviews, 2003, 8, 259-269.	3.9	168

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19	Extracellular Matrix Secretion by Cardiac Fibroblasts. Circulation Research, 2013, 113, 1138-1147.	4.5	162
20	Heme oxygenase-1 and its reaction product, carbon monoxide, prevent inflammation-related apoptotic liver damage in mice. Hepatology, 2003, 38, 909-918.	7.3	158
21	Heart muscle engineering: An update on cardiac muscle replacement therapy. Cardiovascular Research, 2006, 71, 419-429.	3.8	151
22	Comparative study of human-induced pluripotent stem cells derived from bone marrow cells, hair keratinocytes, and skin fibroblasts. European Heart Journal, 2013, 34, 2618-2629.	2.2	144
23	Distilling complexity to advance cardiac tissue engineering. Science Translational Medicine, 2016, 8, 342ps13.	12.4	138
24	Patching the Heart. Circulation Research, 2013, 113, 922-932.	4.5	131
25	Engineered heart tissue models from hiPSC-derived cardiomyocytes and cardiac ECM for disease modeling and drug testing applications. Acta Biomaterialia, 2019, 92, 145-159.	8.3	129
26	Physiologic force-frequency response in engineered heart muscle by electromechanical stimulation. Biomaterials, 2015, 60, 82-91.	11.4	128
27	Terminal Differentiation, Advanced Organotypic Maturation, and Modeling of Hypertrophic Growth in Engineered Heart Tissue. Circulation Research, 2011, 109, 1105-1114.	4.5	124
28	Catecholamine-Dependent Î2-Adrenergic Signaling in a Pluripotent Stem Cell ModelÂof Takotsubo Cardiomyopathy. Journal of the American College of Cardiology, 2017, 70, 975-991.	2.8	124
29	Treatments targeting inotropy. European Heart Journal, 2019, 40, 3626-3644.	2.2	123
30	miR-133a Enhances the Protective Capacity of Cardiac Progenitors Cells after Myocardial Infarction. Stem Cell Reports, 2014, 3, 1029-1042.	4.8	118
31	Phosphodiesterase-2 Is Up-Regulated in Human Failing Hearts and Blunts Î2-Adrenergic Responses in Cardiomyocytes. Journal of the American College of Cardiology, 2013, 62, 1596-1606.	2.8	115
32	Lipopolysaccharides induced inflammatory responses and electrophysiological dysfunctions in human-induced pluripotent stem cell derived cardiomyocytes. Scientific Reports, 2017, 7, 2935.	3.3	111
33	Passive Stretch Induces Structural and Functional Maturation of Engineered Heart Muscle as Predicted by Computational Modeling. Stem Cells, 2018, 36, 265-277.	3.2	111
34	All naturally occurring autoantibodies against the NMDA receptor subunit NR1 have pathogenic potential irrespective of epitope and immunoglobulin class. Molecular Psychiatry, 2017, 22, 1776-1784.	7.9	110
35	Thyroid Hormone Regulates Developmental Titin Isoform Transitions via the Phosphatidylinositol-3-Kinase/ AKT Pathway. Circulation Research, 2008, 102, 439-447.	4.5	100
36	Parthenogenetic stem cells for tissue-engineered heart repair. Journal of Clinical Investigation, 2013, 123, 1285-1298.	8.2	96

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37	Application of Microphysiological Systems to Enhance Safety Assessment in Drug Discovery. Annual Review of Pharmacology and Toxicology, 2018, 58, 65-82.	9.4	95
38	Phosphatase inhibitor-1-deficient mice are protected from catecholamine-induced arrhythmias and myocardial hypertrophy. Cardiovascular Research, 2008, 80, 396-406.	3.8	93
39	Diastolic dysfunction and arrhythmias caused by overexpression of CaMKIIÎ´C can be reversed by inhibition of late Na+ current. Basic Research in Cardiology, 2011, 106, 263-272.	5.9	91
40	A Common <i>MLP</i> (Muscle LIM Protein) Variant Is Associated With Cardiomyopathy. Circulation Research, 2010, 106, 695-704.	4.5	90
41	ESC Working Group on Cellular Biology of the Heart: position paper for Cardiovascular Research: tissue engineering strategies combined with cell therapies for cardiac repair in ischaemic heart disease and heart failure. Cardiovascular Research, 2019, 115, 488-500.	3.8	90
42	Development of a Biological Ventricular Assist Device: Preliminary Data From a Small Animal Model. Circulation, 2007, 116, I-16-I-23.	1.6	88
43	Modeling Short QT Syndrome Using Humanâ€Induced Pluripotent Stem Cellâ€"Derived Cardiomyocytes. Journal of the American Heart Association, 2018, 7, .	3.7	88
44	Heme oxygenase-1 and its reaction product, carbon monoxide, prevent inflammation-related apoptotic liver damage in mice. Hepatology, 2003, 38, 909-918.	7.3	86
45	Severe DCM phenotype of patient harboring RBM20 mutation S635A can be modeled by patient-specific induced pluripotent stem cell-derived cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2017, 113, 9-21.	1.9	84
46	Functional correction of dystrophin actin binding domain mutations by genome editing. JCI Insight, 2017, 2, .	5.0	80
47	Telethonin Deficiency Is Associated With Maladaptation to Biomechanical Stress in the Mammalian Heart. Circulation Research, 2011, 109, 758-769.	4.5	78
48	Developmental GABA polarity switch and neuronal plasticity in Bioengineered Neuronal Organoids. Nature Communications, 2020, 11, 3791.	12.8	77
49	Widespread Expression of Erythropoietin Receptor in Brain and Its Induction by Injury. Molecular Medicine, 2015, 21, 803-815.	4.4	73
50	Cardiac tissue engineering. Transplant Immunology, 2002, 9, 315-321.	1.2	71
51	Cardiac Tissue Engineering: Implications for Pediatric Heart Surgery. Pediatric Cardiology, 2009, 30, 716-723.	1.3	70
52	Sex-specific regulation of collagen I and III expression by 17Î²-Estradiol in cardiac fibroblasts: role of estrogen receptors. Cardiovascular Research, 2019, 115, 315-327.	3.8	68
53	3D engineered heart tissue for replacement therapy. Basic Research in Cardiology, 2002, 97, 1-1.	5.9	64
54	Mechanical stimulation in the engineering of heart muscle. Advanced Drug Delivery Reviews, 2016, 96, 156-160.	13.7	62

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55	Inhibition of exosome release by ketotifen enhances sensitivity of cancer cells to doxorubicin. Cancer Biology and Therapy, 2018, 19, 25-33.	3.4	61
56	Ion Channel Expression and Characterization in Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes. Stem Cells International, 2018, 2018, 1-14.	2.5	60
57	Truncated titin proteins and titin haploinsufficiency are targets for functional recovery in human cardiomyopathy due to <i>TTN</i> mutations. Science Translational Medicine, 2021, 13, eabd3079.	12.4	59
58	Sensing Cardiac Electrical Activity With a Cardiac Myocyteâ€“Targeted Optogenetic Voltage Indicator. Circulation Research, 2015, 117, 401-412.	4.5	57
59	Estradiol protection against toxic effects of catecholamine on electrical properties in human-induced pluripotent stem cell derived cardiomyocytes. International Journal of Cardiology, 2018, 254, 195-202.	1.7	55
60	Key role of myosin light chain (MLC) kinase-mediated MLC2a phosphorylation in the ?-adrenergic positive inotropic effect in human atrium. Cardiovascular Research, 2005, 65, 211-220.	3.8	53
61	Extracellular Vesicles Derived from Neural Progenitor Cellsâ€“â€“a Preclinical Evaluation for Stroke Treatment in Mice. Translational Stroke Research, 2021, 12, 185-203.	4.2	51
62	Embryonic Stem Cells for Cardiac Muscle Engineering. Trends in Cardiovascular Medicine, 2007, 17, 134-140.	4.9	50
63	Electrical dysfunctions in human-induced pluripotent stem cell-derived cardiomyocytes from a patient with an arrhythmogenic right ventricular cardiomyopathy. Europace, 2018, 20, f46-f56.	1.7	50
64	Comparison of Non-human Primate versus Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes for Treatment of Myocardial Infarction. Stem Cell Reports, 2018, 10, 422-435.	4.8	49
65	Systematic Evaluation of Anti-apoptotic Growth Factor Signaling in Vascular Smooth Muscle Cells. Journal of Biological Chemistry, 2005, 280, 14168-14176.	3.4	47
66	Disruption of Platelet-Derived Growth Factorâ€“Dependent Phosphatidylinositol 3-Kinase and Phospholipase CÎ³ 1 Activity Abolishes Vascular Smooth Muscle Cell Proliferation and Migration and Attenuates Neointima Formation In Vivo. Journal of the American College of Cardiology, 2011, 57, 2527-2538.	2.8	44
67	Transforming Growth Factor Î²1 Oppositely Regulates the Hypertrophic and Contractile Response to Î²-Adrenergic Stimulation in the Heart. PLoS ONE, 2011, 6, e26628.	2.5	44
68	Intronic CRISPR Repair in a Preclinical Model of Noonan Syndromeâ€“Associated Cardiomyopathy. Circulation, 2020, 142, 1059-1076.	1.6	43
69	Basic and Translational Research in Cardiac Repair and Regeneration. Journal of the American College of Cardiology, 2021, 78, 2092-2105.	2.8	42
70	PDGF-BB protects cardiomyocytes from apoptosis and improves contractile function of engineered heart tissue. Journal of Molecular and Cellular Cardiology, 2010, 48, 1316-1323.	1.9	41
71	Regenerative potential of epicardium-derived extracellular vesicles mediated by conserved miRNA transfer. Cardiovascular Research, 2022, 118, 597-611.	3.8	41
72	Ion Channel Dysfunctions in Dilated Cardiomyopathy in Limb-Girdle Muscular Dystrophy. Circulation Genomic and Precision Medicine, 2018, 11, e001893.	3.6	40

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73	Targeted disruption of Hspa4 gene leads to cardiac hypertrophy and fibrosis. Journal of Molecular and Cellular Cardiology, 2012, 53, 459-468.	1.9	39
74	Increased myocardial SERCA expression in early type 2 diabetes mellitus is insulin dependent: In vivo and in vitro data. Cardiovascular Diabetology, 2012, 11, 57.	6.8	39
75	Inhibition of aquaporin-1 prevents myocardial remodeling by blocking the transmembrane transport of hydrogen peroxide. Science Translational Medicine, 2020, 12, .	12.4	39
76	Biomechanical regulation of in vitro cardiogenesis for tissue-engineered heart repair. Stem Cell Research and Therapy, 2013, 4, 137.	5.5	37
77	CRISPR-Mediated Activation of Endogenous Gene Expression in the Postnatal Heart. Circulation Research, 2020, 126, 6-24.	4.5	37
78	Adenovirus-delivered short hairpin RNA targeting PKCÎ± improves contractile function in reconstituted heart tissue. Journal of Molecular and Cellular Cardiology, 2007, 43, 371-376.	1.9	35
79	The Effect of Mesenchymal Stem Cell Osteoblastic Differentiation on the Mechanical Properties of Engineered Bone-Like Tissue. Tissue Engineering - Part A, 2011, 17, 2321-2329.	3.1	35
80	Evolutionarily conserved intercalated disc protein Tmem65 regulates cardiac conduction and connexin 43 function. Nature Communications, 2015, 6, 8391.	12.8	35
81	Krueppel â€like factor 15 regulates Wnt/Î²â€catenin transcription and controls cardiac progenitor cell fate in the postnatal heart. EMBO Molecular Medicine, 2012, 4, 992-1007.	6.9	34
82	Cardiac optogenetics: using light to monitor cardiac physiology. Basic Research in Cardiology, 2017, 112, 56.	5.9	33
83	A cellular model of Brugada syndrome with SCN10A variants using human-induced pluripotent stem cell-derived cardiomyocytes. Europace, 2019, 21, 1410-1421.	1.7	33
84	Embryonic and embryonic-like stem cells in heart muscle engineering. Journal of Molecular and Cellular Cardiology, 2011, 50, 320-326.	1.9	32
85	Cardiac Differentiation of Human Embryonic Stem Cells and their Assembly into Engineered Heart Muscle. Current Protocols in Cell Biology, 2012, 55, Unit23.8.	2.3	31
86	Myocardial Tissue Engineering for Regenerative Applications. Current Cardiology Reports, 2017, 19, 78.	2.9	29
87	Studying Brugada Syndrome With an SCN1B Variants in Human-Induced Pluripotent Stem Cell-Derived Cardiomyocytes. Frontiers in Cell and Developmental Biology, 2019, 7, 261.	3.7	29
88	Troponin destabilization impairs sarcomere-cytoskeleton interactions in iPSC-derived cardiomyocytes from dilated cardiomyopathy patients. Scientific Reports, 2020, 10, 209.	3.3	29
89	Common MicroRNA Signatures in Cardiac Hypertrophic and Atrophic Remodeling Induced by Changes in Hemodynamic Load. PLoS ONE, 2010, 5, e14263.	2.5	29
90	A microRNA signature that correlates with cognition and is a target against cognitive decline. EMBO Molecular Medicine, 2021, 13, e13659.	6.9	29

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91	Hyperthermia Influences the Effects of Sodium Channel Blocking Drugs in Human-Induced Pluripotent Stem Cell-Derived Cardiomyocytes. PLoS ONE, 2016, 11, e0166143.	2.5	28
92	T helper cells with specificity for an antigen in cardiomyocytes promote pressure overload-induced progression from hypertrophy to heart failure. Scientific Reports, 2017, 7, 15998.	3.3	28
93	Inhibition of Rho-associated kinases suppresses cardiac myofibroblast function in engineered connective and heart muscle tissues. Journal of Molecular and Cellular Cardiology, 2019, 134, 13-28.	1.9	28
94	Collagen-Based Engineered Heart Muscle. Methods in Molecular Biology, 2014, 1181, 167-176.	0.9	28
95	Modeling myocardial growth and hypertrophy in engineered heart muscle. Trends in Cardiovascular Medicine, 2014, 24, 7-13.	4.9	25
96	Remuscularizing Failing Hearts with Tissue Engineered Myocardium. Antioxidants and Redox Signaling, 2009, 11, 2011-2023.	5.4	24
97	The Cardiogenic Niche as a Fundamental Building Block of Engineered Myocardium. Cells Tissues Organs, 2012, 195, 82-93.	2.3	24
98	Alterations of the preproenkephalin system in cardiac hypertrophy and its role in atrioventricular conduction. Cardiovascular Research, 2006, 69, 412-422.	3.8	23
99	Electrical Coupling of Cardiac Myocyte Cell Sheets to the Heart. Circulation Research, 2006, 98, 573-575.	4.5	23
100	Cardiac Î±-Actin (<i>ACTC1</i>) Gene Mutation Causes Atrial-Septal Defects Associated With Late-Onset Dilated Cardiomyopathy. Circulation Genomic and Precision Medicine, 2019, 12, e002491.	3.6	23
101	Endothelin-1 and isoprenaline co-stimulation causes contractile failure which is partially reversed by MEK inhibition. Cardiovascular Research, 2005, 68, 464-474.	3.8	22
102	Engineering bioartificial tracheal tissue using hybrid fibroblast-mesenchymal stem cell cultures in collagen hydrogelsâ˜†. Interactive Cardiovascular and Thoracic Surgery, 2011, 12, 156-161.	1.1	22
103	Erythropoietin Responsive Cardiomyogenic Cells Contribute to Heart Repair Post Myocardial Infarction. Stem Cells, 2014, 32, 2480-2491.	3.2	22
104	Non-Human Primate iPSC Generation, Cultivation, and Cardiac Differentiation under Chemically Defined Conditions. Cells, 2020, 9, 1349.	4.1	22
105	Cardiac macrotissues-on-a-plate models for phenotypic drug screens. Advanced Drug Delivery Reviews, 2019, 140, 93-100.	13.7	21
106	Drug Testing in Humanâ€Induced Pluripotent Stem Cellâ€"Derived Cardiomyocytes From a Patient With Short <scp>QT</scp> Syndrome Type 1. Clinical Pharmacology and Therapeutics, 2019, 106, 642-651.	4.7	21
107	Regeneration competent satellite cell niches in rat engineered skeletal muscle. FASEB BioAdvances, 2019, 1, 731-746.	2.4	21
108	CD8+-T Cells With Specificity for a Model Antigen in Cardiomyocytes Can Become Activated After Transverse Aortic Constriction but Do Not Accelerate Progression to Heart Failure. Frontiers in Immunology, 2018, 9, 2665.	4.8	20

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109	Insights into therapeutic products, preclinical research models, and clinical trials in cardiac regenerative and reparative medicine: where are we now and the way ahead. Current opinion paper of the ESC Working Group on Cardiovascular Regenerative and Reparative Medicine. Cardiovascular Research, 2021, 117, 1428-1433.	3.8	20
110	Myocardial Tissue Engineering and Heart Muscle Repair. Current Pharmaceutical Biotechnology, 2013, 14, 4-11.	1.6	19
111	Skin Repair Using a Porcine Collagen I/III Membraneâ€"Vascularization and Epithelization Properties. Dermatologic Surgery, 2010, 36, 919-930.	0.8	18
112	p63RhoGEF regulates auto- and paracrine signaling in cardiac fibroblasts. Journal of Molecular and Cellular Cardiology, 2015, 88, 39-54.	1.9	18
113	KLF15-Wntâ€"Dependent Cardiac Reprogramming Up-Regulates SHISA3 in the Mammalian Heart. Journal of the American College of Cardiology, 2019, 74, 1804-1819.	2.8	17
114	Magnetic Resonance Imaging of Cardiac Strain Pattern Following Transplantation of Human Tissue Engineered Heart Muscles. Circulation: Cardiovascular Imaging, 2016, 9, .	2.6	16
115	Agonistic and antagonistic roles of fibroblasts and cardiomyocytes on viscoelastic stiffening of engineered human myocardium. Progress in Biophysics and Molecular Biology, 2019, 144, 51-60.	2.9	16
116	Generation of Engineered Human Myocardium in a Multi-well Format. STAR Protocols, 2020, 1, 100032.	1.2	16
117	Reproducibility of transthoracic echocardiography in small animals using clinical equipment. Coronary Artery Disease, 2007, 18, 283-291.	0.7	15
118	The Four and a Half LIM-Domain 2 Controls Early Cardiac Cell Commitment and Expansion Via Regulating Î²-Catenin-Dependent Transcription. Stem Cells, 2013, 31, 928-940.	3.2	15
119	Preservation of left ventricular function and morphology in volume-loaded versus volume-unloaded heterotopic heart transplants. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 305, H533-H541.	3.2	15
120	Myocardial Tissue Engineering and Heart Muscle Repair. Current Pharmaceutical Biotechnology, 2013, 14, 4-11.	1.6	15
121	RhoA Ambivalently Controls Prominent Myofibroblast Characteritics by Involving Distinct Signaling Routes. PLoS ONE, 2015, 10, e0137519.	2.5	14
122	S100A1 DNA-based Inotropic Therapy Protects Against Proarrhythmogenic Ryanodine Receptor 2 Dysfunction. Molecular Therapy, 2015, 23, 1320-1330.	8.2	14
123	Myocardial tissue engineering strategies for heart repair: current state of the art. Interactive Cardiovascular and Thoracic Surgery, 2018, 27, 916-920.	1.1	14
124	Remuscularization of the failing heart. Journal of Physiology, 2017, 595, 3685-3690.	2.9	13
125	Generation of homozygous CRISPRa human induced pluripotent stem cell (hiPSC) lines for sustained endogenous gene activation. Stem Cell Research, 2020, 48, 101944.	0.7	13
126	Tissue engineered heart repair from preclinical models to first-in-patient studies. Current Opinion in Physiology, 2020, 14, 70-77.	1.8	13

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127	Tuning Wnt-signaling to enhance cardiomyogenesis in human embryonic and induced pluripotent stem cells. Journal of Molecular and Cellular Cardiology, 2011, 51, 277-279.	1.9	12
128	X-ray diffraction imaging of cardiac cells and tissue. Progress in Biophysics and Molecular Biology, 2019, 144, 151-165.	2.9	12
129	Preclinical evidence for the therapeutic value of TBX5 normalization in arrhythmia control. Cardiovascular Research, 2021, 117, 1908-1922.	3.8	12
130	Polymers flex their muscles. Nature Materials, 2008, 7, 932-933.	27.5	11
131	Computational Detection of Stage-Specific Transcription Factor Clusters during Heart Development. Frontiers in Genetics, 2016, 7, 33.	2.3	11
132	Engineered Heart Repair. Clinical Pharmacology and Therapeutics, 2017, 102, 197-199.	4.7	11
133	Tissue engineering of aortic heart valves. Cardiovascular Research, 2003, 60, 460-462.	3.8	10
134	Real-Time Myocardial Contrast Echocardiography for Assessing Perfusion and Function in Healthy and Infarcted Wistar Rats. Ultrasound in Medicine and Biology, 2008, 34, 47-55.	1.5	10
135	Impact of AT2 Receptor Deficiency on Postnatal Cardiovascular Development. PLoS ONE, 2012, 7, e47916.	2.5	10
136	Cardiac tissue engineering: a clinical perspective. Future Cardiology, 2007, 3, 435-445.	1.2	9
137	Muscarinic receptors promote pacemaker fate at the expense of secondary conduction system tissue in zebrafish. JCI Insight, 2019, 4, .	5.0	9
138	Questioning the relevance of circulating cardiac progenitor cells in cardiac regeneration. Cardiovascular Research, 2005, 68, 344-346.	3.8	8
139	Immunological Properties of Murine Parthenogenetic Stem Cell-Derived Cardiomyocytes and Engineered Heart Muscle. Frontiers in Immunology, 2017, 8, 955.	4.8	7
140	Translating Myocardial Remuscularization. Circulation Research, 2017, 120, 278-281.	4.5	6
141	Generation of a KLF15 homozygous knockout human embryonic stem cell line using paired CRISPR/Cas9n, and human cardiomyocytes derivation. Stem Cell Research, 2017, 23, 127-131.	0.7	6
142	Serum of patients with acute myocardial infarction prevents inflammation in iPSC-cardiomyocytes. Scientific Reports, 2019, 9, 5651.	3.3	6
143	Lights on for HIF-1a: Genetically Enhanced Mouse Cardiomyocytes for Heart Tissue Imaging. Cellular Physiology and Biochemistry, 2014, 34, 455-462.	1.6	5
144	Optogenetic Monitoring of the Glutathione Redox State in Engineered Human Myocardium. Frontiers in Physiology, 2019, 10, 272.	2.8	5

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145	Mechanistic role of the CREB-regulated transcription coactivator 1 in cardiac hypertrophy. Journal of Molecular and Cellular Cardiology, 2019, 127, 31-43.	1.9	5
146	Organs-on-chip models for cardiovascular drug development. Cardiovascular Research, 2021, 117, e164-e165.	3.8	5
147	Cardiac Engraftment of Genetically-Selected Parthenogenetic Stem Cell-Derived Cardiomyocytes. PLoS ONE, 2015, 10, e0131511.	2.5	4
148	Strip and Dress the Human Heart. Circulation Research, 2016, 118, 12-13.	4.5	4
149	Cardiovascular molecular mechanisms of disease with COVID-19. Journal of Molecular and Cellular Cardiology, 2020, 141, 107.	1.9	4
150	Modulating the Biomechanical Properties of Engineered Connective Tissues by Chitosan-Coated Multiwall Carbon Nanotubes. International Journal of Nanomedicine, 2021, Volume 16, 989-1000.	6.7	4
151	Comparison of cine and real-time cardiac MRI in rhesus macaques. Scientific Reports, 2021, 11, 10713.	3.3	4
152	Voltage Sensitive Protein 2.3: A Novel Tool to Study Sarcolemmal Structure and Electrical Activity in Mouse Hearts. Biophysical Journal, 2011, 100, 575a-576a.	0.5	3
153	Immunological Properties of Murine Parthenogenetic Stem Cells and Their Differentiation Products. Frontiers in Immunology, 2017, 8, 924.	4.8	3
154	19th Annual Meeting of the Safety Pharmacology Society: regulatory and safety perspectives for advanced therapy medicinal products (cellular and gene therapy products). Expert Opinion on Drug Safety, 2020, 19, 553-558.	2.4	3
155	Chalconeâ€Supported Cardiac Mesoderm Induction in Human Pluripotent Stem Cells for Heart Muscle Engineering. ChemMedChem, 2021, 16, 3300-3305.	3.2	3
156	Establishment of two homozygous CRISPR interference (CRISPRi) knock-in human induced pluripotent stem cell (hiPSC) lines for titratable endogenous gene repression. Stem Cell Research, 2021, 55, 102473.	0.7	3
157	Transmural myocardial repair with engineered heart muscle in a rat model of heterotopic heart transplantation â€" A proof-of-concept study. Journal of Molecular and Cellular Cardiology, 2022, 168, 3-12.	1.9	3
158	New Biologics for the Modulation ofÂPost-Infarct Remodeling. Journal of the American College of Cardiology, 2015, 66, 1375-1377.	2.8	2
159	Engineered Nanoparticles Prevent Dilation of Abdominal Aortic Aneurysms. Journal of the American College of Cardiology, 2018, 72, 2606-2608.	2.8	2
160	Inhibition of Prolyl-Hydroxylase Domain Enzymes Protects From Reoxygenation Injury in Engineered Human Myocardium. Circulation, 2020, 142, 1694-1696.	1.6	2
161	Engineered Heart Muscle Models in Phenotypic Drug Screens. Handbook of Experimental Pharmacology, 2020, 265, 143-156.	1.8	2
162	Establishment of a second generation homozygous CRISPRa human induced pluripotent stem cell (hiPSC) line for enhanced levels of endogenous gene activation. Stem Cell Research, 2021, 56, 102518.	0.7	2

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163	Herzreparatur mit Herzmuskelpflaster aus StammzellenÂâ€" Umsetzung eines prÃklinischen Konzeptes in die klinische PrÃ¼fung. VerÃ¶ffentlichungen Des Instituts FÃ¼r Deutsches, EuropÃisches Und Internationales Medizinrecht, Gesundheitsrecht Und Bioethik Der UniversitÃten Heidelberg Und Mannheim, 2020, , 131-140.	0.2	2
164	Cardiomyocytes remuscularize the heart. Nature Biotechnology, 2018, 36, 592-593.	17.5	1
165	Editorial commentary: Challenges to heart repair with pluripotent stem cell-derived cardiomyocytes. Trends in Cardiovascular Medicine, 2021, 31, 91-92.	4.9	1
166	Engineering Heart Tissue for In Vitro and In Vivo Studies. , 2005, , 640-658.		0
167	Tissue Engineered Myocardium. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , 111-132.	1.0	0
168	Inotropy and chronotropy screens in engineered human myocardium. Journal of Pharmacological and Toxicological Methods, 2016, 81, 373.	0.7	0
169	A scale model of the human ventricle. Nature Biomedical Engineering, 2018, 2, 888-889.	22.5	0
170	Highlighting the Field of Cardiovascular Regenerative Medicine. Molecular Therapy, 2018, 26, 1595.	8.2	0
171	Physics meets medicine - At the heart of active matter. Progress in Biophysics and Molecular Biology, 2019, 144, 1-2.	2.9	0
172	A CARDIAC Î±-ACTIN (ACTC1) GENE MUTATION CAUSES ATRIAL-SEPTAL DEFECTS ASSOCIATED WITH DILATED CARDIOMYOPATHY. Journal of the American College of Cardiology, 2019, 73, 963.	2.8	0
173	Multiscale Strategy to Resolve Stromaâ€"Cardiac Fibroblast Interactions. Circulation Research, 2021, 128, 39-41.	4.5	0
174	Fibroblast Derived Human Engineered Connective Tissue for Screening Applications. Journal of Visualized Experiments, 2021, , .	0.3	0
175	Cell programming to protect the ischemic heart and limb. Molecular Therapy, 2021, 29, 2894-2895.	8.2	0
176	Tissue-Engineered Cardiovascular Products. , 2007, , 1237-1251.		0
177	Ultrasound Techniques for the Detection of Tumors and Metastases in Small Animals. Methods in Molecular Biology, 2014, 1070, 181-190.	0.9	0
178	Myocardial Pharmacoregeneration. , 2016, , 111-143.		0
179	State-of-the-Art in Tissue-Engineered Heart Repair. Cardiac and Vascular Biology, 2017, , 219-239.	0.2	0
180	Tissue engineered heart repair. , 2020, , 285-290.		0

#	Article	IF	Citations
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