

# Charles E Murry

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

160 papers	24,936 citations	71 h-index	157 g-index
178 ext. papers	28,450 ext. citations	14.6 avg, IF	7.06 L-index

#	Paper	IF	Citations
160	Haematopoietic stem cells do not transdifferentiate into cardiac myocytes in myocardial infarcts. <i>Nature</i> , <b>2004</b> , 428, 664-8	50.4	1838
159	Cardiomyocytes derived from human embryonic stem cells in pro-survival factors enhance function of infarcted rat hearts. <i>Nature Biotechnology</i> , <b>2007</b> , 25, 1015-24	44.5	1794
158	Differentiation of embryonic stem cells to clinically relevant populations: lessons from embryonic development. <i>Cell</i> , <b>2008</b> , 132, 661-80	56.2	1369
157	Human embryonic-stem-cell-derived cardiomyocytes regenerate non-human primate hearts. <i>Nature</i> , <b>2014</b> , 510, 273-7	50.4	939
156	Heart regeneration. <i>Nature</i> , <b>2011</b> , 473, 326-35	50.4	894
155	Truncations of titin causing dilated cardiomyopathy. <i>New England Journal of Medicine</i> , <b>2012</b> , 366, 619-28	59.2	874
154	Regenerating the heart. <i>Nature Biotechnology</i> , <b>2005</b> , 23, 845-56	44.5	807
153	Cardiomyocyte grafting for cardiac repair: graft cell death and anti-death strategies. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2001</b> , 33, 907-21	5.8	749
152	Engineering adolescence: maturation of human pluripotent stem cell-derived cardiomyocytes. <i>Circulation Research</i> , <b>2014</b> , 114, 511-23	15.7	630
151	Modeling the mitochondrial cardiomyopathy of Barth syndrome with induced pluripotent stem cell and heart-on-chip technologies. <i>Nature Medicine</i> , <b>2014</b> , 20, 616-23	50.5	604
150	Human ES-cell-derived cardiomyocytes electrically couple and suppress arrhythmias in injured hearts. <i>Nature</i> , <b>2012</b> , 489, 322-5	50.4	563
149	Growth of engineered human myocardium with mechanical loading and vascular coculture. <i>Circulation Research</i> , <b>2011</b> , 109, 47-59	15.7	512
148	Transplantation of undifferentiated murine embryonic stem cells in the heart: teratoma formation and immune response. <i>FASEB Journal</i> , <b>2007</b> , 21, 1345-57	0.9	502
147	Proangiogenic scaffolds as functional templates for cardiac tissue engineering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 15211-6	11.5	498
146	Biphasic role for Wnt/beta-catenin signaling in cardiac specification in zebrafish and embryonic stem cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 9685-90	11.5	464
145	Survival, integration, and differentiation of cardiomyocyte grafts: a study in normal and injured rat hearts. <i>Circulation</i> , <b>1999</b> , 100, 193-202	16.7	442
144	Evidence for cardiomyocyte repopulation by extracardiac progenitors in transplanted human hearts. <i>Circulation Research</i> , <b>2002</b> , 90, 634-40	15.7	374

143	Formation of human myocardium in the rat heart from human embryonic stem cells. <i>American Journal of Pathology</i> , <b>2005</b> , 167, 663-71	5.8	369
142	Statistically based splicing detection reveals neural enrichment and tissue-specific induction of circular RNA during human fetal development. <i>Genome Biology</i> , <b>2015</b> , 16, 126	18.3	363
141	Systems approaches to preventing transplanted cell death in cardiac repair. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2008</b> , 45, 567-81	5.8	320
140	Human embryonic stem cell-derived cardiomyocytes restore function in infarcted hearts of non-human primates. <i>Nature Biotechnology</i> , <b>2018</b> , 36, 597-605	44.5	314
139	Skeletal muscle stem cells do not transdifferentiate into cardiomyocytes after cardiac grafting. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2002</b> , 34, 241-9	5.8	311
138	Cell-based cardiac repair: reflections at the 10-year point. <i>Circulation</i> , <b>2005</b> , 112, 3174-83	16.7	309
137	Cardiomyocyte Regeneration: A Consensus Statement. <i>Circulation</i> , <b>2017</b> , 136, 680-686	16.7	287
136	Electromechanical coupling between skeletal and cardiac muscle. Implications for infarct repair. <i>Journal of Cell Biology</i> , <b>2000</b> , 149, 731-40	7.3	286
135	Regeneration gaps: observations on stem cells and cardiac repair. <i>Journal of the American College of Cardiology</i> , <b>2006</b> , 47, 1777-85	15.1	281
134	Developmental fate and cellular maturity encoded in human regulatory DNA landscapes. <i>Cell</i> , <b>2013</b> , 154, 888-903	56.2	255
133	Tri-iodo-L-thyronine promotes the maturation of human cardiomyocytes-derived from induced pluripotent stem cells. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2014</b> , 72, 296-304	5.8	254
132	A temporal chromatin signature in human embryonic stem cells identifies regulators of cardiac development. <i>Cell</i> , <b>2012</b> , 151, 221-32	56.2	254
131	Mechanical Stress Conditioning and Electrical Stimulation Promote Contractility and Force Maturation of Induced Pluripotent Stem Cell-Derived Human Cardiac Tissue. <i>Circulation</i> , <b>2016</b> , 134, 1557-1567	16.7	254
130	rAAV6-microdystrophin preserves muscle function and extends lifespan in severely dystrophic mice. <i>Nature Medicine</i> , <b>2006</b> , 12, 787-9	50.5	248
129	Myofibroblast and endothelial cell proliferation during murine myocardial infarct repair. <i>American Journal of Pathology</i> , <b>2003</b> , 163, 2433-40	5.8	224
128	Endogenous Wnt/beta-catenin signaling is required for cardiac differentiation in human embryonic stem cells. <i>PLoS ONE</i> , <b>2010</b> , 5, e11134	3.7	212
127	A hierarchical network controls protein translation during murine embryonic stem cell self-renewal and differentiation. <i>Cell Stem Cell</i> , <b>2008</b> , 2, 448-60	18	205
126	Delivery of basic fibroblast growth factor with a pH-responsive, injectable hydrogel to improve angiogenesis in infarcted myocardium. <i>Biomaterials</i> , <b>2011</b> , 32, 2407-16	15.6	192

125	Cardiomyocyte maturation: advances in knowledge and implications for regenerative medicine. <i>Nature Reviews Cardiology</i> , <b>2020</b> , 17, 341-359	14.8	177
124	Clinical imaging in regenerative medicine. <i>Nature Biotechnology</i> , <b>2014</b> , 32, 804-18	44.5	175
123	Osteopontin expression in cardiovascular diseases. <i>Annals of the New York Academy of Sciences</i> , <b>1995</b> , 760, 109-26	6.5	166
122	Let-7 family of microRNA is required for maturation and adult-like metabolism in stem cell-derived cardiomyocytes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, E2785-94	11.5	160
121	Proliferation of cardiomyocytes derived from human embryonic stem cells is mediated via the IGF/PI 3-kinase/Akt signaling pathway. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2005</b> , 39, 865-73	5.8	153
120	In vitro generation of differentiated cardiac myofibers on micropatterned laminin surfaces. <i>Journal of Biomedical Materials Research Part B</i> , <b>2002</b> , 60, 472-9		150
119	Setting Global Standards for Stem Cell Research and Clinical Translation: The 2016 ISSCR Guidelines. <i>Stem Cell Reports</i> , <b>2016</b> , 6, 787-797	8	136
118	VEGF induces differentiation of functional endothelium from human embryonic stem cells: implications for tissue engineering. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2010</b> , 30, 80-9	9.4	133
117	Scaffold-free human cardiac tissue patch created from embryonic stem cells. <i>Tissue Engineering - Part A</i> , <b>2009</b> , 15, 1211-22	3.9	132
116	Fibroblast growth factor-2 regulates myocardial infarct repair: effects on cell proliferation, scar contraction, and ventricular function. <i>American Journal of Pathology</i> , <b>2007</b> , 171, 1431-40	5.8	132
115	Single-Cell Transcriptomic Analysis of Cardiac Differentiation from Human PSCs Reveals HOPX-Dependent Cardiomyocyte Maturation. <i>Cell Stem Cell</i> , <b>2018</b> , 23, 586-598.e8	18	131
114	Extracardiac progenitor cells repopulate most major cell types in the transplanted human heart. <i>Circulation</i> , <b>2005</b> , 112, 2951-8	16.7	130
113	Nanotopography-Induced Structural Anisotropy and Sarcomere Development in Human Cardiomyocytes Derived from Induced Pluripotent Stem Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 21923-32	9.5	118
112	Human Organ-Specific Endothelial Cell Heterogeneity. <i>iScience</i> , <b>2018</b> , 4, 20-35	6.1	115
111	Measuring the contractile forces of human induced pluripotent stem cell-derived cardiomyocytes with arrays of microposts. <i>Journal of Biomechanical Engineering</i> , <b>2014</b> , 136, 051005	2.1	112
110	Distilling complexity to advance cardiac tissue engineering. <i>Science Translational Medicine</i> , <b>2016</b> , 8, 342ps1-3	11.3	108
109	Functional analysis of a chromosomal deletion associated with myelodysplastic syndromes using isogenic human induced pluripotent stem cells. <i>Nature Biotechnology</i> , <b>2015</b> , 33, 646-55	44.5	107
108	Evidence for fusion between cardiac and skeletal muscle cells. <i>Circulation Research</i> , <b>2004</b> , 94, e56-60	15.7	107

107	Generating high-purity cardiac and endothelial derivatives from patterned mesoderm using human pluripotent stem cells. <i>Nature Protocols</i> , <b>2017</b> , 12, 15-31	18.8	102
106	Shear stress stimulation of p130(cas) tyrosine phosphorylation requires calcium-dependent c-Src activation. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 26803-9	5.4	96
105	InVivo Maturation of Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes in Neonatal and Adult Rat Hearts. <i>Stem Cell Reports</i> , <b>2017</b> , 8, 278-289	8	95
104	Fatty Acids Enhance the Maturation of Cardiomyocytes Derived from Human Pluripotent Stem Cells. <i>Stem Cell Reports</i> , <b>2019</b> , 13, 657-668	8	93
103	Regenerating the field of cardiovascular cell therapy. <i>Nature Biotechnology</i> , <b>2019</b> , 37, 232-237	44.5	90
102	Afterload promotes maturation of human induced pluripotent stem cell derived cardiomyocytes in engineered heart tissues. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2018</b> , 118, 147-158	5.8	87
101	Epicardial cells derived from human embryonic stem cells augment cardiomyocyte-driven heart regeneration. <i>Nature Biotechnology</i> , <b>2019</b> , 37, 895-906	44.5	87
100	Dystrophin-deficient cardiomyocytes derived from human urine: new biologic reagents for drug discovery. <i>Stem Cell Research</i> , <b>2014</b> , 12, 467-80	1.6	87
99	SCIENTIFIC COMMUNITY. Confronting stem cell hype. <i>Science</i> , <b>2016</b> , 352, 776-7	33.3	86
98	Mechanical Stress Promotes Maturation of Human Myocardium From Pluripotent Stem Cell-Derived Progenitors. <i>Stem Cells</i> , <b>2015</b> , 33, 2148-57	5.8	85
97	Taking the death toll after cardiomyocyte grafting: a reminder of the importance of quantitative biology. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2002</b> , 34, 251-3	5.8	83
96	The winding road to regenerating the human heart. <i>Cardiovascular Pathology</i> , <b>2015</b> , 24, 133-40	3.8	80
95	Comparison of Human Embryonic Stem Cell-Derived Cardiomyocytes, Cardiovascular Progenitors, and Bone Marrow Mononuclear Cells for Cardiac Repair. <i>Stem Cell Reports</i> , <b>2015</b> , 5, 753-762	8	80
94	NFATc3-induced reductions in voltage-gated K <sup>+</sup> currents after myocardial infarction. <i>Circulation Research</i> , <b>2004</b> , 94, 1340-50	15.7	78
93	Quantitative Analyses of the Left Ventricle Volume and Cardiac Function in Normal and Infarcted Yucatan Minipigs. <i>Journal of Imaging</i> , <b>2021</b> , 7, 107	3.1	78
92	Cardiac development in zebrafish and human embryonic stem cells is inhibited by exposure to tobacco cigarettes and e-cigarettes. <i>PLoS ONE</i> , <b>2015</b> , 10, e0126259	3.7	75
91	Human embryonic stem cells differentiated to lung lineage-specific cells ameliorate pulmonary fibrosis in a xenograft transplant mouse model. <i>PLoS ONE</i> , <b>2012</b> , 7, e33165	3.7	73
90	Transmural replacement of myocardium after skeletal myoblast grafting into the heart. Too much of a good thing?. <i>Cardiovascular Pathology</i> , <b>2000</b> , 9, 337-44	3.8	72

89	Enhanced Electrical Integration of Engineered Human Myocardium via Intramyocardial versus Epicardial Delivery in Infarcted Rat Hearts. <i>PLoS ONE</i> , <b>2015</b> , 10, e0131446	3.7	71
88	Cardiac regeneration using pluripotent stem cells--progression to large animal models. <i>Stem Cell Research</i> , <b>2014</b> , 13, 654-65	1.6	70
87	Micro- and nano-patterned conductive graphene-PEG hybrid scaffolds for cardiac tissue engineering. <i>Chemical Communications</i> , <b>2017</b> , 53, 7412-7415	5.8	68
86	Improving survival and efficacy of pluripotent stem cell-derived cardiac grafts. <i>Journal of Cellular and Molecular Medicine</i> , <b>2013</b> , 17, 1355-62	5.6	65
85	Patterned human microvascular grafts enable rapid vascularization and increase perfusion in infarcted rat hearts. <i>Nature Communications</i> , <b>2019</b> , 10, 584	17.4	64
84	Healing of myocardial infarcts in dogs. Effects of late reperfusion. <i>Circulation</i> , <b>1995</b> , 92, 1891-901	16.7	64
83	Ferritin Overexpression for Noninvasive Magnetic Resonance Imaging-Based Tracking of Stem Cells Transplanted into the Heart. <i>Molecular Imaging</i> , <b>2010</b> , 9, 7290.2010.00020	3.7	60
82	Genetic Lineage Tracing of Sca-1 Cells Reveals Endothelial but Not Myogenic Contribution to the Murine Heart. <i>Circulation</i> , <b>2018</b> , 138, 2931-2939	16.7	59
81	Heart regeneration with engineered myocardial tissue. <i>Annual Review of Biomedical Engineering</i> , <b>2014</b> , 16, 1-28	12	55
80	Defined MicroRNAs Induce Aspects of Maturation in Mouse and Human Embryonic-Stem-Cell-Derived Cardiomyocytes. <i>Cell Reports</i> , <b>2015</b> , 12, 1960-7	10.6	53
79	Isolation and Mechanical Measurements of Myofibrils from Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes. <i>Stem Cell Reports</i> , <b>2016</b> , 6, 885-896	8	53
78	Dynamics of genome reorganization during human cardiogenesis reveal an RBM20-dependent splicing factory. <i>Nature Communications</i> , <b>2019</b> , 10, 1538	17.4	52
77	Electrophysiological effects of monophasic and biphasic stimuli in normal and infarcted dogs. <i>PACE - Pacing and Clinical Electrophysiology</i> , <b>1990</b> , 13, 1158-72	1.6	48
76	Inhibition of Eatenin signaling respecifies anterior-like endothelium into beating human cardiomyocytes. <i>Development (Cambridge)</i> , <b>2015</b> , 142, 3198-209	6.6	47
75	SLIT3-ROBO4 activation promotes vascular network formation in human engineered tissue and angiogenesis in vivo. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2013</b> , 64, 124-31	5.8	42
74	The K219T-Lamin mutation induces conduction defects through epigenetic inhibition of SCN5A in human cardiac laminopathy. <i>Nature Communications</i> , <b>2019</b> , 10, 2267	17.4	40
73	Quantitative proteomics identify DAB2 as a cardiac developmental regulator that inhibits WNT/Eatenin signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 1002-7	11.5	39
72	Transmembrane protein 88: a Wnt regulatory protein that specifies cardiomyocyte development. <i>Development (Cambridge)</i> , <b>2013</b> , 140, 3799-808	6.6	39

71	Absence of regeneration in the MRL/MpJ mouse heart following infarction or cryoinjury. <i>Cardiovascular Pathology</i> , <b>2008</b> , 17, 6-13	3.8	39
70	Stromal Cells in Dense Collagen Promote Cardiomyocyte and Microvascular Patterning in Engineered Human Heart Tissue. <i>Tissue Engineering - Part A</i> , <b>2016</b> , 22, 633-44	3.9	37
69	TFPa/HADHA is required for fatty acid beta-oxidation and cardiolipin re-modeling in human cardiomyocytes. <i>Nature Communications</i> , <b>2019</b> , 10, 4671	17.4	37
68	Muscle cell grafting for the treatment and prevention of heart failure. <i>Journal of Cardiac Failure</i> , <b>2002</b> , 8, S532-41	3.3	37
67	Upregulation of cardiomyocyte ribonucleotide reductase increases intracellular 2 deoxy-ATP, contractility, and relaxation. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2011</b> , 51, 894-901	5.8	36
66	Policy: Global standards for stem-cell research. <i>Nature</i> , <b>2016</b> , 533, 311-3	50.4	33
65	Human Pluripotent Stem Cell-Derived Engineered Tissues: Clinical Considerations. <i>Cell Stem Cell</i> , <b>2018</b> , 22, 294-297	18	32
64	Novel Adult-Onset Systolic Cardiomyopathy Due to MYH7 E848G Mutation in Patient-Derived Induced Pluripotent Stem Cells. <i>JACC Basic To Translational Science</i> , <b>2018</b> , 3, 728-740	8.7	32
63	Learn from Your Elders: Developmental Biology Lessons to Guide Maturation of Stem Cell-Derived Cardiomyocytes. <i>Pediatric Cardiology</i> , <b>2019</b> , 40, 1367-1387	2.1	31
62	Engineered biomaterials control differentiation and proliferation of human-embryonic-stem-cell-derived cardiomyocytes via timed Notch activation. <i>Stem Cell Reports</i> , <b>2014</b> , 2, 271-81	8	31
61	Cronos Titin Is Expressed in Human Cardiomyocytes and Necessary for Normal Sarcomere Function. <i>Circulation</i> , <b>2019</b> , 140, 1647-1660	16.7	29
60	Transgenic overexpression of ribonucleotide reductase improves cardiac performance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 6187-92	11.5	29
59	SARS-CoV-2 Infects Human Pluripotent Stem Cell-Derived Cardiomyocytes, Impairing Electrical and Mechanical Function. <i>Stem Cell Reports</i> , <b>2021</b> , 16, 478-492	8	29
58	Absence of full-length dystrophin impairs normal maturation and contraction of cardiomyocytes derived from human-induced pluripotent stem cells. <i>Cardiovascular Research</i> , <b>2020</b> , 116, 368-382	9.9	29
57	Function Follows Form - A Review of Cardiac Cell Therapy. <i>Circulation Journal</i> , <b>2019</b> , 83, 2399-2412	2.9	28
56	Evidence for Minimal Cardiogenic Potential of Stem Cell Antigen 1-Positive Cells in the Adult Mouse Heart. <i>Circulation</i> , <b>2018</b> , 138, 2960-2962	16.7	27
55	Targeted genomic integration of a selectable floxed dual fluorescence reporter in human embryonic stem cells. <i>PLoS ONE</i> , <b>2012</b> , 7, e46971	3.7	26
54	Hallmarks of cardiac regeneration. <i>Nature Reviews Cardiology</i> , <b>2018</b> , 15, 579-580	14.8	26



53	Lack of thrombospondin-2 reduces fibrosis and increases vascularity around cardiac cell grafts. <i>Cardiovascular Pathology</i> , <b>2013</b> , 22, 91-5	3.8	25
52	Chromatin compartment dynamics in a haploinsufficient model of cardiac laminopathy. <i>Journal of Cell Biology</i> , <b>2019</b> , 218, 2919-2944	7.3	24
51	Regulation of skeletal myotube formation and alignment by nanotopographically controlled cell-secreted extracellular matrix. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2018</b> , 106, 1543-1551	5.4	22
50	Engineering anisotropic 3D tubular tissues with flexible thermoresponsive nanofabricated substrates. <i>Biomaterials</i> , <b>2020</b> , 240, 119856	15.6	21
49	Chromatin and Transcriptional Analysis of Mesoderm Progenitor Cells Identifies HOPX as a Regulator of Primitive Hematopoiesis. <i>Cell Reports</i> , <b>2017</b> , 20, 1597-1608	10.6	21
48	Ribonucleotide reductase-mediated increase in dATP improves cardiac performance via myosin activation in a large animal model of heart failure. <i>European Journal of Heart Failure</i> , <b>2015</b> , 17, 772-81	12.3	21
47	Engineered human cardiac tissue. <i>Pediatric Cardiology</i> , <b>2011</b> , 32, 334-41	2.1	21
46	Stem cells and the heart-the road ahead. <i>Science</i> , <b>2020</b> , 367, 854-855	33.3	20
45	AAV6-mediated Cardiac-specific Overexpression of Ribonucleotide Reductase Enhances Myocardial Contractility. <i>Molecular Therapy</i> , <b>2016</b> , 24, 240-250	11.7	20
44	Thin filament incorporation of an engineered cardiac troponin C variant (L48Q) enhances contractility in intact cardiomyocytes from healthy and infarcted hearts. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2014</b> , 72, 219-27	5.8	20
43	Development biology. Turnover after the fallout. <i>Science</i> , <b>2009</b> , 324, 47-8	33.3	20
42	Magnetic Resonance Imaging Tracking of Graft Survival in the Infarcted Heart: Iron Oxide Particles Versus Ferritin Overexpression Approach. <i>Journal of Cardiovascular Pharmacology and Therapeutics</i> , <b>2014</b> , 19, 358-367	2.6	19
41	Tunable electroconductive decellularized extracellular matrix hydrogels for engineering human cardiac microphysiological systems. <i>Biomaterials</i> , <b>2021</b> , 272, 120764	15.6	19
40	Capillary force lithography for cardiac tissue engineering. <i>Journal of Visualized Experiments</i> , <b>2014</b> ,	1.6	18
39	NanoMEA: A Tool for High-Throughput, Electrophysiological Phenotyping of Patterned Excitable Cells. <i>Nano Letters</i> , <b>2020</b> , 20, 1561-1570	11.5	18
38	The Challenges of First-in-Human Stem Cell Clinical Trials: What Does This Mean for Ethics and Institutional Review Boards?. <i>Stem Cell Reports</i> , <b>2018</b> , 10, 1429-1431	8	17
37	Reprogramming fibroblasts into cardiomyocytes. <i>New England Journal of Medicine</i> , <b>2011</b> , 364, 177-8	59.2	17
36	Evaluation of Free Radical Injury in Myocardium. <i>Toxicologic Pathology</i> , <b>1990</b> , 18, 470-480	2.1	17



35	Chemical dimerization of fibroblast growth factor receptor-1 induces myoblast proliferation, increases intracardiac graft size, and reduces ventricular dilation in infarcted hearts. <i>Human Gene Therapy</i> , <b>2007</b> , 18, 401-12	4.8	16
34	Substrate Stiffness, Cell Anisotropy, and Cell-Cell Contact Contribute to Enhanced Structural and Calcium Handling Properties of Human Embryonic Stem Cell-Derived Cardiomyocytes. <i>ACS Biomaterials Science and Engineering</i> , <b>2019</b> , 5, 3876-3888	5.5	15
33	Prosurvival Factors Improve Functional Engraftment of Myogenically Converted Dermal Cells into Dystrophic Skeletal Muscle. <i>Stem Cells and Development</i> , <b>2016</b> , 25, 1559-1569	4.4	15
32	Cell-based delivery of dATP via gap junctions enhances cardiac contractility. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2014</b> , 72, 350-9	5.8	15
31	The advancement of human pluripotent stem cell-derived therapies into the clinic. <i>Development (Cambridge)</i> , <b>2015</b> , 142, 3077-84	6.6	14
30	Get with the (re)program: cardiovascular potential of skin-derived induced pluripotent stem cells. <i>Circulation</i> , <b>2008</b> , 118, 472-5	16.7	14
29	Platelet-derived growth factor-A mRNA expression in fetal, normal adult, and atherosclerotic human aortas. Analysis by competitive polymerase chain reaction. <i>Circulation</i> , <b>1996</b> , 93, 1095-106	16.7	12
28	Pharmacologic therapy for engraftment arrhythmia induced by transplantation of human cardiomyocytes. <i>Stem Cell Reports</i> , <b>2021</b> , 16, 2473-2487	8	12
27	ALPK2 Promotes Cardiogenesis in Zebrafish and Human Pluripotent Stem Cells. <i>iScience</i> , <b>2018</b> , 2, 88-1006.1		11
26	A Rainbow Reporter Tracks Single Cells and Reveals Heterogeneous Cellular Dynamics among Pluripotent Stem Cells and Their Differentiated Derivatives. <i>Stem Cell Reports</i> , <b>2020</b> , 15, 226-241	8	9
25	Letter by Murry et al regarding article, "Embryonic stem cell-derived cardiac myocytes are not ready for human trials". <i>Circulation Research</i> , <b>2014</b> , 115, e28-9	15.7	8
24	Delta-1 Functionalized Hydrogel Promotes hESC-Cardiomyocyte Graft Proliferation and Maintains Heart Function Post-Injury. <i>Molecular Therapy - Methods and Clinical Development</i> , <b>2020</b> , 17, 986-998	6.4	8
23	Depth-resolved 3D visualization of coronary microvasculature with optical microangiography. <i>Physics in Medicine and Biology</i> , <b>2016</b> , 61, 7536-7550	3.8	8
22	Inducible CRISPR genome editing platform in naive human embryonic stem cells reveals JARID2 function in self-renewal. <i>Cell Cycle</i> , <b>2018</b> , 17, 535-549	4.7	7
21	Polarization sensitive optical coherence tomography with single input for imaging depth-resolved collagen organizations. <i>Light: Science and Applications</i> , <b>2021</b> , 10, 237	16.7	6
20	Dynamic reorganization of nuclear architecture during human cardiogenesis		6
19	Proliferation at the heart of preadolescence. <i>Cell</i> , <b>2014</b> , 157, 765-7	56.2	4
18	SARS-CoV-2 infects human pluripotent stem cell-derived cardiomyocytes, impairing electrical and mechanical function		4

17	Engrafted Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes Undergo Clonal Expansion In Vivo. <i>Circulation</i> , <b>2021</b> , 143, 1635-1638	16.7	4
16	Sarcomere function activates a p53-dependent DNA damage response that promotes polyploidization and limits in vivo cell engraftment. <i>Cell Reports</i> , <b>2021</b> , 35, 109088	10.6	4
15	Sonic Hedgehog upregulation does not enhance the survival and engraftment of stem cell-derived cardiomyocytes in infarcted hearts. <i>PLoS ONE</i> , <b>2020</b> , 15, e0227780	3.7	3
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