

Lior Gepstein

List of Publications by Citations

Source: <https://exaly.com/author-pdf/4957998/lior-gepstein-publications-by-citations.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

118
papers

9,319
citations

47
h-index

96
g-index

124
ext. papers

10,404
ext. citations

9.1
avg, IF

5.89
L-index

#	Paper	IF	Citations
118	Modelling the long QT syndrome with induced pluripotent stem cells. <i>Nature</i> , 2011 , 471, 225-9	50.4	803
117	Electromechanical integration of cardiomyocytes derived from human embryonic stem cells. <i>Nature Biotechnology</i> , 2004 , 22, 1282-9	44.5	738
116	A novel method for nonfluoroscopic catheter-based electroanatomical mapping of the heart. In vitro and in vivo accuracy results. <i>Circulation</i> , 1997 , 95, 1611-22	16.7	493
115	Tissue engineering of vascularized cardiac muscle from human embryonic stem cells. <i>Circulation Research</i> , 2007 , 100, 263-72	15.7	478
114	Transplantation of human embryonic stem cell-derived cardiomyocytes improves myocardial performance in infarcted rat hearts. <i>Journal of the American College of Cardiology</i> , 2007 , 50, 1884-93	15.1	459
113	Cardiomyocyte differentiation of human induced pluripotent stem cells. <i>Circulation</i> , 2009 , 120, 1513-23	16.7	332
112	Defined Engineered Human Myocardium With Advanced Maturation for Applications in Heart Failure Modeling and Repair. <i>Circulation</i> , 2017 , 135, 1832-1847	16.7	328
111	Nonfluoroscopic, in vivo navigation and mapping technology. <i>Nature Medicine</i> , 1996 , 2, 1393-5	50.5	327
110	High-resolution electrophysiological assessment of human embryonic stem cell-derived cardiomyocytes: a novel in vitro model for the study of conduction. <i>Circulation Research</i> , 2002 , 91, 659-667	15.7	254
109	Identification and selection of cardiomyocytes during human embryonic stem cell differentiation. <i>FASEB Journal</i> , 2007 , 21, 2551-63	0.9	229
108	Mechanism of spontaneous excitability in human embryonic stem cell derived cardiomyocytes. <i>Journal of Physiology</i> , 2004 , 559, 479-96	3.9	228
107	Sinoatrial node cardiomyocytes derived from human pluripotent cells function as a biological pacemaker. <i>Nature Biotechnology</i> , 2017 , 35, 56-68	44.5	204
106	Transplantation of a tissue-engineered human vascularized cardiac muscle. <i>Tissue Engineering - Part A</i> , 2010 , 16, 115-25	3.9	197
105	Derivation and potential applications of human embryonic stem cells. <i>Circulation Research</i> , 2002 , 91, 866-76	15.7	190
104	In vitro electrophysiological drug testing using human embryonic stem cell derived cardiomyocytes. <i>Stem Cells and Development</i> , 2009 , 18, 161-72	4.4	183
103	Modeling of catecholaminergic polymorphic ventricular tachycardia with patient-specific human-induced pluripotent stem cells. <i>Journal of the American College of Cardiology</i> , 2012 , 60, 990-1000	15.1	167
102	Preliminary animal and clinical experiences using an electromechanical endocardial mapping procedure to distinguish infarcted from healthy myocardium. <i>Circulation</i> , 1998 , 98, 1116-24	16.7	157

101	Calcium handling in human embryonic stem cell-derived cardiomyocytes. <i>Stem Cells</i> , 2008 , 26, 1961-72	5.8	148
100	Low-energy laser irradiation reduces formation of scar tissue after myocardial infarction in rats and dogs. <i>Circulation</i> , 2001 , 103, 296-301	16.7	144
99	Calcium handling in human induced pluripotent stem cell derived cardiomyocytes. <i>PLoS ONE</i> , 2011 , 6, e18037	3.7	139
98	Optogenetics for in vivo cardiac pacing and resynchronization therapies. <i>Nature Biotechnology</i> , 2015 , 33, 750-4	44.5	137
97	Modeling of arrhythmogenic right ventricular cardiomyopathy with human induced pluripotent stem cells. <i>Circulation: Cardiovascular Genetics</i> , 2013 , 6, 557-68		127
96	Genome editing of isogenic human induced pluripotent stem cells recapitulates long QT phenotype for drug testing. <i>Journal of the American College of Cardiology</i> , 2014 , 64, 451-9	15.1	123
95	Attenuation of infarct size in rats and dogs after myocardial infarction by low-energy laser irradiation. <i>Lasers in Surgery and Medicine</i> , 2001 , 28, 204-11	3.6	105
94	Guidance of radiofrequency endocardial ablation with real-time three-dimensional magnetic navigation system. <i>Circulation</i> , 1997 , 96, 2016-21	16.7	104
93	Electromechanical characterization of chronic myocardial infarction in the canine coronary occlusion model. <i>Circulation</i> , 1998 , 98, 2055-64	16.7	102
92	Electrophysiological modulation of cardiomyocytic tissue by transfected fibroblasts expressing potassium channels: a novel strategy to manipulate excitability. <i>Circulation</i> , 2002 , 105, 522-9	16.7	98
91	Monitoring Human-Induced Pluripotent Stem Cell-Derived Cardiomyocytes with Genetically Encoded Calcium and Voltage Fluorescent Reporters. <i>Stem Cell Reports</i> , 2015 , 5, 582-96	8	83
90	Generating ring-shaped engineered heart tissues from ventricular and atrial human pluripotent stem cell-derived cardiomyocytes. <i>Nature Communications</i> , 2020 , 11, 75	17.4	82
89	A combined cell therapy and in-situ tissue-engineering approach for myocardial repair. <i>Biomaterials</i> , 2011 , 32, 7514-23	15.6	75
88	In vivo assessment of the electrophysiological integration and arrhythmogenic risk of myocardial cell transplantation strategies. <i>Stem Cells</i> , 2010 , 28, 2151-61	5.8	75
87	Modulation of cardiac tissue electrophysiological properties with light-sensitive proteins. <i>Cardiovascular Research</i> , 2014 , 102, 176-87	9.9	72
86	Electroanatomic mapping of arrhythmogenic right ventricular dysplasia. <i>Journal of the American College of Cardiology</i> , 2001 , 38, 2020-7	15.1	72
85	Hollow nanoneedle array and its utilization for repeated administration of biomolecules to the same cells. <i>ACS Nano</i> , 2012 , 6, 4940-6	16.7	68
84	Electroanatomical mapping of the heart: basic concepts and implications for the treatment of cardiac arrhythmias. <i>PACE - Pacing and Clinical Electrophysiology</i> , 1998 , 21, 1268-78	1.6	67

83	Engineered heart tissue models from hiPSC-derived cardiomyocytes and cardiac ECM for disease modeling and drug testing applications. <i>Acta Biomaterialia</i> , 2019 , 92, 145-159	10.8	66
82	Derivation and cardiomyocyte differentiation of induced pluripotent stem cells from heart failure patients. <i>European Heart Journal</i> , 2013 , 34, 1575-86	9.5	61
81	A photopolymerizable hydrogel for 3-D culture of human embryonic stem cell-derived cardiomyocytes and rat neonatal cardiac cells. <i>Journal of Molecular and Cellular Cardiology</i> , 2009 , 46, 213-24	5.8	59
80	Reprogramming of telomeric regions during the generation of human induced pluripotent stem cells and subsequent differentiation into fibroblast-like derivatives. <i>Epigenetics</i> , 2011 , 6, 63-75	5.7	58
79	Hemodynamic evaluation of the heart with a nonfluoroscopic electromechanical mapping technique. <i>Circulation</i> , 1997 , 96, 3672-80	16.7	56
78	Use of Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes in Preclinical Cancer Drug Cardiotoxicity Testing: A Scientific Statement From the American Heart Association. <i>Circulation Research</i> , 2019 , 125, e75-e92	15.7	55
77	Atrial linear ablations in pigs. Chronic effects on atrial electrophysiology and pathology. <i>Circulation</i> , 1999 , 100, 419-26	16.7	53
76	Circadian pattern of life-threatening ventricular arrhythmia in patients with sleep-disordered breathing and implantable cardioverter-defibrillators. <i>Heart Rhythm</i> , 2011 , 8, 657-62	6.7	52
75	Controlling the cellular organization of tissue-engineered cardiac constructs. <i>Annals of the New York Academy of Sciences</i> , 2004 , 1015, 299-311	6.5	52
74	Detailed endocardial mapping accurately predicts the transmural extent of myocardial infarction. <i>Journal of the American College of Cardiology</i> , 2001 , 37, 1590-7	15.1	52
73	Activation-repolarization coupling in the normal swine endocardium. <i>Circulation</i> , 1997 , 96, 4036-43	16.7	51
72	Human embryonic stem cells for myocardial regeneration. <i>Heart Failure Reviews</i> , 2003 , 8, 229-36	5	49
71	Electrospun Extracellular Matrix: Paving the Way to Tailor-Made Natural Scaffolds for Cardiac Tissue Regeneration. <i>Advanced Functional Materials</i> , 2017 , 27, 1700427	15.6	47
70	Cell therapy for modification of the myocardial electrophysiological substrate. <i>Circulation</i> , 2008 , 117, 720-31	16.7	47
69	Human Induced Pluripotent Stem Cell-Derived Cardiac Cell Sheets Expressing Genetically Encoded Voltage Indicator for Pharmacological and Arrhythmia Studies. <i>Stem Cell Reports</i> , 2018 , 10, 1879-1894	8	47
68	Differentiation pathways in human embryonic stem cell-derived cardiomyocytes. <i>Annals of the New York Academy of Sciences</i> , 2005 , 1047, 50-65	6.5	46
67	Modeling Atrial Fibrillation using Human Embryonic Stem Cell-Derived Atrial Tissue. <i>Scientific Reports</i> , 2017 , 7, 5268	4.9	45
66	Human embryonic stem cells for cardiomyogenesis. <i>Journal of Molecular and Cellular Cardiology</i> , 2008 , 45, 462-74	5.8	43

65	Flecainide therapy suppresses exercise-induced ventricular arrhythmias in patients with CASQ2-associated catecholaminergic polymorphic ventricular tachycardia. <i>Heart Rhythm</i> , 2013 , 10, 1671-5	6.7	39
64	Induced pluripotent stem cells for cardiac repair. <i>Cellular and Molecular Life Sciences</i> , 2012 , 69, 3285-99	10.3	36
63	Calcium handling in embryonic stem cell-derived cardiac myocytes: of mice and men. <i>Annals of the New York Academy of Sciences</i> , 2006 , 1080, 207-15	6.5	36
62	Modeling Reentry in the Short QT Syndrome With Human-Induced Pluripotent Stem Cell-Derived Cardiac Cell Sheets. <i>Journal of the American College of Cardiology</i> , 2019 , 73, 2310-2324	15.1	35
61	Usefulness of electroanatomical mapping to differentiate between right ventricular outflow tract tachycardia and arrhythmogenic right ventricular dysplasia. <i>American Journal of Cardiology</i> , 2005 , 95, 935-40	3	35
60	Online myocardial viability assessment in the catheterization laboratory via NOGA electroanatomic mapping: Quantitative comparison with thallium-201 uptake. <i>Circulation</i> , 2001 , 104, 1005-11	16.7	32
59	Patient-Specific Drug Screening Using a Human Induced Pluripotent Stem Cell Model of Catecholaminergic Polymorphic Ventricular Tachycardia Type 2. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2017 , 10,	6.4	30
58	Uncovering the Role of Hypermethylation by CTG Expansion in Myotonic Dystrophy Type 1 Using Mutant Human Embryonic Stem Cells. <i>Stem Cell Reports</i> , 2015 , 5, 221-31	8	29
57	Towards Precision Medicine With Human iPSCs for Cardiac Channelopathies. <i>Circulation Research</i> , 2019 , 125, 653-658	15.7	28
56	Potential applications of human embryonic stem cell-derived cardiomyocytes. <i>Annals of the New York Academy of Sciences</i> , 2004 , 1015, 285-98	6.5	28
55	Cardiac safety pharmacology: from human ether-a-gogo related gene channel block towards induced pluripotent stem cell based disease models. <i>Expert Opinion on Drug Safety</i> , 2012 , 11, 285-98	4.1	27
54	Extracellular Vesicles From Epicardial Fat Facilitate Atrial Fibrillation. <i>Circulation</i> , 2021 , 143, 2475-2493	16.7	26
53	Making better scar: Emerging approaches for modifying mechanical and electrical properties following infarction and ablation. <i>Progress in Biophysics and Molecular Biology</i> , 2016 , 120, 134-48	4.7	25
52	Optogenetics for suppression of cardiac electrical activity in human and rat cardiomyocyte cultures. <i>Neurophotonics</i> , 2015 , 2, 031204	3.9	23
51	Vascularization shaping the heart. <i>Annals of the New York Academy of Sciences</i> , 2010 , 1188, 46-51	6.5	23
50	Myocardial regeneration strategies using human embryonic stem cell-derived cardiomyocytes. <i>Journal of Controlled Release</i> , 2006 , 116, 211-8	11.7	23
49	Importance of ventricular tachycardia storms not terminated by implantable cardioverter defibrillators shocks in patients with CASQ2 associated catecholaminergic polymorphic ventricular tachycardia. <i>American Journal of Cardiology</i> , 2012 , 110, 72-6	3	21
48	High-resolution optical mapping of ventricular tachycardia in rats with chronic myocardial infarction. <i>PACE - Pacing and Clinical Electrophysiology</i> , 2010 , 33, 687-95	1.6	19

47	Concise review: reprogramming strategies for cardiovascular regenerative medicine: from induced pluripotent stem cells to direct reprogramming. <i>Stem Cells Translational Medicine</i> , 2014 , 3, 448-57	6.9	18
46	Pluripotent Stem Cell-Based Platforms in Cardiac Disease Modeling and Drug Testing. <i>Clinical Pharmacology and Therapeutics</i> , 2017 , 102, 203-208	6.1	18
45	Development of cardiomyocytes from human ES cells. <i>Methods in Enzymology</i> , 2003 , 365, 461-73	1.7	18
44	Three-dimensional endocardial impedance mapping: a new approach for myocardial infarction assessment. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2001 , 280, H179-88	5.2	18
43	Stem cells as biological heart pacemakers. <i>Expert Opinion on Biological Therapy</i> , 2005 , 5, 1531-7	5.4	16
42	Scalable production of cardiomyocytes derived from c-Myc free induced pluripotent stem cells. <i>Tissue Engineering - Part A</i> , 2011 , 17, 1027-37	3.9	15
41	A combined gene and cell therapy approach for restoration of conduction. <i>Heart Rhythm</i> , 2011 , 8, 121-30	6.7	13
40	Electrocardiographic comparison of ventricular premature complexes during exercise test in patients with CPVT and healthy subjects. <i>PACE - Pacing and Clinical Electrophysiology</i> , 2015 , 38, 398-402	1.6	12
39	Cell and gene therapy strategies for the treatment of postmyocardial infarction ventricular arrhythmias. <i>Annals of the New York Academy of Sciences</i> , 2010 , 1188, 32-8	6.5	11
38	Chronic Akt1 deficiency attenuates adverse remodeling and enhances angiogenesis after myocardial infarction. <i>Circulation: Cardiovascular Imaging</i> , 2013 , 6, 992-1000	3.9	10
37	Technical delivery of myogenic cells through an endocardial injection catheter for myocardial cell implantation. <i>International Journal of Cardiovascular Interventions</i> , 2000 , 3, 227-230		10
36	Polymorphic ventricular tachycardia, ischaemic ventricular fibrillation, and torsade de pointes: importance of the QT and the coupling interval in the differential diagnosis. <i>European Heart Journal</i> , 2021 , 42, 3965-3975	9.5	10
35	Hydrogels for cardiac tissue regeneration. <i>Bio-Medical Materials and Engineering</i> , 2008 , 18, 309-14	1	9
34	Electrophysiologic implications of myocardial stem cell therapies. <i>Heart Rhythm</i> , 2008 , 5, S48-52	6.7	8
33	Titin Circular RNAs Create a Back-Splice Motif Essential for SRSF10 Splicing. <i>Circulation</i> , 2021 , 143, 1502-1512	6.7	8
32	Cardiovascular therapeutic aspects of cell therapy and stem cells. <i>Annals of the New York Academy of Sciences</i> , 2006 , 1080, 415-25	6.5	7
31	Electroanatomical mapping and radiofrequency ablation of an accessory pathway associated with a large aneurysm of the coronary sinus. <i>Europace</i> , 2004 , 6, 608-12	3.9	7
30	Accurate linear radiofrequency lesions guided by a nonfluoroscopic electroanatomic mapping method during atrial fibrillation. <i>PACE - Pacing and Clinical Electrophysiology</i> , 2001 , 24, 1672-8	1.6	7

29	Cardiac optogenetics: the next frontier. <i>Europace</i> , 2018 , 20, 1910-1918	3.9	6
28	Hydrogels for cardiac tissue regeneration. <i>Bio-Medical Materials and Engineering</i> , 2008 , 18, 309-314	1	5
27	Single-Cell Mechanical Analysis of Human Pluripotent Stem Cell-Derived Cardiomyocytes for Drug Testing and Pathophysiological Studies. <i>Stem Cell Reports</i> , 2020 , 15, 587-596	8	5
26	Specific Therapy Based on the Genotype in a Malignant Form of Long QT3, Carrying the V411M Mutation. <i>International Heart Journal</i> , 2019 , 60, 979-982	1.8	4
25	Experimental molecular and stem cell therapies in cardiac electrophysiology. <i>Annals of the New York Academy of Sciences</i> , 2008 , 1123, 224-31	6.5	4
24	Electrophysiological coupling of transplanted cardiomyocytes. <i>Circulation Research</i> , 2007 , 101, 433-5	15.7	4
23	From gene therapy and stem cells to clinical electrophysiology. <i>PACE - Pacing and Clinical Electrophysiology</i> , 2006 , 29, 996-1005	1.6	4
22	The Third Intron of the Interferon Regulatory Factor-8 Is an Initiator of Repressed Chromatin Restricting Its Expression in Non-Immune Cells. <i>PLoS ONE</i> , 2016 , 11, e0156812	3.7	4
21	Synthetic cells with self-activating optogenetic proteins communicate with natural cells.. <i>Nature Communications</i> , 2022 , 13, 2328	17.4	4
20	Modulation of excessive neuronal activity by fibroblasts: potential use in treatment of Parkinson's disease. <i>Restorative Neurology and Neuroscience</i> , 2010 , 28, 803-15	2.8	3
19	Optogenetic modulation of cardiac action potential properties may prevent arrhythmogenesis in short and long QT syndromes. <i>JCI Insight</i> , 2021 , 6,	9.9	3
18	Gap junctions, stem cells, and cell therapy: rhythmic/arrhythmic implications. <i>Heart Rhythm</i> , 2012 , 9, 1512-6	6.7	2
17	Targeted therapies in genetic dilated and hypertrophic cardiomyopathies: From molecular mechanisms to therapeutic targets.. <i>European Journal of Heart Failure</i> , 2021 ,	12.3	2
16	Light and the Heart 2019 , 152-169		1
15	Robust Fabrication of Composite 3D Scaffolds with Tissue-Specific Bioactivity: A Proof-of-Concept Study.. <i>ACS Applied Bio Materials</i> , 2020 , 3, 4974-4986	4.1	1
14	Derivation and properties of human embryonic stem cell-derived cardiomyocytes. <i>Gene Therapy and Regulation</i> , 2001 , 1, 387-398		1
13	Restoration of heart functions using human embryonic stem cells derived heart muscle cells. <i>Discovery Medicine</i> , 2005 , 5, 11-7	2.5	1
12	Characterization of the mechanism by which a nonsense variant in RYR2 leads to disordered calcium handling.. <i>Physiological Reports</i> , 2022 , 10, e15265	2.6	1

11	Insights from the Third Dimension: Cardiac Organoids Help Identify Regenerative Pathways. <i>Cell Stem Cell</i> , 2019 , 24, 833-834	18	o
10	Optogenetic Control of Human Induced Pluripotent Stem Cell-Derived Cardiac Tissue Models.. <i>Journal of the American Heart Association</i> , 2022 , e021615	6	o
9	Triiodothyronine and dexamethasone alter potassium channel expression and promote electrophysiological maturation of human-induced pluripotent stem cell-derived cardiomyocytes. <i>Journal of Molecular and Cellular Cardiology</i> , 2021 , 161, 130-138	5.8	o
8	Ablation of idiopathic ventricular fibrillation triggered by ventricular premature beat originating from myocardium of right ventricle: Case report. <i>Journal of Cardiology Cases</i> , 2014 , 9, 109-112	0.6	
7	Biologic Pacemakers: Past, Present, and Future. <i>Cardiac Electrophysiology Clinics</i> , 2011 , 3, 69-76	1.4	
6	Temporal changes in the endocardial ST segment during the evolution of myocardial infarction in dogs. <i>PACE - Pacing and Clinical Electrophysiology</i> , 2002 , 25, 1616-23	1.6	
5	Left Ventricular Systolic Dysfunction Due to Atrial Fibrillation: Clinical and Echocardiographic Predictors.. <i>Cardiac Failure Review</i> , 2021 , 7, e16	4.2	
4	Reply to W re atrial human pluripotent stem cell-derived cardiomyocytes ready to identify drugs that beat atrial fibrillation? W <i>Nature Communications</i> , 2021 , 12, 1729	17.4	
3	Non-ischemic sudden cardiac arrest: Role of 12 lead Holter, family screening and genetic testing. <i>PACE - Pacing and Clinical Electrophysiology</i> , 2021 , 44, 1347-1354	1.6	
2	Using Decellularization/Recellularization Processes to Prepare Liver and Cardiac Engineered Tissues. <i>Methods in Molecular Biology</i> , 2021 , 2273, 111-129	1.4	
1	Factors Associated with Left Ventricular Function Recovery in Patients with Atrial Fibrillation Related Cardiomyopathy.. <i>Israel Medical Association Journal</i> , 2022 , 24, 101-106	0.9	