Teun P De Boer

List of Publications by Year
in descending order

48 papers	1,352 citations	361413 20 h-index	395702 33 g-index
50 all docs	50 docs citations	50 times ranked	1892 citing authors

#	Article	IF	Citations
1	Application of human stem cell-derived cardiomyocytes in safety pharmacology requires caution beyond hERG. Journal of Molecular and Cellular Cardiology, 2012, 52, 998-1008.	1.9	136
2	The immature electrophysiological phenotype of iPSC-CMs still hampers in vitro drug screening: Special focus on I K1. , 2018, 183, 127-136.		130
3	Uncertainty and variability in models of the cardiac action potential: Can we build trustworthy models?. Journal of Molecular and Cellular Cardiology, 2016, 96, 49-62.	1.9	113
4	Comparison of the I_{Kr} blockers moxifloxacin, dofetilide and Eâ€4031 in five screening models of proâ€arrhythmia reveals lack of specificity of isolated cardiomyocytes. British Journal of Pharmacology, 2012, 165, 467-478.	5.4	58
5	GNB5 Mutations Cause an Autosomal-Recessive Multisystem Syndrome with Sinus Bradycardia and Cognitive Disability. American Journal of Human Genetics, 2016, 99, 704-710.	6.2	58
6	Sensing Cardiac Electrical Activity With a Cardiac Myocyteâ€“Targeted Optogenetic Voltage Indicator. Circulation Research, 2015, 117, 401-412.	4.5	57
7	Sinusoidal voltage protocols for rapid characterisation of ion channel kinetics. Journal of Physiology, 2018, 596, 1813-1828.	2.9	54
8	The mammalian K_{IR}2.x inward rectifier ion channel family: expression pattern and pathophysiology. Acta Physiologica, 2010, 199, 243-256.	3.8	53
9	Perpetuation of torsade de pointes in heterogeneous hearts: competing foci or reâ€entry?. Journal of Physiology, 2016, 594, 6865-6878.	2.9	50
10	A Hybrid Model for Safety Pharmacology on an Automated Patch Clamp Platform: Using Dynamic Clamp to Join iPSC-Derived Cardiomyocytes and Simulations of Ik1 Ion Channels in Real-Time. Frontiers in Physiology, 2017, 8, 1094.	2.8	48
11	The antiâ€protozoal drug pentamidine blocks K_{IR}2.xâ€mediated inward rectifier current by entering the cytoplasmic pore region of the channel. British Journal of Pharmacology, 2010, 159, 1532-1541.	5.4	42
12	Drug-Induced Torsade de Pointes Arrhythmias in the Chronic AV Block Dog Are Perpetuated by Focal Activity. Circulation: Arrhythmia and Electrophysiology, 2011, 4, 566-576.	4.8	41
13	Lysosome mediated Kir2.1 breakdown directly influences inward rectifier current density. Biochemical and Biophysical Research Communications, 2008, 367, 687-692.	2.1	40
14	Optogenetic sensors in the zebrafish heart: a novel in vivo electrophysiological tool to study cardiac arrhythmogenesis. Theranostics, 2018, 8, 4750-4764.	10.0	38
15	Accounting for variability in ion current recordings using a mathematical model of artefacts in voltage-clamp experiments. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190348.	3.4	38
16	Inhibition of cardiomyocyte automaticity by electrotonic application of inward rectifier current from Kir2.1 expressing cells. Medical and Biological Engineering and Computing, 2006, 44, 537-542.	2.8	34
17	Cardiac optogenetics: using light to monitor cardiac physiology. Basic Research in Cardiology, 2017, 112, 56.	5.9	33
18	Connexin43 repression following epithelium-to-mesenchyme transition in embryonal carcinoma cells requires Snail1 transcription factor. Differentiation, 2007, 75, 208-218.	1.9	30

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19	Changes in Cx43 and NaV1.5 Expression Precede the Occurrence of Substantial Fibrosis in Calcineurin-Induced Murine Cardiac Hypertrophy. PLoS ONE, 2014, 9, e87226.	2.5	28
20	Cardiac Ca2+ signalling in zebrafish: Translation of findings to man. Progress in Biophysics and Molecular Biology, 2018, 138, 45-58.	2.9	25
21	The concept of triple wavefront fusion during biventricular pacing: Using the EGM to produce the best acute hemodynamic improvement in CRT. PACE - Pacing and Clinical Electrophysiology, 2017, 40, 873-882.	1.2	22
22	Human cardiomyocyte progenitor cell-derived cardiomyocytes display a maturated electrical phenotype. Journal of Molecular and Cellular Cardiology, 2010, 48, 254-260.	1.9	21
23	Inhibition of lysosomal degradation rescues pentamidine-mediated decreases of KIR2.1 ion channel expression but not that of Kv11.1. European Journal of Pharmacology, 2011, 652, 96-103.	3.5	20
24	Genetic variation in GNB5 causes bradycardia by increasing IK,ACh augmenting cholinergic response. DMM Disease Models and Mechanisms, 2019, 12, .	2.4	19
25	Xenopus connexins: how frogs bridge the gap. Differentiation, 2005, 73, 330-340.	1.9	18
26	Istaroxime treatment ameliorates calcium dysregulation in a zebrafish model of phospholamban R14del cardiomyopathy. Nature Communications, 2021, 12, 7151.	12.8	18
27	Automated Dynamic Clamp for Simulation of I_{K1} in Human Induced Pluripotent Stem Cellâ€"Derived Cardiomyocytes in Real Time Using Patchliner Dynamite⁸. Current Protocols in Pharmacology, 2020, 88, e70.	4.0	17
28	Required G1 to Suppress Automaticity of iPSC-CMs Depends Strongly on I1 Model Structure. Biophysical Journal, 2019, 117, 2303-2315.	0.5	16
29	The zebrafishgrimemutant uncovers an evolutionarily conserved role for Tmem161b in the control of cardiac rhythm. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	12
30	Is zebrafish heart regeneration â€œcompleteâ€? Lineage-restricted cardiomyocytes proliferate to pre-injury numbers but some fail to differentiate in fibrotic hearts. Developmental Biology, 2021, 471, 106-118.	2.0	11
31	Arrhythmogenic Remodeling in Murine Models of Deoxycorticosterone Acetate-Salt-Induced and 5/6-Subtotal Nephrectomy-Salt-Induced Cardiorenal Disease. CardioRenal Medicine, 2015, 5, 208-218.	1.9	10
32	A 2015 focus on preventing drug-induced arrhythmias. Expert Review of Cardiovascular Therapy, 2016, 14, 245-253.	1.5	9
33	The influence of hERG1a and hERG1b isoforms on drug safety screening in iPSC-CMs. Progress in Biophysics and Molecular Biology, 2019, 149, 86-98.	2.9	8
34	Adrenergic regulation of conduction velocity in cultures of immature cardiomyocytes. Netherlands Heart Journal, 2008, 16, 106-109.	0.8	7
35	Cloning and functional characterization of a novel connexin expressed in somites ofXenopus laevis. Developmental Dynamics, 2005, 233, 864-871.	1.8	6
36	Cloning, embryonic expression, and functional characterization of two novel connexins from Xenopus laevis. Biochemical and Biophysical Research Communications, 2006, 349, 855-862.	2.1	6

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37	A nonlinear and time-dependent leak current in the presence of calcium fluoride patch-clamp seal enhancer. Wellcome Open Research, 2020, 5, 152.	1.8	6
38	A nonlinear and time-dependent leak current in the presence of calcium fluoride patch-clamp seal enhancer. Wellcome Open Research, 0, 5, 152.	1.8	6
39	eSolv, a CellML-based simulation front-end for online teaching. American Journal of Physiology - Advances in Physiology Education, 2017, 41, 425-427.	1.6	4
40	Flotillins in the intercalated disc are potential modulators of cardiac excitability. Journal of Molecular and Cellular Cardiology, 2019, 126, 86-95.	1.9	3
41	Action potential contour and inter-species differences. Europace, 2018, 20, 1395-1396.	1.7	1
42	Abstract 13976: Optogenetic Monitoring of Endocardial Calcium Transients in vivo Using a Minimally Invasive Fiber Optic Approach. Circulation, 2015, 132, .	1.6	1
43	Assessment of the Effects of Online Linear Leak Current Compensation at Different Pacing Frequencies in a Dynamic Action Potential Clamp System. , 0, , .		1
44	P803Temporal increased arrhythmogenicity due to dynamic mechano-electrical remodeling following dyssynchronous ventricular activation in a canine model. Europace, 2018, 20, i144-i144.	1.7	0
45	Using Light to Endow Stem-Cell-Derived Cardiomyocytes With Virtual I1 Conductances. Biophysical Journal, 2018, 115, 2079-2080.	0.5	0
46	P316Optogenetic sensors in zebrafish hearts as novel in vivo electrophysiological readout tools to study cardiac arrhythmogenesis. Cardiovascular Research, 2018, 114, S81-S81.	3.8	0
47	Development, Implementation and Testing of a Multicellular Dynamic Action Potential Clamp Simulator for Drug Cardiac Safety Assessment. , 0, , .		0
48	Mutiscale Computational Analysis of the Effect on Heart Rate of a HCN4 Gene Double Mutation: from the Single Channel to the Clinical Phenotype. , 0, , .		0