Niels Voigt

List of Publications by Citations

94 papers	5,349 citations	35 h-index	72 g-index
109 ext. papers	6,617 ext. citations	7.7 avg, IF	5.34 L-index

#	Paper	IF	Citations
94	Enhanced sarcoplasmic reticulum Ca2+ leak and increased Na+-Ca2+ exchanger function underlie delayed afterdepolarizations in patients with chronic atrial fibrillation. *Circulation*, **2012**, 125, 2059-70	16.7	395
93	Cellular and molecular electrophysiology of atrial fibrillation initiation, maintenance, and progression. *Circulation Research*, **2014**, 114, 1483-99	15.7	373
92	Recent advances in the molecular pathophysiology of atrial fibrillation. *Journal of Clinical Investigation*, **2011**, 121, 2955-68	15.9	369
91	The G protein-gated potassium current I(K,ACh) is constitutively active in patients with chronic atrial fibrillation. *Circulation*, **2005**, 112, 3697-706	16.7	345
90	Cellular and molecular mechanisms of atrial arrhythmogenesis in patients with paroxysmal atrial fibrillation. *Circulation*, **2014**, 129, 145-156	16.7	273
89	Human atrial action potential and Ca2+ model: sinus rhythm and chronic atrial fibrillation. *Circulation Research*, **2011**, 109, 1055-66	15.7	238
88	Oxidized Ca(2+)/calmodulin-dependent protein kinase II triggers atrial fibrillation. *Circulation*, **2013**, 128, 1748-57	16.7	186
87	Transient receptor potential canonical-3 channel-dependent fibroblast regulation in atrial fibrillation. *Circulation*, **2012**, 126, 2051-64	16.7	185
86	MicroRNA29: a mechanistic contributor and potential biomarker in atrial fibrillation. *Circulation*, **2013**, 127, 1466-75, 1475e1-28	16.7	178
85	Role of RyR2 phosphorylation at S2814 during heart failure progression. *Circulation Research*, **2012**, 110, 1474-83	15.7	158
84	Left-to-right atrial inward rectifier potassium current gradients in patients with paroxysmal versus chronic atrial fibrillation. *Circulation: Arrhythmia and Electrophysiology*, **2010**, 3, 472-80	6.4	154
83	Oxidized CaMKII causes cardiac sinus node dysfunction in mice. *Journal of Clinical Investigation*, **2011**, 121, 3277-88	15.9	154
82	Upregulation of K(2P)3.1 K+ Current Causes Action Potential Shortening in Patients With Chronic Atrial Fibrillation. *Circulation*, **2015**, 132, 82-92	16.7	120
81	Mutation E169K in junctophilin-2 causes atrial fibrillation due to impaired RyR2 stabilization. *Journal of the American College of Cardiology*, **2013**, 62, 2010-9	15.1	120
80	Ryanodine receptor-mediated calcium leak drives progressive development of an atrial fibrillation substrate in a transgenic mouse model. *Circulation*, **2014**, 129, 1276-1285	16.7	114
79	Inhibition of CaMKII phosphorylation of RyR2 prevents induction of atrial fibrillation in FKBP12.6 knockout mice. *Circulation Research*, **2012**, 110, 465-70	15.7	109
78	The value of basic research insights into atrial fibrillation mechanisms as a guide to therapeutic innovation: a critical analysis. *Cardiovascular Research*, **2016**, 109, 467-79	9.9	108

77	Differential phosphorylation-dependent regulation of constitutively active and muscarinic receptor-activated IK,ACh channels in patients with chronic atrial fibrillation. *Cardiovascular Research*, **2007**, 74, 426-37	9.9	91
76	Pathology-specific effects of the IKur/Ito/IK,ACh blocker AVE0118 on ion channels in human chronic atrial fibrillation. *British Journal of Pharmacology*, **2008**, 154, 1619-30	8.6	89
75	Multiple potential molecular contributors to atrial hypocontractility caused by atrial tachycardia remodeling in dogs. *Circulation: Arrhythmia and Electrophysiology*, **2010**, 3, 530-41	6.4	83
74	The ryanodine receptor channel as a molecular motif in atrial fibrillation: pathophysiological and therapeutic implications. *Cardiovascular Research*, **2011**, 89, 734-43	9.9	80
73	Loss of microRNA-106b-25 cluster promotes atrial fibrillation by enhancing ryanodine receptor type-2 expression and calcium release. *Circulation: Arrhythmia and Electrophysiology*, **2014**, 7, 1214-22	6.4	78
72	Defects in ankyrin-based membrane protein targeting pathways underlie atrial fibrillation. *Circulation*, **2011**, 124, 1212-22	16.7	78
71	Tachycardia-induced silencing of subcellular Ca2+ signaling in atrial myocytes. *Journal of Clinical Investigation*, **2014**, 124, 4759-72	15.9	77
70	Differential protein kinase C isoform regulation and increased constitutive activity of acetylcholine-regulated potassium channels in atrial remodeling. *Circulation Research*, **2011**, 109, 1031-43	15.7	69
69	Changes in I K, ACh single-channel activity with atrial tachycardia remodelling in canine atrial cardiomyocytes. *Cardiovascular Research*, **2008**, 77, 35-43	9.9	69
68	Inverse remodelling of K2P3.1 K+ channel expression and action potential duration in left ventricular dysfunction and atrial fibrillation: implications for patient-specific antiarrhythmic drug therapy. *European Heart Journal*, **2017**, 38, 1764-1774	9.5	55
67	Atrial Fibrillation Activates AMP-Dependent Protein Kinase and its Regulation of Cellular Calcium Handling: Potential Role in Metabolic Adaptation and Prevention of Progression. *Journal of the American College of Cardiology*, **2015**, 66, 47-58	15.1	54
66	NSC23766, a widely used inhibitor of Rac1 activation, additionally acts as a competitive antagonist at muscarinic acetylcholine receptors. *Journal of Pharmacology and Experimental Therapeutics*, **2013**, 347, 69-79	4.7	54
65	Impaired local regulation of ryanodine receptor type 2 by protein phosphatase 1 promotes atrial fibrillation. *Cardiovascular Research*, **2014**, 103, 178-87	9.9	49
64	Ca(2+)-related signaling and protein phosphorylation abnormalities play central roles in a new experimental model of electrical storm. *Circulation*, **2011**, 123, 2192-203	16.7	43
63	Dysfunction in the β spectrin-dependent cytoskeleton underlies human arrhythmia. *Circulation*, **2015**, 131, 695-708	16.7	41
62	Inhibition of IK,ACh current may contribute to clinical efficacy of class I and class III antiarrhythmic drugs in patients with atrial fibrillation. *Naunyn-Schmiedeberg's Archives of Pharmacology*, **2010**, 381, 251-9	3.4	38
61	New directions in antiarrhythmic drug therapy for atrial fibrillation. *Future Cardiology*, **2013**, 9, 71-88	1.3	36
60	Calcium dysregulation in atrial fibrillation: the role of CaMKII. *Frontiers in Pharmacology*, **2014**, 5, 30	5.6	35

59	Computational models of atrial cellular electrophysiology and calcium handling, and their role in atrial fibrillation. *Journal of Physiology*, **2016**, 594, 537-53	3.9	34
58	Identification of microRNA-mRNA dysregulations in paroxysmal atrial fibrillation. *International Journal of Cardiology*, **2015**, 184, 190-197	3.2	32
57	Alterations in the interactome of serine/threonine protein phosphatase type-1 in atrial fibrillation patients. *Journal of the American College of Cardiology*, **2015**, 65, 163-73	15.1	31
56	Cardiac safety assays. *Current Opinion in Pharmacology*, **2014**, 15, 16-21	5.1	30
55	Impaired Na+-dependent regulation of acetylcholine-activated inward-rectifier K+ current modulates action potential rate dependence in patients with chronic atrial fibrillation. *Journal of Molecular and Cellular Cardiology*, **2013**, 61, 142-52	5.8	30
54	Stretch-activated two-pore-domain (K) potassium channels in the heart: Focus on atrial fibrillation and heart failure. *Progress in Biophysics and Molecular Biology*, **2017**, 130, 233-243	4.7	25
53	Expression and function of Kv1.1 potassium channels in human atria from patients with atrial fibrillation. *Basic Research in Cardiology*, **2015**, 110, 505	11.8	25
52	Constitutive activity of the acetylcholine-activated potassium current IK,ACh in cardiomyocytes. *Advances in Pharmacology*, **2014**, 70, 393-409	5.7	25
51	Atrial-Selective Potassium Channel Blockers. *Cardiac Electrophysiology Clinics*, **2016**, 8, 411-21	1.4	24
50	S-glutathiolation impairs phosphoregulation and function of cardiac myosin-binding protein C in human heart failure. *FASEB Journal*, **2016**, 30, 1849-64	0.9	22
49	Atrial fibrillation and heart failure-associated remodeling of two-pore-domain potassium (K) channels in murine disease models: focus on TASK-1. *Basic Research in Cardiology*, **2018**, 113, 27	11.8	22
48	Calcium handling and atrial fibrillation. *Wiener Medizinische Wochenschrift*, **2012**, 162, 287-91	2.9	21
47	Axial Tubule Junctions Activate Atrial Ca Release Across Species. *Frontiers in Physiology*, **2018**, 9, 1227	4.6	21
46	Altered atrial cytosolic calcium handling contributes to the development of postoperative atrial fibrillation. *Cardiovascular Research*, **2021**, 117, 1790-1801	9.9	18
45	Cellular and mitochondrial mechanisms of atrial fibrillation. *Basic Research in Cardiology*, **2020**, 115, 72	11.8	18
44	Dysfunction of the β-spectrin-based pathway in human heart failure. *American Journal of Physiology - Heart and Circulatory Physiology*, **2016**, 310, H1583-91	5.2	17
43	Sarcoplasmic reticulum calcium leak contributes to arrhythmia but not to heart failure progression. *Science Translational Medicine*, **2018**, 10,	17.5	17
42	Nucleoside Diphosphate Kinase-C Suppresses cAMP Formation in Human Heart Failure. *Circulation*, **2017**, 135, 881-897	16.7	16

41	Application of the RIMARC algorithm to a large data set of action potentials and clinical parameters for risk prediction of atrial fibrillation. *Medical and Biological Engineering and Computing*, **2015**, 53, 263-73	3.1	16
40	Methods for isolating atrial cells from large mammals and humans. *Journal of Molecular and Cellular Cardiology*, **2015**, 86, 187-98	5.8	15
39	The combined effects of ranolazine and dronedarone on human atrial and ventricular electrophysiology. *Journal of Molecular and Cellular Cardiology*, **2016**, 94, 95-106	5.8	15
38	Voltage-clamp-based methods for the detection of constitutively active acetylcholine-gated I(K,ACh) channels in the diseased heart. *Methods in Enzymology*, **2010**, 484, 653-75	1.7	14
37	Muscarinic type-1 receptors contribute to I in human atrial cardiomyocytes and are upregulated in patients with chronic atrial fibrillation. *International Journal of Cardiology*, **2018**, 255, 61-68	3.2	13
36	The inward rectifier current inhibitor PA-6 terminates atrial fibrillation and does not cause ventricular arrhythmias in goat and dog models. *British Journal of Pharmacology*, **2017**, 174, 2576-2590	8.6	12
35	Calcium Handling Abnormalities as a Target for Atrial Fibrillation Therapeutics: How Close to Clinical Implementation?. *Journal of Cardiovascular Pharmacology*, **2015**, 66, 515-22	3.1	12
34	Isolation of human atrial myocytes for simultaneous measurements of Ca2+ transients and membrane currents. *Journal of Visualized Experiments*, **2013**, e50235	1.6	11
33	Proarrhythmic atrial calcium cycling in the diseased heart. *Advances in Experimental Medicine and Biology*, **2012**, 740, 1175-91	3.6	11
32	German Cardiac Society Working Group on Cellular Electrophysiology state-of-the-art paper: impact of molecular mechanisms on clinical arrhythmia management. *Clinical Research in Cardiology*, **2019**, 108, 577-599	6.1	11
31	Cellular and molecular correlates of ectopic activity in patients with atrial fibrillation. *Europace*, **2012**, 14 Suppl 5, v97-v105	3.9	9
30	Regenerative potential of epicardium-derived extracellular vesicles mediated by conserved miRNA transfer. *Cardiovascular Research*, **2021**,	9.9	9
29	CaMKII activity contributes to homeometric autoregulation of the heart: A novel mechanism for the Anrep effect. *Journal of Physiology*, **2020**, 598, 3129-3153	3.9	8
28	Ion Channel Remodelling in Atrial Fibrillation. *European Cardiology Review*, **2011**, 7, 97	3.9	7
27	Rhythm control of atrial fibrillation in heart failure. *Heart Failure Clinics*, **2013**, 9, 407-15, vii-viii	3.3	6
26	In search for novel functions of adenosine 5Ptriphosphate (ATP) in the heart. *Cardiovascular Research*, **2017**, 113, e59-e60	9.9	5
25	Caveolin3 Stabilizes McT1-Mediated Lactate/Proton Transport in Cardiomyocytes. *Circulation Research*, **2021**, 128, e102-e120	15.7	5
24	N-glycosylation-dependent regulation of hK17.1 currents. *Molecular Biology of the Cell*, **2019**, 30, 1425-1436	3.3	4

23	Response to Letter Regarding Article, "Upregulation of K2P3.1 K+ Current Causes Action Potential Shortening in Patients With Chronic Atrial Fibrillation". *Circulation*, **2016**, 133, e440-1	16.7	4
22	Dysferlin links excitation-contraction coupling to structure and maintenance of the cardiac transverse-axial tubule system. *Europace*, **2020**, 22, 1119-1131	3.9	3
21	Scientists on the Spot: Autophagy and heart disease. *Cardiovascular Research*, **2019**, 115, e91-e92	9.9	3
20	Kv1.1 potassium channel subunit deficiency alters ventricular arrhythmia susceptibility, contractility, and repolarization. *Physiological Reports*, **2021**, 9, e14702	2.6	3
19	Chromatin Accessibility of Human Mitral Valves and Functional Assessment of MVP Risk Loci. *Circulation Research*, **2021**, 128, e84-e101	15.7	3
18	New antiarrhythmic targets in atrial fibrillation. *Future Cardiology*, **2015**, 11, 645-54	1.3	2
17	ESC Congress 2018 highlights in basic science: a report from the Scientists of Tomorrow. *Cardiovascular Research*, **2018**, 114, e103-e105	9.9	2
16	Voltage-Gated Calcium Channels and Their Roles in Cardiac Electrophysiology. *Cardiac and Vascular Biology*, **2018**, 77-96	0.2	1
15	Single-Cell Optical Action Potential Measurement in Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes. *Journal of Visualized Experiments*, **2020**,	1.6	1
14	Report on the Ion Channel Symposium : Organized by the German Cardiac Society Working Group on Cellular Electrophysiology (AG 18). *Herzschrittmachertherapie Und Elektrophysiologie*, **2018**, 29, 4-13	0.8	0
13	The Molecular Pathophysiology of Atrial Fibrillation **2014**, 449-458		0
12	A Mathematical Model for Electrical Activity in Pig Atrial Tissue.. *Frontiers in Physiology*, **2022**, 13, 812535	4.6	0
11	Increased cytosolic calcium buffering contributes to a cellular arrhythmogenic substrate in iPSC-cardiomyocytes from patients with dilated cardiomyopathy.. *Basic Research in Cardiology*, **2022**, 117, 5	11.8	0
10	Arzneimittelinteraktionen, die man kennen muss!. *Geriatrie Up2date*, **2019**, 1, 151-163	0	
9	The Molecular Pathophysiology of Atrial Fibrillation **2018**, 396-408		
8	Prof Niels Voigt talks to Prof Stanley Nattel about advances in atrial fibrillation research and career insights. *Cardiovascular Research*, **2018**, 114, e65	9.9	
7	Arzneimittelinteraktionen, die man kennen muss!. *Notfallmedizin Up2date*, **2019**, 14, 173-185	0.2	
6	Cholinergic and Constitutive Regulation of Atrial Potassium Channel **2014**, 383-391		

5	Insights into cardiovascular research in GEttingen and Heidelberg: a report by the ESC Scientists of Tomorrow. *Cardiovascular Research*, **2020**, 116, e162-e164	9.9
4	Arzneimittelinteraktionen, die man kennen muss!. *Allgemein- Und Viszeralchirurgie Up2date*, **2019**, 13, 547-559	0.3
3	Ryanodine receptor dysfunction and the resolution revolution: how Nobel Prize-winning techniques transform cardiovascular research. *Cardiovascular Research*, **2018**, 114, e106-e109	9.9
2	Niels Voigt talks to W. Jonathan Lederer, keynote lecturer at the "GEttingen Channels" Symposium 2017. *Cardiovascular Research*, **2018**, 114, e14	9.9
1	Personalization of Mathematical Models of Human Atrial Action Potential. *Smart Innovation, Systems and Technologies*, **2021**, 223-236	0.5