Nicholas S Peters

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4110626/publications.pdf

Version: 2024-02-01

122 papers	4,482 citations	117453 34 h-index	118652 62 g-index
130 all docs	130 docs citations	130 times ranked	4564 citing authors

#	Article	IF	Citations
1	Disturbed Connexin43 Gap Junction Distribution Correlates With the Location of Reentrant Circuits in the Epicardial Border Zone of Healing Canine Infarcts That Cause Ventricular Tachycardia. Circulation, 1997, 95, 988-996.	1.6	466
2	Characterization of Left Atrial Activation in the Intact Human Heart. Circulation, 2003, 107, 733-739.	1.6	259
3	Feasibility of a Noncontact Catheter for Endocardial Mapping of Human Ventricular Tachycardia. Circulation, 1999, 99, 2543-2552.	1.6	192
4	Right ventricle segmentation from cardiac MRI: A collation study. Medical Image Analysis, 2015, 19, 187-202.	7.0	189
5	Remodeling of Gap Junctional Channel Function in Epicardial Border Zone of Healing Canine Infarcts. Circulation Research, 2003, 92, 437-443.	2.0	173
6	SERCA2a Gene Transfer Decreases Sarcoplasmic Reticulum Calcium Leak and Reduces Ventricular Arrhythmias in a Model of Chronic Heart Failure. Circulation: Arrhythmia and Electrophysiology, 2011, 4, 362-372.	2.1	147
7	New Insights into Myocardial Arrhythmogenesis: Distribution of Gap-Junctional Coupling in Normal, Ischaemic and Hypertrophied Human Hearts. Clinical Science, 1996, 90, 447-452.	1.8	133
8	Spatial Resolution Requirements for Accurate Identification of Drivers of Atrial Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2017, 10, e004899.	2.1	120
9	Heterogeneous gap junction remodeling in reentrant circuits in the epicardial border zone of the healing canine infarctâ˜†. Cardiovascular Research, 2006, 72, 241-249.	1.8	119
10	Hierarchical statistical techniques are necessary to draw reliable conclusions from analysis of isolated cardiomyocyte studies. Cardiovascular Research, 2017, 113, 1743-1752.	1.8	102
11	Artificial Intelligence and Machine Learning in Arrhythmias and Cardiac Electrophysiology. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e007952.	2.1	96
12	Relationship Between Connexins and Atrial Activation During Human Atrial Fibrillation. Journal of Cardiovascular Electrophysiology, 2004, 15, 206-216.	0.8	77
13	Spatiotemporal Behavior of High Dominant Frequency During Paroxysmal and Persistent Atrial Fibrillation in the Human Left Atrium. Circulation: Arrhythmia and Electrophysiology, 2012, 5, 650-658.	2.1	77
14	Model of reentrant ventricular tachycardia based on infarct border zone geometry predicts reentrant circuit features as determined by activation mapping. Heart Rhythm, 2007, 4, 1034-1045.	0.3	73
15	Recommendations for Successful Training on Methods of Delivery of Biologics for Cardiac Regeneration. JACC: Cardiovascular Interventions, 2010, 3, 265-275.	1.1	71
16	Relationship Between Gap-Junctional Conductance and Conduction Velocity in Mammalian Myocardium. Circulation: Arrhythmia and Electrophysiology, 2013, 6, 1208-1214.	2.1	62
17	Characteristics of the Temporal and Spatial Excitable Gap in Anisotropic Reentrant Circuits Causing Sustained Ventricular Tachycardia. Circulation Research, 1998, 82, 279-293.	2.0	60
18	The Impact of the COVID-19 Pandemic on the Uptake of Influenza Vaccine: UK-Wide Observational Study. JMIR Public Health and Surveillance, 2021, 7, e26734.	1.2	56

#	Article	IF	Citations
19	Myocardial gap junction organization in ischemia and infarction. Microscopy Research and Technique, 1995, 31, 375-386.	1.2	53
20	Visualizing Localized Reentry With Ultraâ€“High Density Mapping in Iatrogenic Atrial Tachycardia. Circulation: Arrhythmia and Electrophysiology, 2017, 10, .	2.1	53
21	In-Ear SpO2: A Tool for Wearable, Unobtrusive Monitoring of Core Blood Oxygen Saturation. Sensors, 2020, 20, 4879.	2.1	53
22	Characterization of the Left Atrial Neural Network and its Impact on Autonomic Modification Procedures. Circulation: Arrhythmia and Electrophysiology, 2013, 6, 632-640.	2.1	52
23	Mechanisms Causing Sustained Ventricular Tachycardia With Multiple QRS Morphologies. Circulation, 1997, 96, 3721-3731.	1.6	51
24	Application of Ripple Mapping to Visualize Slow Conduction Channels Within the Infarct-Related Left Ventricular Scar. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 76-86.	2.1	47
25	Identification and Characterization of Sites Where Persistent Atrial Fibrillation Is Terminated by Localized Ablation. Circulation: Arrhythmia and Electrophysiology, 2018, 11, e005258.	2.1	43
26	Source-Sink Mismatch Causing FunctionalÂConduction Block in Re-Entrant VentricularÂTachycardia. JACC: Clinical Electrophysiology, 2018, 4, 1-16.	1.3	43
27	A Prospective Study of Ripple Mapping the Post-Infarct Ventricular Scar to Guide Substrate Ablation for Ventricular Tachycardia. Circulation: Arrhythmia and Electrophysiology, 2016, 9, .	2.1	42
28	The Effects of Carbenoxolone on Human Myocardial Conduction. Journal of the American College of Cardiology, 2006, 48, 1242-1249.	1.2	41
29	Characterisation of Connexin Expression and Electrophysiological Properties in Stable Clones of the HL-1 Myocyte Cell Line. PLoS ONE, 2014, 9, e90266.	1.1	41
30	Voltage during atrial fibrillation is superior to voltage during sinus rhythm in localizing areas of delayed enhancement on magnetic resonance imaging: An assessment of the posterior left atrium in patients with persistent atrial fibrillation. Heart Rhythm, 2019, 16, 1357-1367.	0.3	40
31	Rethinking multiscale cardiac electrophysiology with machine learning and predictive modelling. Computers in Biology and Medicine, 2019, 104, 339-351.	3.9	40
32	Point-of-care screening for heart failure with reduced ejection fraction using artificial intelligence during ECG-enabled stethoscope examination in London, UK: a prospective, observational, multicentre study. The Lancet Digital Health, 2022, 4, e117-e125.	5.9	37
33	Localization of the Isthmus in Reentrant Circuits by Analysis of Electrograms Derived from Clinical Noncontact Mapping During Sinus Rhythm and Ventricular Tachycardia. Journal of Cardiovascular Electrophysiology, 2004, 15, 27-36.	0.8	36
34	High-order spectral/hp element discretisation for reactionâ€“diffusion problems on surfaces: Application to cardiac electrophysiology. Journal of Computational Physics, 2014, 257, 813-829.	1.9	36
35	Detection of the diastolic pathway, circuit morphology, and inducibility of human postinfarction ventricular tachycardia from mapping in sinus rhythm. Heart Rhythm, 2008, 5, 981-991.	0.3	35
36	Mechanisms that initiate ventricular tachycardia in the infarcted human heart. Heart Rhythm, 2010, 7, 57-64.	0.3	35

#	Article	IF	Citations
37	Rotor Tracking Using Phase of Electrograms Recorded During Atrial Fibrillation. Annals of Biomedical Engineering, 2017, 45, 910-923.	1.3	34
38	The role of gap junctions in the arrhythmias of ischemia and infarction. Heart Rhythm, 2012, 9, 308-311.	0.3	33
39	Simple Model for Identifying Critical Regions in Atrial Fibrillation. Physical Review Letters, 2015, 114, 028104-28104.	2.9	33
40	Interaction of Localized Drivers and Disorganized Activation in Persistent Atrial Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2018, 11, e005846.	2.1	33
41	Ventricular fibrillation mechanism and global fibrillatory organization are determined by gap junction coupling and fibrosis pattern. Cardiovascular Research, 2021, 117, 1078-1090.	1.8	33
42	Ectopy-triggering ganglionated plexuses ablation to prevent atrial fibrillation: GANGLIA-AF study. Heart Rhythm, 2022, 19, 516-524.	0.3	33
43	Structure and function of the ventricular tachycardia isthmus. Heart Rhythm, 2022, 19, 137-153.	0.3	31
44	Gap Junction Remodeling in Infarction: Does It Play a Role in Arrhythmogenesis?. Journal of Cardiovascular Electrophysiology, 2000, 11, 488-490.	0.8	29
45	Organizational Index Mapping to Identify Focal Sources During Persistent Atrial Fibrillation. Journal of Cardiovascular Electrophysiology, 2014, 25, 355-363.	0.8	29
46	Overexpression of connexin 43 using a retroviral vector improves electrical coupling of skeletal myoblasts with cardiac myocytes in vitro. BMC Cardiovascular Disorders, 2006, 6, 25.	0.7	28
47	Enhancement of Gap Junction Function During Acute Myocardial Infarction Modifies Healing and Reduces Late Ventricular Arrhythmia Susceptibility. JACC: Clinical Electrophysiology, 2016, 2, 574-582.	1.3	28
48	Survey of current perspectives on consumer-available digital health devices for detecting atrial fibrillation. Cardiovascular Digital Health Journal, 2020, 1, 21-29.	0.5	28
49	Characteristics of Wavefront Propagation in Reentrant Circuits Causing Human Ventricular Tachycardia. Circulation, 2002, 105, 2172-2178.	1.6	27
50	Determinants of new wavefront locations in cholinergic atrial fibrillation. Europace, 2018, 20, iii3-iii15.	0.7	27
51	Belief of having had unconfirmed Covid-19 infection reduces willingness to participate in app-based contact tracing. Npj Digital Medicine, 2020, 3, 146.	5.7	27
52	Selective heart rate reduction with ivabradine slows ischaemia-induced electrophysiological changes and reduces ischaemiaâ€“reperfusion-induced ventricular arrhythmias. Journal of Molecular and Cellular Cardiology, 2013, 59, 67-75.	0.9	26
53	Relationship Between Connexin Expression and Gapâ€“Junction Resistivity in Human Atrial Myocardium. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 321-329.	2.1	26
54	Model of Bipolar Electrogram Fractionation and Conduction Block Associated With Activation Wavefront Direction at Infarct Border Zone Lateral Isthmus Boundaries. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 152-163.	2.1	25

#	Article	IF	Citations
55	Post-operative atrial fibrillation is associated with a pre-existing structural and electrical substrate in human right atrial myocardium. International Journal of Cardiology, 2016, 220, 580-588.	0.8	25
56	Standardised Framework for Quantitative Analysis of Fibrillation Dynamics. Scientific Reports, 2019, 9, 16671.	1.6	25
57	Stimulation of the Intrinsic Cardiac Autonomic Nervous System Results in a Gradient of Fibrillatory Cycle Length Shortening Across the Atria During Atrial Fibrillation in Humans. Journal of Cardiovascular Electrophysiology, 2011, 22, 1224-1231.	0.8	24
58	Formation of Functional Conduction Block During the Onset of Reentrant Ventricular Tachycardia. Circulation: Arrhythmia and Electrophysiology, 2016, 9, .	2.1	23
59	Machine learning methods for locating re-entrant drivers from electrograms in a model of atrial fibrillation. Royal Society Open Science, 2018, 5, 172434.	1.1	23
60	In vivo grafting of large engineered heart tissue patches for cardiac repair. JCI Insight, 2021, 6, .	2.3	23
61	Mechanism of Pacing-Induced Ventricular Fibrillation in the Infarcted Human Heart. Circulation, 2004, 110, 1725-1730.	1.6	22
62	Adverse Remodeling of the Electrophysiological Response to Ischemiaâ€“Reperfusion in Human Heart Failure Is Associated With Remodeling of Metabolic Gene Expression. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 875-882.	2.1	22
63	Rotor mapping and ablation to treat atrial fibrillation. Current Opinion in Cardiology, 2015, 30, 24-32.	0.8	22
64	A novel approach to mapping the atrial ganglionated plexus network by generating a distribution probability atlas. Journal of Cardiovascular Electrophysiology, 2018, 29, 1624-1634.	0.8	22
65	Artificial Intelligence, Data Sensors and Interconnectivity: Future Opportunities for Heart Failure. Cardiac Failure Review, 2020, 6, e11.	1.2	21
66	An automated algorithm for determining conduction velocity, wavefront direction and origin of focal cardiac arrhythmias using a multipolar catheter. , 2014, 2014, 1583-6.		20
67	Concurrent micro- to macro-cardiac electrophysiology in myocyte cultures and human heart slices. Scientific Reports, 2018, 8, 6947.	1.6	20
68	Optimum lesion set and predictors of outcome in persistent atrial fibrillation ablation: a meta-regression analysis. Europace, 2019, 21, 1176-1184.	0.7	20
69	Model of unidirectional block formation leading to reentrant ventricular tachycardia in the infarct border zone of postinfarction canine hearts. Computers in Biology and Medicine, 2015, 62, 254-263.	3.9	19
70	Analytical approaches for myocardial fibrillation signals. Computers in Biology and Medicine, 2018, 102, 315-326.	3.9	17
71	Wearable In-Ear PPG: Detailed Respiratory Variations Enable Classification of COPD. IEEE Transactions on Biomedical Engineering, 2022, 69, 2390-2400.	2.5	17
72	Characterisation of re-entrant circuit (or rotational activity) in vitro using the HL1-6 myocyte cell line. Journal of Molecular and Cellular Cardiology, 2018, 119, 155-164.	0.9	15

#	Article	IF	Citations
73	Toward Mechanism-Directed Electrophenotype-Based Treatments for Atrial Fibrillation. Frontiers in Physiology, 2020, 11, 987.	1.3	15
74	Direct Adherence Measurement Using an Ingestible Sensor Compared With Self-Reporting in High-Risk Cardiovascular Disease Patients Who Knew They Were Being Measured: A Prospective Intervention. JMIR MHealth and UHealth, 2017, 5, e76.	1.8	15
75	The Rotor Revolution. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 1230-1236.	2.1	14
76	Arrhythmias After Cell Transplantation for Myocardial Regeneration: Natural History or Result of the Intervention?. Journal of Cardiovascular Electrophysiology, 2005, 16, 1255-1257.	0.8	13
77	Myocardial architecture and patient variability in clinical patterns of atrial fibrillation. Physical Review E, 2016, 94, 042401.	0.8	13
78	Challenges Associated with Interpreting Mechanisms of AF. Arrhythmia and Electrophysiology Review, 2020, 8, 273-284.	1.3	13
79	Gap Junctions. Circulation Research, 2006, 99, 1156-1158.	2.0	12
80	Meta-Analysis of Randomized Controlled Trials of Atrial Fibrillation Ablation With Pulmonary Vein Isolation Versus Without. JACC: Clinical Electrophysiology, 2019, 5, 968-976.	1.3	12
81	Architectural Correlates of Myocardial Conduction. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 1198-1204.	2.1	11
82	Formation of reentrant circuits in the mid-myocardial infarct border zone. Computers in Biology and Medicine, 2016, 71, 205-213.	3.9	11
83	Characterization of the Effects of Single Ventricular Extrastimuli on Endocardial Activation in Human Infarct-Related Ventricular Tachycardia. Journal of the American College of Cardiology, 2007, 49, 1315-1323.	1.2	10
84	Discriminating electrocardiographic responses to His-bundle pacing using machine learning. Cardiovascular Digital Health Journal, 2020, 1, 11-20.	0.5	10
85	Characterization and consistency of interactions of triggers and substrate at the onset of paroxysmal atrial fibrillation. Europace, 2017, 19, 1454-1462.	0.7	9
86	The ectopy-triggering ganglionated plexuses in atrial fibrillation. Autonomic Neuroscience: Basic and Clinical, 2020, 228, 102699.	1.4	9
87	Mechanisms of Resetting Reentrant Circuits in Canine Ventricular Tachycardia. Circulation, 2001, 103, 1148-1156.	1.6	8
88	Unified mechanism of local drivers in a percolation model of atrial fibrillation. Physical Review E, 2019, 100, 062406.	0.8	8
89	Quantification of Electromechanical Coupling to Prevent Inappropriate Implantable Cardioverter-Defibrillator Shocks. JACC: Clinical Electrophysiology, 2019, 5, 705-715.	1.3	7
90	Slow uniform electrical activation during sinus rhythm is an indicator of reentrant VT isthmus location and orientation in an experimental model of myocardial infarction. Computer Methods and Programs in Biomedicine, 2020, 196, 105666.	2.6	7

#	Article	IF	Citations
91	Electrocardiographic predictors of successful resynchronization of left bundle branch block by His bundle pacing. Journal of Cardiovascular Electrophysiology, 2021, 32, 428-438.	0.8	7
92	RETRO-MAPPING: A New Approach to Activation Mapping in Persistent Atrial Fibrillation Reveals Evidence of Spatiotemporal Stability. Circulation: Arrhythmia and Electrophysiology, 2021, 14, e009602.	2.1	7
93	Determinants of Shielding Behavior During the COVID-19 Pandemic and Associations With Well-being Among National Health Service Patients: Longitudinal Observational Study. JMIR Public Health and Surveillance, 2021, 7, e30460.	1.2	7
94	Catheter ablation of ventricular tachycardia related to coronary artery disease: The role of noncontact mapping. Current Cardiology Reports, 2000, 2, 529-536.	1.3	6
95	Left Atrial Enhancement Correlates With Myocardial Conduction Velocity in Patients With Persistent Atrial Fibrillation. Frontiers in Physiology, 2020, 11, 570203.	1.3	6
96	Granger Causalityâ€“Based Analysis for Classification of Fibrillation Mechanisms and Localization of Rotational Drivers. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008237.	2.1	6
97	A Multicenter External Validation of a Score Model to Predict Risk of Events in Patients With Brugada Syndrome. American Journal of Cardiology, 2021, 160, 53-59.	0.7	6
98	Interventricular Differences in Action Potential Duration Restitution Contribute to Dissimilar Ventricular Rhythms in ex vivo Perfused Hearts. Frontiers in Cardiovascular Medicine, 2019, 6, 34.	1.1	5
99	Anatomical Distribution of Ectopy-Triggering Plexuses in Patients With Atrial Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008715.	2.1	5
100	Development of a pro-arrhythmic ex vivo intact human and porcine model: cardiac electrophysiological changes associated with cellular uncoupling. Pflugers Archiv European Journal of Physiology, 2020, 472, 1435-1446.	1.3	5
101	Automatic Diagnosis Labeling of Cardiovascular MRI Using Semisupervised Natural Language Processing of Text Reports. Radiology: Artificial Intelligence, 2022, 4, e210085.	3.0	5
102	The sawtooth EKG pattern of typical atrial flutter is not related to slow conduction velocity at the cavotricuspid isthmus. Journal of Cardiovascular Electrophysiology, 2017, 28, 1445-1453.	0.8	4
103	Rotigaptide Infusion for the First 7ÂDays After Myocardial Infarctionâ€“Reperfusion Reduced Late Complexity of Myocardial Architecture of the Healing Borderâ€Zone and Arrhythmia Inducibility. Journal of the American Heart Association, 2021, 10, e020006.	1.6	4
104	Factors Affecting Engagement in Web-Based Health Care Patient Information: Narrative Review of the Literature. Journal of Medical Internet Research, 2021, 23, e19896.	2.1	4
105	Identifying Potential Re-entrant Circuit Locations from Atrial Fibre Maps. , 2019, 2019, 1-4.		4
106	Classification of Fibrillation Organisation Using Electrocardiograms to Guide Mechanism-Directed Treatments. Frontiers in Physiology, 2021, 12, 712454.	1.3	4
107	Effects on Arrhythmogenesis and Arrhythmic Threshold of Injection of Autologous Fibroblasts into Myocardial Infarcts in Adult Pigs. Journal of Cardiovascular Translational Research, 2012, 5, 337-344.	1.1	3
108	Autologous Dermal Fibroblast Injections Slow Atrioventricular Conduction and Ventricular Rate in Atrial Fibrillation in Swine. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 439-446.	2.1	3

#	Article	IF	Citations
109	Effects of refractory gradients and ablation on fibrillatory activity. Computers in Biology and Medicine, 2018, 95, 175-187.	3.9	3
110	Use of an automaton model to suggest methods for cessation of intractable fibrillatory activity. Computers in Biology and Medicine, 2018, 102, 357-368.	3.9	3
111	Withinâ€patient comparison of Hisâ€bundle pacing, right ventricular pacing, and right ventricular pacing avoidance algorithms in patients with PR prolongation: Acute hemodynamic study. Journal of Cardiovascular Electrophysiology, 2020, 31, 2964-2974.	0.8	3
112	Cycle Length Evaluation in Persistent Atrial Fibrillation Using Kernel Density Estimation to Identify Transient and Stable Rapid Atrial Activity. Cardiovascular Engineering and Technology, 2021, , 1.	0.7	3
113	Understanding the transition from paroxysmal to persistent atrial fibrillation. Physical Review Research, 2020, 2, 023311.	1.3	3
114	The Barrel of the Smoking Gun. Circulation: Arrhythmia and Electrophysiology, 2016, 9, .	2.1	2
115	Addressing challenges of quantitative methodologies and event interpretation in the study of atrial fibrillation. Computer Methods and Programs in Biomedicine, 2019, 178, 113-122.	2.6	2
116	OCT2013, an ischaemiaâ€activated antiarrhythmic prodrug, devoid of the systemic side effects of lidocaine. British Journal of Pharmacology, 2022, 179, 2037-2053.	2.7	2
117	Prognostic Significance of Ventricular Arrhythmias in 13Â444 Patients With Acute Coronary Syndrome: A Retrospective Cohort Study Based on Routine Clinical Data (NIHR Health Informatics Collaborative) Tj ETQq1 1 0.784314 rgBT /Ove	1.8	2
118	Targeting Atrio-Atrial Conduction in the Post-Orthotopic Heart Transplant Patient. Journal of Interventional Cardiac Electrophysiology, 2005, 13, 31-34.	0.6	1
119	Cardiac Stem Cell Therapy and Arrhythmogenicity: Prometheus and the arrows of Apollo and Artemis. Journal of Cardiovascular Translational Research, 2008, 1, 207-216.	1.1	1
120	Response by Handa et al to Letter Regarding Article, â€œGranger Causalityâ€“Based Analysis for Classification of Fibrillation Mechanisms and Localization of Rotational Driversâ€. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008951.	2.1	1
121	Functional consequences of co-expressing connexin40 or connexin45 with connexin43 on intercellular electrical coupling. Biochemical and Biophysical Research Communications, 2017, 483, 191-196.	1.0	0
122	Identifying locations susceptible to micro-anatomical reentry using a spatial network representation of atrial fibre maps. PLoS ONE, 2022, 17, e0267166.	1.1	0